

Gotta speak real English: Foreign accent and L1 speakers' perceptions of nonstandard grammar

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ABSTRACT

Spoken grammar is known to deviate from commonly taught rules of written grammar. For example, Carter and McCarthy (1995) have observed frequent use of topic fronting (*this film, have you seen it?*) and sentence-initial ellipsis (*didn't expect to see you here*) in spoken English. Consequently, several scholars have called for greater attention to spoken grammar in language teaching (e.g., Carter & McCarthy, 1995; Cullen & Kuo, 2007). However, none of these calls have considered potential barriers that learners might encounter when using spoken grammar with L1 speakers.

The present study compares how non-expert L1 English speakers (those without prior linguistic training) perceive the grammatical acceptability of these nonstandard forms when produced by speakers with foreign accents. Ten L1 Tagalog speakers and five L1 English speakers recorded 60 sentences containing one of four spoken grammar constructions: topic fronting, sentence-initial ellipsis, historical present, and disjointed descriptions. These samples were rated for accentedness by 10 raters, which yielded three groups of five: non-accented, moderately accented, and heavily accented. Another group of 10 raters rated the samples on grammaticality, segmental accuracy, and word stress accuracy, using a computer-based sliding scale. The two latter measures helped prevent raters from confounding grammar and pronunciation issues (Varonis & Gass, 1982). A one-way ANOVA revealed a significant effect of foreign accent on perceived grammaticality, with heavily accented speakers receiving harsher judgments than both moderately and non-accented speakers on syntactically equivalent productions. Implications for spoken grammar pedagogy and future research on grammatical perception and spoken grammar are discussed.

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Lastly, I dedicate this thesis to my father, Joel Ruivivar. Our old friend Dan Fogelberg said it best: *your blood runs through my instrument, and your song is in my soul.*

Contribution of Authors

As the first author of the manuscript version of this thesis, June Ruivivar was responsible for conceptualizing, designing, piloting, and conducting the study; creating the spoken grammar stimuli; supervising the recording and rating sessions; collecting and analyzing the data; and writing the final research report. Laura Collins provided guidance at all stages of the project, providing particular support in the study design and data analysis.

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Chapter One

Spoken grammar in second language teaching has long been of interest to me, although I did not always know this. My interest in this topic can be traced back to my experiences as a learner of French as a second language in Quebec. Although I progressed quickly and now consider myself a near-bilingual, a challenge that has remained over the years is the ability to use informal language with native French speakers. I could not, for example, say *on y va-tu?* (“Are we going?” – a nonstandard word order for questions) without my interlocutors pausing, as if to process my unexpected use of “street” French, or attempting to correct my utterance to “textbook” French. First-language (L1) speakers seemed to have a certain credibility that allowed them to break the grammatical rules that second-language (L2) spent hours learning, and I assumed that I would earn this credibility someday. In the meantime, I reverted to textbook French, content to understand but not speak the language of my more proficient peers.

This experience came back to me five years later in a graduate seminar on pedagogical grammar. For one class, we read studies describing the relative absence of spoken grammar in language textbooks and calling for more attention to it in language teaching. These calls, I realized, did not consider the potential challenges learners might face in using the spoken grammar that scholars insisted we teach, such as those I faced with French. I came to my professor and would-be supervisor with a rough research question: Are speakers with foreign accents judged more harshly on these nonstandard forms than native speakers? Does my experience in French spoken grammar reflect a larger phenomenon in which certain features of second-language (L2) speakers cannot legitimately use certain features of their target language? This became the focus of my research and coursework over the next few months, and eventually evolved into this master’s thesis.

I begin this chapter by reviewing some of the research that has been done on spoken grammar and its place in second language teaching. I then introduce the issue of learners as users of spoken grammar, and discuss how their foreign accents might influence how their L1-speaking peers perceive their use of these features. Finally, I highlight under-explored areas in the literature on spoken grammar and the link between perceptions of accent and grammaticality, and explain how this thesis contributes to addressing these gaps.

Spoken and Written Grammar

It has long been established that spoken grammar deviates from grammatical rules of writing. Brazil (1995), in an early attempt at a theoretical framework for the study of speech, suggested that existing sentence-based grammars do not adequately capture the nature of spoken language, which is co-constructed by interlocutors in real time. This view was soon adopted in second language teaching. Carter and McCarthy (1995) questioned the appropriateness of written grammatical rules as a basis for teaching, particularly when the goal is communicative competence. They also criticized the view that spoken language violates the rules of written grammar and is thus an “incorrect” version of English (Carter & McCarthy, 1995). Using preliminary data from the Cambridge and Nottingham Corpus of Discourse in English (CANCODE), they highlighted several grammatical features that are characteristic of speech but are not addressed in traditional, writing-based pedagogical grammars. These include ellipses (*[You did a] Good job*), tails (*It's really nice, this town*), and tags that follow a variety of positive-negative combinations (*He's a smart man, he is; She's not going to medal, I don't think*). Other scholars, notably Biber, Johansson, Leech, Conrad, and Finegan (1999) and Leech (2000, 2014), propose a *probabilistic* model of grammar in which forms occur with different frequencies across registers, or, to use Biber et al.'s term, “situationally defined varieties” of

language. For example, their corpus showed that the simple present and simple past are much more frequent in conversation, whereas written registers make more use of progressive and perfect aspects. This has become the prevalent view in most reference grammars, including recent works by McCarthy, Carter, and their colleagues (e.g., Carter & McCarthy, 2006; Carter, McCarthy, Mark, & O’Keeffe, 2011).

Researchers have also noted that it is uncommon for English teaching practice to include spoken grammar forms, which in effect denies learners access to the full range of linguistic choices available to more proficient speakers (McCarthy & Carter, 1995). Calls continue to be made for its inclusion in teaching materials and practice (e.g., Carter & McCarthy, 2015; Cullen & Kuo, 2007; Frazier, 2003; Mumford, 2009; Timmis, 2005). The case for teaching spoken grammar has also been made from a sociolinguistic viewpoint: Cutting (2006) argued that vagueness, a characteristic feature of spoken language, serves as a marker of group membership, and so teaching it to learners can help them show solidarity with the speech community.

Learners as Users of Spoken Grammar

It has been claimed that as a result of the under-coverage of spoken grammar in teaching, learners tend to sound bookish and pedantic (e.g., Brown, 1979; Rings, 1992; McCarthy & Carter, 2001). Cutting (2006) has speculated that such “textbook speech” reflects learners’ attempts to make sure they are understood, even if this means being overly explicit. This underuse of spoken grammar forms has not been empirically observed in English, although it has been observed in Canadian French: Rehner, Mougeon, and Nadasdi (2003) found that learners almost never use the frequent spoken forms *nous-autres* and *nous on* (variants of the first-person plural pronoun *nous*), which they link to a lack of attention to these forms in both textbooks and teacher input.

This supposed underuse of spoken grammar calls into question Cutting's (2006) claim that vague language allows learners to signal belonging to their L2 community. It is not known how L1 speakers might respond when L2 speakers use forms they are not often heard using. This leads us to an underexplored area in the spoken grammar literature: learners' *use* of spoken grammar. Calls for the teaching of spoken grammar have largely been based on corpus studies showing discrepancies between speech and writing (Frazier, 2003; Jones & Waller, 2011), or analyses of language textbooks showing an under-coverage of these features (Cullen & Kuo, 2007; Etienne & Sax, 2009). To the best of my knowledge, no studies apart from Derwing et al. (2002) have considered how L2 speakers' use of spoken grammar is perceived by the language community, given learners' supposed underuse of these forms. There is evidence, however, that L1 speakers may not consider such nonstandard language use acceptable. A small study by Prodromou (2007) revealed that L1 speakers will accept creative idiomatic expressions when used by perceived L1 speakers, but will consider them incorrect when told that the expression came from an L2 speaker. Research also shows that pronunciation and grammar tend to influence each other in listeners' judgments of L2 speech (Varonis & Gass, 1982), and that listeners perceive error-free speech as grammatically flawed when speakers have foreign accents (Kennedy, 2015). However, few studies have explored these phenomena in the context of spoken grammar, which is unique in that it deviates from the rules of written grammar but is frequent enough that it may be perceived as acceptable. As Kennedy's (2015) findings suggest, it is likely that the presence of a foreign accent may negatively influence listeners' perceptions of grammaticality. However, there are few studies exploring this aspect of learner language, and even fewer that address its perception by L1 users. These studies will be discussed in the following section.

Judgments of L2 Speech and Grammar

Most studies that have looked at attitudes to L2 speech consider foreign accent as a marker of L2 speaker status. Southwood and Flege (1999) define foreign accent as one that “differs in partially systematic ways” from that of native speakers of a given language or language variety (p. 335). For this study, we use the term “accentedness,” defined by Munro and Derwing (1995) as the degree to which one’s speech is perceived to differ from that of a native speaker.

Research has shown that listeners tend to make negative associations with accented speech (Lippi-Green, 1997). Lindemann (2005), for example, showed that native English speakers in the U.S. ascribe negative traits to certain L1 groups, describing certain accents as “harsh,” “sloppy,” and “arrogant.” Other studies showed that L1 English speakers judged L2 speakers as less competent (e.g., Cargile, 1997; Cargile & Giles, 1998; Lindemann, 2003), less credible (Lev-Ari & Keysar, 2010), or having lower linguistic ability (Brown, 1992; Hu & Lindemann, 2009). Such judgments may stem from the fact that accents serve as “out-group markers” (Gluszek & Dovidio, 2010), or that the greater processing difficulty imposed by accents leads to negative prejudices (Munro & Derwing, 2006).

Although few studies have looked specifically at perceptions of the grammaticality of L2 speech, pronunciation and grammar have been shown to interact in influencing listener judgments. Varonis and Gass (1982) found that perceptions of sentence grammaticality were affected by the presence of foreign accents, particularly when the accent was in the moderate range (i.e., not very mild or very strong). They also found the opposite effect; i.e., grammatical errors influence judgments on degree of accentedness. Overall, they conclude that linguistically naïve listeners—those who have had little to no linguistic training—tend to confound accent and

grammar in subjective judgments of L2 speech. Derwing et al. (2002) conducted a similar study investigating judgments by high-proficiency L2 English speakers, L1 English speakers claiming language awareness (awareness of linguistic features, usually as a result of training or experience), and L1 speakers who claim no language awareness. They listened to sentences containing no errors, typical L2 errors (e.g., *she have*), and typical L1 errors (e.g., *there's less people here*). Both groups of L1-speaker judges were able to identify typical L2 speaker errors better than typical L1 speaker errors: around 80% recognized the error-free sentences, 75% detected the L2 errors, and less than half were able to detect the L1 errors. However, contrary to their expectations, when asked to judge the gravity of the errors, the judges did not tend to rate L1 errors more harshly when produced by L2 speakers. A second experiment, in which the three groups of judges were exposed to the same error types in both aural and written mode, revealed that L2-speaker listeners detected more L1 errors than L1 non-expert listeners. Derwing et al. (2002) attribute this finding to the higher linguistic awareness of both L1 expert raters and L2 speakers, who in their English as a Second Language (ESL) classes had been trained to pay more attention to grammatical form. This points to a possible role of raters' linguistic experience or training in grammaticality ratings, a phenomenon that has been observed in comprehensibility studies (e.g., Kim, 2009; Major, Fitzmaurice, Bunta, & Balasubramanian, 2002; McBride, 2014; O'Brien, 2014).

Kennedy (2015) offers evidence that accents exert a stronger influence on grammaticality ratings by non-expert judges, or those who are not aware of differences in linguistic features. In his study, he asked 11 non-expert judges to rate the grammaticality of 16 speech samples read out by L2 speakers from 11 different L1 backgrounds, with varying degrees of accentedness. They had previously been rated by five expert judges (experienced ESL teachers) to be

grammatically acceptable; i.e., they contained no errors that a teacher might address in an ESL classroom. The mean grammaticality rating for all 16 samples was 4.39 on a 1-6 scale, with only two samples scoring above a 5.0—despite the expert judges having rated them all as grammatical. Speakers with the most pronounced accents were also judged to be the least grammatical, while those with weaker accents were judged more favourably. These findings lend some support to Varonis and Gass' (1982) proposition that non-expert listeners are unable to distinguish between issues in pronunciation and grammar when judging L2 speech, and add to existing studies lower expectations of linguistic ability from L2 speakers (Hu & Lindemann, 2009).

Problem Statement

This chapter has highlighted a number of under-explored areas in the literature on both spoken grammar and perceived grammaticality, and the purpose of the present study is to address these gaps. The first of these areas is L2 speakers' use of spoken grammar. Much of the work that has been done on spoken English grammar has to do with describing its current use by native speakers, and proposing some pedagogical approaches for non-native speakers. To date, only Derwing et al. (2002) have looked at spoken grammar use (or, to use their terms, “native-speaker errors”) by L2 speakers.

In addition, most studies on perceived grammaticality have used forms that can be categorically considered correct or incorrect. While Kennedy (2015) offers evidence of differential judgment of grammaticality in the presence of accent, the issue has not been explored in the context of spoken grammar, which represents a “gray area” in that they are nonstandard but increasingly acceptable as a result of their frequency. The present study will attempt to address these gaps by investigating how non-expert L1 speakers of English, i.e., those who

regularly use and hear spoken grammar forms but are not necessarily aware of these variations, perceive L2 speakers' use of these forms.

In accordance with the Concordia University guidelines for manuscript-based theses, Chapter Two consists of a full research paper written for submission to an applied linguistics journal, including a condensed literature review that overlaps with some of the content in Chapter One. Chapter Three expands on the findings by discussing interpretations beyond the scope of the project, implications for language teaching, and directions for future research.

Chapter Two

Researchers have documented several systematic differences between spoken and written grammar, in large part facilitated by the increased availability of large spoken corpora (Leech, 2000). Carter and McCarthy (1995), for example, have observed that many spoken forms deviate from commonly taught rules of written grammar, as in the case of topic fronting (*This shop, it used to be a church*) and subject ellipsis (*[I] just got caught in the rain*). However, despite increased interest in and understanding of spoken grammar in applied linguistics research, English language teaching and materials remain heavily focused on the rules of written grammar, with spoken features often considered “deviations” from language conventions (Carter & McCarthy, 1995, 2015; Cullen & Kuo, 2007).

Several scholars have acknowledged the need to devote more attention to spoken grammar in second language teaching (e.g., Cullen & Kuo, 2007; Frazier, 2003), arguing that learners should be presented with the same range of linguistic resources as their more proficient peers (McCarthy & Carter, 1995; Carter & McCarthy, 1995). Cutting (2006) has also argued for the teaching of spoken grammar from a sociolinguistic angle, suggesting that vagueness, a characteristic feature of spoken language, serves as a marker of group membership and can help learners show solidarity with the speech community. However, there is little empirical evidence that learners can successfully use spoken grammar in interactions with native speakers. In fact, evidence seems to suggest that second-language (L2) speakers’ use of nonstandard forms in English may not be considered acceptable by first-language (L1) speakers (e.g., Prodromou, 2007; Kennedy, 2015). To date, recommendations for the teaching of spoken grammar have not taken these potential challenges into account. The present study addresses these issues by

investigating how L1 speakers of English judge L2 speakers' use of nonstandard spoken forms typically used by L1 speakers.

We begin with an overview of the research that has been done on spoken grammar and arguments for its inclusion in teaching practice. We then discuss the issue of whether learners can successfully use spoken grammar in interaction within the L2 speech community, given learners' supposed underuse of this feature. Finally, drawing upon the literature on judgments of L2 speech, we discuss why English learners' use of spoken grammar may not be considered acceptable by their native-speaking peers.

Spoken and Written Grammar in Second Language Teaching

Most contemporary research on spoken grammar cites Brazil (1995) as one of the first to attempt a theoretical framework for the study of speech as separate from writing. He argued that the interactive nature of speech could not be accounted for by existing sentence- or constituent-based models of grammar, and proposed a linear model in which utterances form a "chain" co-constructed by interlocutors in-real time to fit the functions dictated by the context. Carter & McCarthy (1995) share this view, arguing that spoken grammar should be recognized as different from written grammar and that this should be reflected in teaching practice that aims for communicative competence (McCarthy & Carter, 1995). They also highlighted several grammatical features that are characteristic of speech but are not addressed in traditional, writing-based models of grammar and pedagogical grammars based on such models. These include sentence-initial ellipses (*[You did a] Good job*) and tails (*It's really nice, this town*). Like Brazil, they argued strongly against presenting language as consisting of sentences, noting that speech occurs in short utterances and phrases that are either aborted or spread out across several

turns. They noted that excluding such forms from English teaching practice is in effect denying learners access to the variety used by more proficient speakers (McCarthy & Carter, 1995).

Other scholars argue that rather than following different systems, speech and writing have essentially the same grammar but with certain forms occurring with different frequencies across registers. Biber, Johansson, Leech, Conrad, and Finegan (1999), using data from the Longman Corpus of Spoken and Written English, observed that some forms occur with notable frequency in specific registers. For example, the simple present and the simple past were found to be much more frequent in conversation, whereas written registers make more use of progressive and perfect aspects. Under this view, each of these registers can be described in terms of the linguistic features they use most frequently. They refer to this as a *probabilistic* model of grammar, where certain forms are more likely to occur in certain contexts. Later works by Carter, McCarthy, and their colleagues (e.g., Carter & McCarthy, 2006; Carter, McCarthy, Mark, & O’Keeffe, 2011) came to adopt this model, resulting in a hybrid view where spoken and written language follow “two different grammars, but with considerable overlap” (Leech, 2014).

While debates remain regarding how spoken grammar should be defined and taught, researchers agree that differences exist between spoken and written language, and that second language teaching has largely focused on the latter. Research has established, for example, that some nonstandard features are more frequent and systematic in speech than previously thought, and that what were once thought to be “grammatical violations” in speech actually serve pragmatic or discursal purposes (Timmis, 2012). For example, McCarthy and Carter (1995) observed that tails (*It’s a great city, London*), which follow a nonstandard word order, usually occur in an evaluative context, with the goal of signalling an affective relationship with the listener. We also know that a focus on written grammar fails to reflect the real-life use of certain

spoken features. For example, traditional language textbooks do not capture the emerging multi-functionality of the word *like*—for instance as a marker of informal reported speech (*I was like, that's awesome!*) and as a hesitation marker (*He just like, grabbed his stuff and went off*)—and thus present an incomplete picture of the language to L2 users (Adolphs & Carter, 2003; Carter & McCarthy, 1995).

Spoken Grammar in L2 Speech

It has been claimed that as a result of the under-coverage of spoken grammar in teaching, learners tend to sound bookish and pedantic (e.g., Brown, 1979; Rings, 1992; McCarthy & Carter, 2001), although this behaviour has so far only been observed in L2 French learners. Rehner, Mougeon, and Nadasdi (2003) found that learners almost never use the frequent spoken forms *nous-autres* (*Nous autres on va magasiner/Us, we're going shopping*) and *nous on* (*Nous on sortira pas/We [formal], we [informal] aren't going out*), both of which are variants of the first-person plural pronoun *nous*. They link this to a lack of attention to these forms in both textbooks and teacher input. Regarding English learners, Cutting (2006) speculates that learners may underuse vague language in speech because, in an attempt to make sure they are understood, they consciously seek to express themselves in the most explicit way possible.

This raises the question of whether English learners can be accepted as *legitimate* users of spoken grammar forms when they do use them, given that listeners may not be accustomed to hearing nonstandard forms from non-native speakers. In addition, using these features may not necessarily signal belonging to the in-group, as Cutting (2006) claims. Prodromou (2007) offers some evidence of this in a small study in which he presented a selection of idiomatic expressions to 400 teachers, half of whom were told the expressions were produced by L1 speakers and the other half told they were produced by L2 speakers. Those who were told that the speakers were

non-native marked the expressions as not acceptable in English nearly twice as often as those who believed that they were native-speaker productions. The results suggest that “what was possible for L1-users was ‘out of bounds’ for L2-users” (Prodromou, 2007).

Two points must be made about Prodromou’s (2007) study. The first is that the judges were simply told that the “speakers” were L1 or L2 users. Therefore, it does not tell us much about their *perceptions* of whether L2 speakers’ actual use of these forms is acceptable. What it tells us, however, is that listeners’ *attitudes* toward L2 speakers seem to prevent them from being considered legitimate users of creative language. The second point is that Prodromou (2007) made use of written stimuli. Given the target form of the study, this is not problematic, because creative idiomaticity can occur in both written and spoken modes. However, we do not know whether the phenomenon he found extends to learners’ use of features in speech that may be underused, such as spoken grammar.

Judgments of L2 Speech and Grammar

Most studies that have looked at attitudes to L2 speech consider foreign accent as a marker of non-native speaker status. Southwood and Flege (1999) define foreign accent as one that “differs in partially systematic ways” from that of L1 speakers of a given language or language variety (p. 335). For this study, we use the term “accentedness,” defined by Munro and Derwing (1995) as the degree to which one’s speech is perceived to differ from that of an L1 speaker.

Research has shown that listeners tend to make negative associations with accented speech (Lippi-Green, 1997). Lindemann (2005), for example, showed that native English speakers in the U.S. describe the speech of certain L1 groups as such as “harsh,” “sloppy,” and “arrogant.” Accents have also been linked to negative judgments of one’s credibility: a study by

Lev-Ari and Keysar (2010) found that trivia statements read out in English by foreign-accented speakers tended to be rated as less true than those read out by L1 speakers. They found the same results in a second experiment where listeners were aware that the study was about the link between processing difficulty and lower truth value judgments. In other words, they were not able to correct their biases despite being aware that these might exist. The authors interpret this as evidence that accents serve as “out-group markers” (Gluszek & Dovidio, 2010) leading to negative prejudices, and that the greater processing difficulty imposed by foreign-accented speech leads to negative prejudices (Munro & Derwing, 2006).

These negative associations can also extend to speakers’ linguistic ability. Brown (1992), for example, asked students to watch a videotaped lecture with a foreign-accented speaker and gave them a variety of speaker guises regarding country of origin, educational status, and L1/L2 speaker status. She found that perceived country of origin strongly influences listeners’ perceptions of his or her language competence; i.e., some L2 groups are associated with lower linguistic ability. Hu and Lindemann (2009) offer further evidence in their study of L1 Cantonese listeners’ perceptions of phonological accuracy in L2 English. Participants listened to a set of L1 English speech samples, but half were told that the speakers were Cantonese. Those who perceived the speakers as Cantonese perceived phonological features stereotypically associated with Cantonese-accented English, such as non-aspirated stops, even when these features were absent. The authors conclude that an idealized view of a given variety—in this case, L1 English—may have caused the raters to react negatively to the same features when produced by L2 speakers. Based on these findings, it is plausible that a foreign accent can lower expectations of grammatical ability by cuing listeners to perceive as errors what they would consider acceptable when produced by an L1 speaker. With regard to grammatical ability,

Hanulíková, van Alphen, van Goch, and Weber (2012) observed a similar phenomenon in a study of Dutch L1 speakers' responses to grammatical errors produced by L1 and L2 speakers. A P600 response test, a measure of changes in brain activity following exposure to stimuli, showed that listeners responded more strongly to errors made by L1 speakers than those by L2 speakers. They interpret this as a “surprisal” effect that manifests when an L1 speaker produces a structure associated with L2 speech. In other words, knowledge of the speaker's identity appears to influence listeners' judgments of grammatical ability. In this case, the high frequency of gender agreement errors in L2 Dutch has conditioned listeners to expect such deviations from foreign-accented speakers. This was supported in a later study by Asano and Weber (2016), who found that L1 German speakers were rated as more accented when reading out incorrect German sentences compared to well-formed sentences. However, this effect of grammatical correctness was not observed in foreign-accented speakers, suggesting that the listeners, like those in Hanulíková et al.'s (2012) study, have come to associate L2 German speech with grammatical inaccuracy and so did not exhibit a “surprisal” effect when the error was made by an L2 speaker.

This interaction between pronunciation and grammar in listener judgments has been observed for a long time, although not extensively studied. Varonis and Gass (1982) found that accents affect perceptions of sentence grammaticality, particularly when the accent is in the moderate range. They also found the opposite effect; i.e., grammatical errors influence judgments on degree of accentedness. Overall, they conclude that linguistically naïve listeners—those who have had little to no linguistic training, for example as language learners or teachers—tend to confound accent and grammar in subjective judgments. Derwing et al. (2002) conducted a similar study in which L1 English judges listened to English sentences containing no errors, errors typically committed by L1 speakers (e.g., *if I would have*), and “egregious” errors

typically made by learners (e.g., *she have*). These were read out by a proficient English speaker with a Polish accent. Most were able to identify typical L2 speaker errors, but less than half picked up on the L1 speaker errors. The authors related the finding to the higher saliency of the L2 speaker errors. However, contrary to their expectations, when asked to judge the gravity of the errors, the judges did not tend to rate L1 errors more harshly when produced by L2 speakers.

In a second experiment, three groups of judges—high-proficiency L2 speakers, L1 speakers with linguistic training, and L1 speakers with no linguistic training—were exposed to the same error types, this time in both written and aural mode. The aural input was read out by an L1 speaker. An interesting finding was that L2 listeners detected more of the L1 errors than L1 non-expert listeners. Derwing et al. (2002) attribute this finding to the higher language awareness of L1 experts, who had linguistic training, and L2 speakers, who in their ESL classes had been trained to pay more attention to grammatical forms. This points to a possible role of language awareness in grammaticality ratings. There is already considerable support for this in pronunciation and comprehensibility, where researchers have found that judgments can be influenced by raters' language background (e.g., Derwing & Munro, 1997; Major et al., 2002; Kim, 2009; McBride, 2014; Saito & Shintani, 2016a) and linguistic training and proficiency in the target language (O'Brien, 2014).

Kennedy (2015) offers evidence that accents affect grammaticality ratings to a greater degree when judges are not linguistically trained. He asked 11 non-expert judges to rate the grammaticality of 16 speech samples on a six-point Likert scale, with 1 = *frequent grammar mistakes* and 6 = *no grammar mistakes*. The text was read out by L2 speakers from 11 different L1 backgrounds and had been rated by five expert judges (experienced ESL teachers) to be grammatically acceptable; i.e., they contained no errors that a teacher might address in an ESL

classroom. These expert judges also rated the accentedness of the samples on a similar scale, with 1 designated for an “accent so strong that many words cannot be understood” and 6 for native-like accent. The mean grammaticality rating for all 16 samples was 4.39, with only two samples scoring above a 5.0—despite the expert judges having rated them all as grammatical. He also found a moderate to strong correlation ($r = .527$) between strength of accent and perceived grammaticality, such that speakers with the most pronounced accents were judged to be the least grammatical and those with weaker accents were judged more favourably. These findings lend some support to the proposition that non-expert listeners have trouble distinguishing between issues in pronunciation and grammar when judging L2 speech (Varonis & Gass, 1982), and that foreign accents lead to lower expectations of linguistic ability (Brown, 1992; Hu & Lindemann, 2009) and grammatical accuracy (Asano & Weber, 2016; Hanulíková et al., 2012).

This review reveals a number of under-explored areas in the literature. First, most studies on spoken grammar have focused on its formal properties; i.e., they are based on frequency observations in spoken corpora (e.g., Biber et al., 1999; McCarthy & Carter, 1995) and their treatment in language teaching materials (e.g., Cullen & Kuo, 2007; Jones & Waller, 2011). To the best of our knowledge, the only study addressing *perceptions* of spoken grammar in use is Derwing et al. (2002), who compared judgments of egregious errors with what they call “native-speaker errors”: forms that deviate from prescriptive rules but are increasingly accepted.

Another under-explored area that the present study will address is the link between grammar and accent. Previous research has shown that non-expert listeners confuse these two constructs (e.g., Kennedy, 2015; Varonis & Gass, 1982), and that listeners associate accented speech with a variety of negative traits (e.g., Lev-Ari & Keysar, 2010; Lindemann, 2005), including grammatical ability (Asano & Weber, 2016; Hanulíková et al., 2012). This study

extends these findings by investigating 1) accent as a variable in non-expert raters' judgments of grammaticality, and 2) judgments of grammatical features that are nonstandard but frequent enough that they may not necessarily be perceived as errors. We are particularly interested in the perceptions of non-expert raters as they may not necessarily be aware of these variations compared to those with linguistic training, and are more representative of the population with which L2 speakers are likely to use spoken grammar. The research questions are as follows:

- 1) Does the presence of a foreign accent affect non-expert raters' judgments of the acceptability of nonstandard spoken grammar forms?
- 2) Does degree of accentedness influence the severity of these judgments?

Based on previous findings that listeners are unable to distinguish between issues in pronunciation and grammar in L2 speech (Varonis & Gass, 1982), that accents can lead to lower perceptions of grammaticality in grammatically acceptable speech (Asano & Weber, 2016; Hanulíková et al., 2012; Kennedy, 2015), and that some language features are considered acceptable only when produced by native speakers (Prodromou, 2007), we hypothesize that the answer to the first research question is yes; accented speech will be judged as less grammatical than non-accented speech. Regarding the second research question, Kennedy (2015) found a moderate effect of accentedness on perceived grammaticality. We expect to find a similar effect in our study, such that the more accented the speaker is, the lower they will be rated on grammaticality.

Method

Participants

Speakers. Fifteen speakers were recorded reading out loud a set of sentences containing examples of spoken grammar. Of these, 10 were L1 speakers of Tagalog (five male and five

female) who spoke English as a second language, and 5 were L1 users of English (two male and three female). The L1 Tagalog speakers had been living in Montreal, Canada between two and four years and report high English proficiency ($M = 7.7$ on a 1-9 scale, with 1 = very poor and 9 = very proficient) on all four skills (reading, writing, listening, and speaking). All the speakers were students at different English-language universities in Montreal and were aged 22 to 35 ($M = 27.7$). English is the dominant language for all speakers: self-reported daily use of English was 85 to 100 per cent for the L1 speakers and 50 to 80 percent for the L2 speakers. All the speakers also spoke French; the L1 speakers also spoke a variety of additional languages including Greek, Italian, and Hebrew.

Accentedness raters. A first group of 10 raters listened to a selection of the speech samples and rated them on accentedness, using a computer-based sliding scale described in the next section. These raters were all undergraduate university students in Montreal, with ages ranging from 24 to 32 ($M = 25.5$; $SD = 2.8$). All spoke English as their dominant language, using it in 70–100% of daily interactions, and with the exception of one monolingual, also spoke French as a second language. Their self-reported English proficiency ranged from 7 to 9 on all four skills. Many also spoke a third language, including Spanish, Italian, and Mandarin. Research has shown that non-expert raters are able to rate accentedness with high reliability (e.g., Isaacs & Thomson, 2013; Derwing, Thomson, & Munro, 2006); as such, the raters had no linguistic training or language teaching experience, although one was a part-time tutor at an English writing centre for two years.

Grammaticality raters. A second group of raters was asked to rate the grammaticality of the sentences in the speech samples using the same sliding scale. Like the accentedness raters, they were all undergraduate students in Montreal, and were aged 22 to 31 ($M = 26$; $SD = 3.25$)

Four were monolingual English speakers, and six were L1 speakers of French, Spanish, and Punjabi; however, English was the dominant language for all raters, with self-reported daily use ranging from 80–100%. Their self-reported English proficiency was similar to the other two groups, ranging from 7.5 to 9 on all four skills. This linguistic profile is typical of English speakers in Montreal, whose perceptions we aimed to investigate; i.e., a mix of monolingual and multilingual speakers who are dominant speakers of English. The raters also had no linguistic training or language teaching experience, which allowed us to control for linguistic awareness as it has been operationalized in previous studies (e.g., Derwing et al., 2002; Kennedy, 2015).

We also asked both groups of raters to rate their familiarity with Tagalog-accented speech and L2-accented speech, using a semantic differential scale with the following options: *never, rarely, sometimes, frequently, and very frequently*. Both groups claimed limited familiarity with Tagalog-accented speech, with most reporting that they “rarely” or “never” interact with this language group. However, both groups were familiar with accented speech in general, reporting that they interact with L2 speakers “sometimes” to “very frequently.”

Materials

Stimuli. The speech samples consisted of 60 sentences, of which 48 contained one of four spoken grammar constructions: topic fronting, ellipsis, disjointed descriptions, and historical present. These constructions are among those observed by McCarthy and Carter (1995) to be frequent in spoken English (e.g., McCarthy & Carter, 1995). We also confirmed the frequency of these forms in the Santa Barbara Corpus of Spoken American English (DuBois, Chafe, Meyer, & Thompson, 2005), which more accurately reflects the variety spoken in Canada. In addition, these constructions deviate from prescriptive rules of written grammar and could thus be

interpreted as grammatical errors. Table 1 provides a brief description of each of these forms, along with examples and their “correct” equivalents according to standard written rules.

Table 1

Description of selected spoken grammar constructions

Spoken grammar form	Example	Standard (written) form
Ellipsis	<i>Gotta love Swedish weather.</i>	<i>You've got to love Swedish weather.</i>
Historical present	<i>I was jogging the other day, and I see this sixty-year-old man, he's running twice as fast and he just whizzes by me.</i>	<i>I was jogging the other day, and I saw this sixty-year-old man who was running twice as fast, and he just whizzed by me.</i>
Topic fronting	<i>This book, it's one of my favourites. (subject fronting)</i> <i>Cyclists, they've got a lot of those in Norway. (object fronting)</i>	<i>This book is one of my favourites.</i> <i>They've got a lot of cyclists in Norway.</i>
Disjointed descriptions	<i>It's a good show, very whimsical, it's a children's story but philosophical</i>	<i>It's a good, very whimsical, but philosophical children's story.</i>

There were also 12 distractors consisting of six sentences containing egregious errors of the type that is normally addressed in ESL classrooms, such as *She have a car*, and six sentences containing no errors. This was to ensure that raters were not consciously paying attention to the

grammar while rating, and to help position the spoken grammar samples as being in between acceptable and not acceptable.

The speakers recorded all 60 sentences into an Apple laptop with a Logitech microphone. To simulate spontaneous speech as closely as possible in a laboratory setting, the speakers were instructed to speak in a casual, conversational tone, as if they were talking to another person. Before recording, they listened to three sample recordings demonstrating the required register, and were given time to practice each sentence following the model. They then recorded each sentence twice. An independent rater listened to the two versions and chose which version sounded the most natural, and this version was then used in the final pool of samples. The resulting speech samples were between 6 and 10 seconds long. The complete list of stimuli is provided in Appendix A.

The final set of stimuli was created by randomly distributing the twelve sentences from each of the five categories (four spoken grammar forms + distractors) among the three groups of speakers, so that all three groups contained four samples from the five categories. Each rater therefore listened to 60 sentences, consisting of 12 examples of each of the four spoken grammar constructions, and 12 distractors. Table 2 illustrates this distribution.

Table 2

Distribution of stimuli

Category	Heavily accented	Moderately accented	Non-accented	Total
Ellipsis	4	4	4	12
Historical present	4	4	4	12
Topic fronting	4	4	4	12

Disjointed descriptions	4	4	4	12
Distractors	4	4	4	12
Total	20	20	20	60

Rating scale. We used a computer-based sliding scale adapted from the one developed by Saito, Trofimovich, and Isaacs (2015) and Crowther, Trofimovich, Saito, and Isaacs (2015) for a variety of linguistic measures. This scale records scores from .001 to 1.000 with increments of .001, resulting in a 1000-point scale. The large number of increments is expected to capture more fine-grained differences in judgments than is possible with discrete-point scales used in previous grammaticality rating studies (e.g., Kennedy, 2015). To keep the judgments as subjective as possible, raters do not see the scores, but are guided by anchor points at the low and high ends marked by frowning and smiling faces, as well as verbal descriptors. The descriptions for all four measures are provided in Table 3.

Table 3

Anchor Point Descriptions for Sliding Scale

Measure	.001 = ☹	1.000 = ☺
Accentedness	Strongly accented	Not accented at all
Grammatical acceptability	Unacceptable grammar	Acceptable grammar
Vowel and consonant errors	Frequent errors	No errors
Word stress errors	Frequent errors	No errors

Procedure

The first group of raters rated the speakers on accentedness, defined as the degree to which the speech deviates from that of a native speaker (Munro & Derwing, 1995). Prior to rating, they listened to three sample files illustrating strongly accented, moderately accented, and non-accented speech, and practiced rating speech samples using the computer-based sliding scale described above. To prevent grammatical errors from interfering with accentedness judgments, the samples were chosen from among the error-free distractors from each speaker. Each rating session took approximately 45 minutes, including 5-minute breaks after every 10 speakers.

The second group of raters rated the samples on three measures: grammatical acceptability, vowel and consonant accuracy, and word stress placement. The two phonological measures were added to encourage the raters to attend to grammar and pronunciation separately, as these two have been shown to interact in non-expert ratings (Kennedy, 2015; Varonis & Gass, 1982). Grammatical acceptability was defined as the listener's perception of how good the speaker's grammar was, not based on a word-for-word analysis or number of errors but rather on how "correct" the sentence sounds as a whole. Vowel and consonant errors were defined as the use of different sounds than might be expected from a proficient speaker, such as pronouncing *pitch* /pitʃ/ as *peach* /pitʃ/ or *light* /laɪt/ as *right* /raɪt/. Word stress errors were defined as emphasizing (pronouncing longer and more loudly) the wrong syllable, such as *phoTOgrapher* pronounced as *photoGRapher*. As with the expert raters, they began by listening to sample files illustrating low, medium, and high scores on all three measures, and practiced rating sample files using the sliding scale. As with the accentedness raters, they took 5-minute breaks after every 10 samples. Each rating session took approximately 60 minutes.

Previous studies have found that non-expert raters have difficulty reaching inter-rater consistency in measures other than accentedness (e.g., Crowther et al., 2015), a problem that we also expected with the measures we used. To maximize inter-rater consistency on these measures, in addition to rating the three sample files, we asked raters to identify which characteristics of the sample influenced their judgments (e.g., vowel and consonant accuracy was scored low because the speaker pronounced *Swedish* as /swɛdɪʃ/ instead of /swɪdɪʃ/). This allowed us to ensure that they understood each construct and were basing their judgments on different observations for each measure.

All rating sessions took place in a research laboratory in Montreal, Canada. Raters listened to the samples on a Dell laptop and a pair of Logitech headphones. In all sessions, the raters listened to each sample once, and were allowed to take as much time as they needed to complete the rating before moving on to the next sample.

Analysis

Cronbach's alpha was .96 for the accentedness raters and .89 for the grammaticality raters, indicating high reliability within both groups. The mean accentedness ratings, provided by the first group of raters, yielded three groups of 5 speakers each: heavily accented, moderately accented, and non-accented, with mean accentedness scores of .205, .559, and .925 respectively. As expected, all five L1 speakers were in the non-accented group. The moderately accented group consisted of two male and three female speakers, and the heavily accented group had three male and two female. The mean grammaticality scores for each group were then calculated and compared using a one-way analysis of variance (ANOVA).

Results

The present study aimed to examine the effect of foreign accent on non-expert raters' judgments of the grammatical acceptability of nonstandard spoken grammar forms used by L2 speakers.. Table 4 shows that the non-accented speakers received the highest grammaticality scores overall, and the heavily accented speakers the lowest scores. The scores for phoneme and word stress errors also displayed the same pattern, although the word stress scores exhibited less variation. The means plot provided in Figure 1 illustrates the difference in grammaticality scores between speaker groups.

Table 4

Mean Scores by Degree of Accentedness

Measures	Groups by accentedness (SDs in parentheses)		
	Non-accented	Moderate	Heavy
Accentedness	.925 (.97)	.559 (.97)	.205 (.97)
Grammaticality	.923 (.04)	.499 (.14)	.356 (.09)
Vowel and consonant errors	.902 (.04)	.404 (.17)	.262 (.07)
Word stress	.902 (.06)	.746 (.11)	.668 (.10)

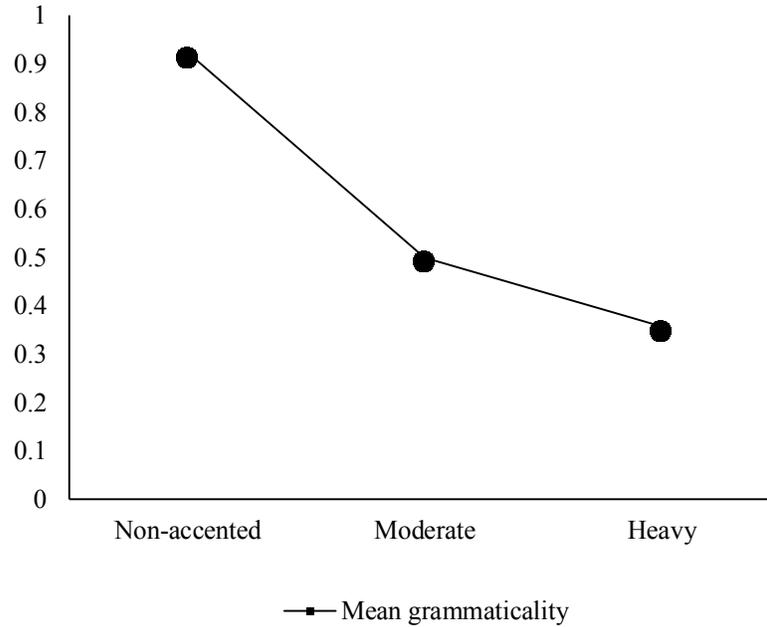


Figure 1. Mean grammaticality scores by accentedness group.

The Shapiro-Wilk test indicated that the grammaticality scores were normally distributed in all three groups. However, a Levene's F test revealed that homogeneity of variance was not met ($p = .001$). Figure 2 shows that the greatest variance occurred within the moderately accented group, with the non-accented group showing the least variance. There also appears to be some overlap in scores between the moderately accented and heavily accented groups.

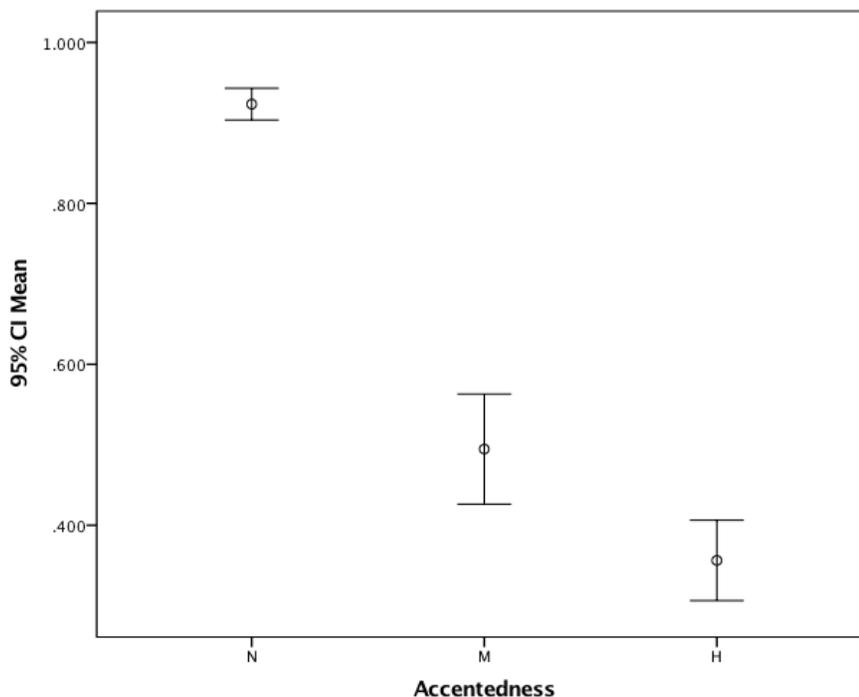


Figure 2. Variation in grammaticality scores by accentedness group.

Following Field (2005, p. 346), we performed a Welch's F test to account for the homogeneity of variance violation. The one-way ANOVA revealed a significant main effect of accentedness on grammaticality scores, Welch's $F(2, 23.81) = 294.71$, $p < .001$, indicating that foreign accent does significantly affect the perceived grammaticality of nonstandard spoken forms. The estimated omega squared ($\omega^2 = .92$), indicating a large effect size, suggests that approximately 92% of the total variation in grammaticality scores may be attributed to the presence of foreign accent.

We then performed post-hoc tests using the Games-Howell procedure to determine whether the significance lies between any two specific groups, with a Bonferroni adjustment to adjust significance values to .0167. The results of these tests and the corresponding effect sizes (expressed as Cohen's d) are provided in Table 5. Grammaticality scores differed significantly

between all pairs; i.e., between native and moderately accented, moderately and heavily accented, and native and heavily accented speakers, with large effect sizes across the board. The largest effect size was observed between non-accented and heavily accented speakers, indicating that it is between these two groups that foreign accent played the biggest role in differentiating between grammaticality ratings.

Table 5

Games-Howell Post-Hoc Results for Grammaticality Scores by Accentedness

Accentedness	Mean gramm. score (SD)	<u>Mean differences (Cohen's <i>d</i>)</u>		
		Non-accented	Moderate	Heavy
Non-accented	.923 (.04)	--		
Moderate	.499 (.14)	.424** (4.12)	--	
Heavy	.356 (.09)	.567** (8.14)	.143* (1.22)	--

* $p < .005$, ** $p < .001$

Because the ANOVA considered differences between groups of speakers, this analysis may have obscured finer differences between individual scores. To account for this, we ran a Pearson product-moment correlation to between the mean accentedness and grammaticality scores for all 15 speakers, and found a strong, statistically significant correlation, ($r = .94$, $n = 15$, $p = .001$). Figure 3 shows a clear linear relationship between the two measures.

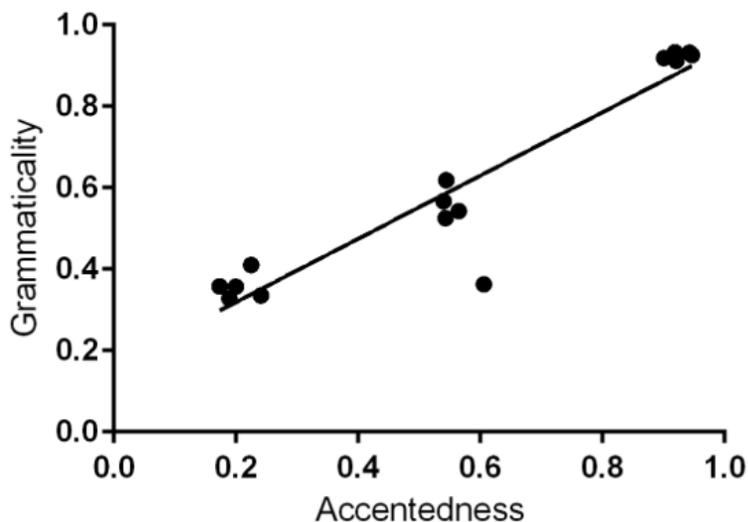


Figure 3. Correlation between accentedness and grammaticality scores.

To identify possible confounding effects on grammaticality of segmental (vowel and consonant) accuracy and word stress accuracy, we performed a partial correlation to determine the relationship between accentedness and grammaticality while accounting for these two phonological measures. Table 6 shows strong positive correlations between all three variables. However, there was also a strong partial correlation between grammaticality scores and accentedness while controlling for both vowel and consonant and word stress accuracy, which was statistically significant, $r(11) = .744$, $N = 15$, $p = .004$. This indicates that the two other measures had only a slight effect on the relationship between grammaticality and accentedness.

Table 6

Partial Correlation Controlling for Segmental and Word Stress Accuracy

	Accentedness	Grammaticality	V&C errors	WS errors
Accentedness	--			
Grammaticality	.94**	--		
V&C errors	.86*	.91*	--	

WS errors	.84*	.91*	.98*	--
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**p = .004, **p = .001*

Based on previous studies (Kennedy, 2015; Prodromou, 2007), we had hypothesized that (1) speakers with foreign accents would be rated as less grammatical compared to non-accented speakers on their use of syntactically equivalent spoken grammar forms, and that (2) speakers with the strongest accents would receive the lowest grammaticality ratings. Our findings suggest that both hypotheses are supported.

Discussion

Our results indicate that foreign accent does affect non-expert raters' perceptions of the grammaticality of nonstandard spoken grammar forms. We also found significant differences in all pairwise comparisons, suggesting a possible correlation between accentedness and perceived grammaticality. This is further supported by a strong linear correlation between these two measures; i.e., the stronger a speaker's accent is, the less grammatical his or her use of nonstandard forms is perceived to be by L1 speakers.

Foreign Accent and Perceptions of Grammaticality

Our results are in line with previous studies that have examined the link between pronunciation and grammaticality judgments. Notably, they support Kennedy's (2015) finding that foreign accent correlates with lower perceptions of grammaticality, and that of Varonis and Gass (1982), who found that non-expert raters struggle to separate issues of grammar and pronunciation when rating L2 speech. This was despite our efforts to encourage raters to attend to grammar and pronunciation separately by having them rate two phonological measures, phonemic accuracy and word stress, in addition to grammaticality. Although having to rate all

three measures at the same time might have caused some conflation, the raters showed evidence that they were able to base their judgments on different observations rather than relying on a single construct for all three measures. In addition, a partial correlation showed that the two phonological variables had minimal effect on the effect of accentedness on grammaticality scores. This suggests that the differential judgments may not have resulted entirely from the raters confounding the two constructs. A possible explanation is that the foreign accent placed a greater processing load on the listeners, causing negative prejudices about the speaker (Munro & Derwing, 2006). This has been observed in several studies that have linked foreign accent with negative judgments (Lindemann, 2005). In the present study, the processing difficulty imposed by the accent might have caused a negative judgment on the speaker's linguistic ability, which cued the raters to perceive errors in what they would otherwise consider error-free speech.

L2 Speakers' Use of Spoken Grammar

The results also appear to support claims that some features of speech that are frequently used by L1 speakers are “out of bounds” for L2 speakers (Prodromou, 2007). In the case of our study, spoken grammar—which is under-covered in English language teaching (Cullen & Kuo, 2007; Jones & Waller, 2012) and presumed to be underused by learners (Brown, 1979; Cutting; 2006; Rings, 1992)—might be more closely associated with L1 than L2 speech. Listeners unaccustomed to hearing a “native speaker” feature produced by an L2 user may therefore judge the production as incorrect, as Brown (1992) found in judgments of phonological accuracy in Cantonese-accented English. In other words, L2 speakers may be held up to different standards of grammar than L1 speakers, which in effect denies them access to certain features of the language. However, we are cautious in making this connection because the ratings were carried out in a laboratory setting, rather than an authentic, interactive context where spoken grammar

forms are likely to occur. This means that our experiment does not include elements of interaction that may influence listener judgments, such as knowledge of the speaker's identity and contextual information such as level of formality and social distance between interlocutors. In the absence of more authentic experimental conditions, we are more inclined to attribute our finding to psycholinguistic, rather than sociolinguistic reasons. That is, listeners perceive L2 speakers' use of nonstandard features as incorrect not out of prejudices regarding their linguistic competence, but because the accent heightens their expectation of grammatical errors (Asano & Weber, 2016; Hanulíková et al., 2012). Where grammatical acceptability cannot be categorically determined, as in the case of nonstandard spoken grammar, the presence of an accent might sway listeners toward the lower end of the scale because they have come to associate L2 speech with grammatical errors. This may also explain the slight overlap in grammaticality scores between the two accented groups.

Effect of Degree of Accentedness

Degree of accentedness also appears to influence perceived grammaticality, such that stronger accents tend to receive lower grammaticality scores on syntactically equivalent constructions. Our raters exhibited the greatest variation in scores within the moderately accented group ($SD = .14$) and had similarly low variation in the non-accented and heavily accented groups ($SD = .04$ and $.09$ respectively), again supporting Varonis and Gass (1982). However, the slight overlap between the moderately and heavily accented groups suggests that the confusion between pronunciation and grammaticality judgments may not be limited to moderate accents. It is possible that the range at which this confusion occurs is greater than previously thought; that is, at least for spoken grammar forms, raters may confound pronunciation and grammar issues beyond the moderate range. If accents are indeed tied to lower

expectations of grammatical ability (Asano & Weber, 2016; Hanulíková et al., 2012; Kennedy, 2015) or at least linguistic ability (e.g., Brown, 1992), raters might have more difficulty making judgments on nonstandard forms when they cannot quickly associate the speech with a proficiency level.

Conclusions

This study is one of the few to have examined the interaction between judgments of accent and grammar, and to investigate L1 speakers' perceptions of L2 speakers' use of nonstandard grammar. However, there are some limitations of the research that need to be acknowledged. The study was conducted in a controlled environment, with raters listening to recorded samples of pre-selected forms rather than interacting with L2 speakers. This is not fully representative of the context in which spoken grammar occurs, and prevented us from considering other factors related to real-time, face-to-face communication. As such, although our findings are in line with claims made from a sociolinguistic angle (e.g., Cutting, 2006; Prodromou, 2007), we could only make connections to psycholinguistic studies (e.g., Asano & Weber, 2016; Hanulíková et al., 2012). Future studies could investigate sociolinguistic factors by using video prompts or face-to-face interaction rather than recorded speech samples, or exploring the effects of raters' exposure and attitude towards particular L1 groups.

This study also had a small number of raters ($N = 10$). Although similar rating studies have been conducted with a similar sample size (e.g., Crowther et al., 2015), our results would be more generalizable with a larger number of raters. This is especially important when looking at subjective measures, such as perceived grammaticality.

Future Research

Investigating rater judgments. To explain the greater variation in scores within the accented groups compared to the non-accented group, it would be interesting to explore how raters arrive at their judgments. One way to do so would be to compare raters' reaction times among the speaker groups. Both our study and that of Varonis and Gass (1982) suggest that raters struggle more in judging moderate accents than very strong or very mild ones. However, both studies are based on variations in rater judgments, which cannot definitively be linked to greater difficulty or confusion between the two constructs. A study using a P600 response test, such as that used by Hanulíková et al. (2012), might reveal longer response times for moderately accented speakers and offer more direct evidence of this claim. To gain insight on the *nature* of this difficulty, a qualitative aspect could also be added, for example by conducting post-rating interviews (e.g., Isaacs & Trofimovich, 2012; Kim, 2009; McBride, 2014). Such an approach would help us identify, among other things, the source of raters' confusion, what characteristics of the speech stream are most salient to them, and whether different characteristics are more or less salient at different levels of accentedness. It is also possible that at this range, raters' judgments are influenced by specific components of accentedness, such as segmental errors, rhythm, and syllable structure (Trofimovich & Isaacs, 2012), or even on other constructs altogether, such as fluency or comprehensibility. The strong correlations between all variables (see Table 6) may be evidence of such an effect. It would therefore be interesting to identify which of these features feed into grammaticality ratings at different levels.

Rater characteristics. Also worth investigating is whether certain rater characteristics influence perceptions of grammaticality. As mentioned, there is a considerable body of research suggesting that L1 background affects judgments in a number of phonological domains,

including comprehensibility and accentedness. Perceived grammaticality may well be subject to this influence as well. Studies on perceived grammaticality have considered language teaching experience as an indicator of linguistic awareness (e.g., Kennedy, 2015; Derwing et al., 2002), but our findings suggest that bilingual or monolingual status, or even familiarity with L2 speech in general, lead to more lenient rating behaviours. Following the studies mentioned, we controlled for linguistic awareness by asking about raters' language teaching experience and formal linguistics training; we did not account for other languages spoken or informal language studies. As such, four of our raters were monolingual English speakers and six spoke at least one other language, and a quick look at the mean grammaticality scores given by these raters does show a slight difference between the two groups. This was especially true with accented speakers: scores for the moderately accented group averaged .881 and .643 from the multilingual and monolingual raters respectively, and the heavily accented group scored .460 and .322. This did not seem to compromise inter-rater reliability, as indicated by the high consistency scores for all measures. However, there is plenty of evidence that linguistic awareness and familiarity with a common language play a role in raters' judgments (e.g., Kim, 2009; McBride, 2014; O'Brien, 2014), particularly in the areas of comprehension (Major et al., 2002), intelligibility (Bent & Bradlow, 2003; Munro, Derwing, & Morton, 2006), and accentedness (Saito & Shintani, 2016). Derwing et al. (2002) found that non-expert ESL learners were more sensitive to grammatical errors in rating tasks, attributing it to greater linguistic awareness from having been trained to notice grammatical forms. Although the small number of raters and uneven distribution of monolingual and multilingual raters prevented us from running statistical comparisons, it is possible that our bilingual and multilingual raters had substantially greater linguistic awareness than the monolingual ones, which might have positively influenced their grammaticality ratings.

It would be interesting, therefore, to conduct a similar study comparing the rating behaviours of raters from different language backgrounds.

Effect of spoken grammar forms. The present study examined a small number of spoken grammar forms. These forms were chosen based on frequency using informal, albeit principled methods. Although we did not find significant differences between these forms in a previous study (Ruivivar & Collins, 2017), we recognize that they represent different aspects of spoken conventions. For example, in sentence-initial ellipsis, the ellipsed word/s, usually the subject, are known to both interlocutors (e.g., [*Are you*] *Still working on that paper?*). Historical present, on the other hand, signals an informal context and is often used to convey the mood or emotion of a past event (Wolfson, 1982). A future study using a larger number of samples might reveal patterns based on the pragmatic or discoursal purpose served by different target forms.

Spoken grammar in other L1/L2 contexts. Further research is also needed to determine whether our findings are generalizable across L1s and L2s. We chose L1 Tagalog speakers because they represent a relatively small linguistic group in Montreal, making it possible to locate raters who had had little to no previous contact with Tagalog-accented speakers. A similar study might yield different results when raters are more familiar with the accent in question, as in the case of French-accented English speakers in Montreal. Such a result might arise from greater exposure to the spoken form in question, such as topic fronting, which is common in both conversational French and Montreal English. Differences might also come from familiarity with the accent in question: raters may be accustomed to topic fronting in French-accented English because these French speakers cross-linguistically transfer this feature from their L1. Finally, studies could also look at factors that may vary between languages, such as different types of

accents, similarity between L1 and L2 spoken grammar features, and raters' attitudes towards a particular language group.

Pedagogical approaches. One of the motivations for the present study was that current recommendations for teaching spoken grammar do not consider potential challenges that learners might encounter when using spoken grammar in their L2. This study illustrates one such challenge. While our findings are not sufficient to make concrete pedagogical recommendations, they do offer some direction for future research. For example, studies on the various factors (e.g., discursial features, L2 proficiency, context) influencing grammatical judgment might guide pedagogical decisions such as where to put spoken grammar in the curriculum (e.g., during oral or grammar practice), which forms to teach, and at which level to teach them.

Chapter Three

This chapter begins with a recapitulation of the conclusions drawn in Chapter Two, focusing on interesting trends that emerged from our data. It then lays out directions for future study in light of these findings, both in the domains of spoken grammar and the link between accent and perceived grammaticality. Finally, it discusses the potential implications of our findings for second language teaching.

General Conclusions

As discussed in Chapter Two, our main finding is that nonstandard spoken grammar forms are judged as less grammatical when produced with a foreign accent. We also found that the more accented the speech is, the lower the grammaticality scores tend to be. Our results lend support to previous findings that accents affect perceptions of grammaticality (Asano & Weber, 2016; Hanulíková et al., 2012; Kennedy, 2015). This effect also appears to be stronger in the case of moderate accents, consistent with Varonis and Gass (1982).

We also observed a number of unexpected trends. For instance, a slight overlap in scores between the moderately and heavily accented groups suggests that raters confound accent and grammar to a greater degree within a certain range of accentedness. There was also evidence that the raters' language background influenced their judgments, such that bilingual and multilingual raters gave higher scores than monolingual speakers. These observations are beyond the scope of our research questions, but certainly merit further investigation.

Future Research

Because this study is among the first to look at perceptions of spoken grammar, it raises several questions that may be addressed in future studies, in addition to the ones suggested above. One is whether perceived grammaticality differs among spoken grammar forms. It is

possible that differences can arise from formal differences between types of spoken grammar. For example, topic fronting exhibits a noticeable “violation” from written standards in that the subject is displaced or repeated, while sentence-initial ellipsis involves the dropping of initial, usually unstressed personal pronouns (e.g., [*I*] *Had to call my boss on vacation*), which is less easily perceived. We did not find any differences between the forms we looked at in our study. However, because we did not set out to address this question, we used a small selection of forms based on corpus observations and used a small number of samples per form, which limited us to a comparison of means. A larger number of samples per category will allow for more powerful statistical comparisons between different forms, and a larger selection of forms would offer a better idea of whether our findings apply to spoken grammar in general.

Spoken grammar in other languages. There is a need to extend research on spoken grammar to a wider range of languages. With the exception of Etienne and Sax (2009) and Rehner et al.’s (2003) work on French, most studies have been on English spoken grammar. Little is known about the nature of spoken grammar in other languages, particularly whether the same features serve the same purposes. However, the abovementioned studies on French spoken grammar have successfully answered other practical questions, such as whether spoken grammar is under-taught or under-used, without relying on corpus data or corpus-based selection of features. Future research could therefore answer the same questions with regard to other languages. In particular, studies could investigate whether spoken grammar is given equal attention in other second language and foreign language contexts, and how this affects learners’ ability or willingness to use nonstandard forms in interaction. Also worth exploring is whether findings from the present study apply to other first and second languages, taking into account

related factors such as amount of contact between L1 and L2 groups, attitudes towards different linguistic communities, and similarity of spoken grammar features across languages.

Spoken grammar pedagogy. Perhaps the most important focus for future research, however, is where learners themselves stand on the issue of spoken grammar teaching. Are they aware of the nature and purpose of nonstandard spoken grammar forms? If so, do they want to learn these forms in order to communicate with L1-speaking peers, or do they prefer to speak their target language “correctly”? These questions have been addressed by Timmis (2002) and Goh (2009) in English as a Foreign Language (EFL) contexts. Both studies found that EFL learners want to learn “real” English; that is, English as it is used by native speakers in inner-circle countries such as the United Kingdom (Kachru, 1985). However, such studies have not been conducted in second language contexts, where the target language is the primary language used outside the classroom. In Quebec, for example, students learning English as a Second Language (ESL) are exposed to English outside the classroom through interactions with native speakers, and thus may be more aware than EFL learners of linguistic variations such as nonstandard spoken grammar. It is therefore possible that learners in a second-language environment share the views of those in foreign-language contexts, or have different motivations to learn “real-life” varieties of the target language. To this end, future studies could also consider factors that might arise in a second-language environment, such as L1 and L2 identity and media exposure (Rubenfeld, Clément, Lussier, Lebrun, & Auger, 2006) and ethnic group affiliation (Gatbonton & Trofimovich, 2008), and how these might influence learners’ views on learning nonstandard L2 features.

Pedagogical implications

Our findings seem to suggest several possible directions for the teaching of spoken grammar. The first is that it may not be useful to teach spoken grammar at all because its use by L2 speakers does not seem to be accepted by the L1 community. However, this approach would not be advisable for two reasons. First, Timmis (2005) argues that “there is at least a *prima facie* case for teaching spoken grammar” because it remains heavily ignored in second language teaching, and because both teachers and students agree that nonstandard forms should be taught if these reflect real-life use of the target language. In other words, this approach ignores an observed flaw in teaching practice and learners’ and teachers’ preferences. Second, such a recommendation would be based on an overgeneralization of our data. What we have found is an effect of accent on perceived grammaticality, rather than a judgment on the speakers’ ownership of the language, belonging to the L1 community, or “authority” to use certain features of the language. As mentioned in Chapter Two, more interactive experimental conditions might yield different results. One reason to expect a difference is that spoken grammar forms serve to facilitate real-time interaction (Brazil, 1995; McCarthy & Carter, 1995). Disjointed descriptions, for example, allow speakers to express a series of ideas in real time, rather than stringing them into well-formed sentences. They also fit better into Brazil’s (1995) linear model of speech, where interlocutors co-construct a chain of ideas.

A second possible implication is that spoken grammar should be taught while or after addressing pronunciation issues. However, this goes against the widely accepted view that pronunciation teaching should aim for comprehensibility, not native-like accent (e.g., Isaacs & Trofimovich, 2012). “Correcting” learners’ accents so that their speech meets with greater acceptance from their L1-speaking peers reinforces the view that certain features—in this case,

spoken grammar—can only legitimately be used by L1 speakers (or at least those with native-like accents), rather than being made accessible to learners. In addition, our data suggests that variability can exist as much in L1 listeners' comprehension of L2 speech as in L2 users' speaking ability. Subtirelu and Lindemann (2014) point out that successful interaction relies on communication skills from both interlocutors, and advocate focusing research on L1 speakers' language attitudes, comprehension skills, and communication strategies. Indeed, previous studies suggest that familiarity with L2 varieties improves comprehension of L2 speech; for example, Kennedy and Trofimovich (2008) found that ESL teachers understood L2 speech better than L1 speakers who had not been exposed to as much language variation. This can well apply to L1 speakers' perceptions of nonstandard language.

In light of this research, I see two possible directions for the teaching of spoken grammar. The first is teaching it through production practice. Previous research has largely focused on teaching learners *about* spoken grammar forms, but not necessarily having them use these forms (e.g., Cullen & Kuo, 2007; Timmis, 2005); indeed, there is evidence that teachers recognize the need to teach spoken grammar for receptive but not productive purposes. However, Mumford (2009) argues that spoken grammar should be taught through production, with the goal of 1) improving interactional fluency by saving learners the burden of formulating their ideas into grammatically correct speech, and 2) training them to use spoken grammar forms when contextually appropriate (e.g., making quick orders at a fast-food counter).

The second pedagogical direction, in response to Subtirelu and Lindemann's (2014) call to focus on L1 speakers' role in L1-L2 communication, is to teach spoken grammar through interaction with L1 speakers. This would allow learners to approximate the contexts in which they might expect to use spoken grammar (i.e., with L1-speaking or more proficient

interlocutors), as well as improve L1 speakers' familiarity with L2 speakers' accents and their use of spoken grammar forms. These suggestions have yet to be empirically tested, ideally in classroom studies comparing the learning outcomes of different approaches. However, in the absence of such studies and more detailed investigations on the perceptions of L2 spoken grammar, it makes the most sense for L2 users to learn spoken grammar for the same purposes that it serves in L1 speech (Ruivivar & Collins, 2016, 2017).

I embarked upon this thesis with the general goal of better understanding my own struggles in using French spoken grammar. The study suggests that these struggles may indeed reflect a larger phenomenon that other language learners have likely experienced. We know little about this phenomenon, but this further shows that spoken grammar, particularly spoken grammar in use, is a promising avenue for future research. This thesis may have raised more questions about spoken grammar and perceived grammaticality than it has answered, and I hope that these questions can contribute to advancing our knowledge in both of these domains.

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Appendix A: Stimuli

1) Set 1: Ellipsis

- Just got caught in the rain. That's the fourth time this week! Gotta love Swedish weather.
- Had to sell my car to pay for university. I got a good price, though. Buyer was desperate.
- Great work! I swear you're the best graffiti artist in this town. Really proud of you!
- Still working on that paper? Come out and take a break! Coffee's getting cold!
- Finally tried that new Peruvian restaurant yesterday. It was so crowded! Food was great though.
- Dog turns two today. He's getting a giant steak and a trip to the beach. Should be a fun time!
- Spent the last two days in Venice. I wouldn't want to live there—it's too crowded! Lots of nice museums though.
- Metro was down again this morning. I had to walk outside for 30 minutes! Almost didn't make it to class.
- New designer starts work today. I heard he really impressed the CEO at the interview. Hope he's as good as he sounds!
- Lots of good news in the past week. Frank got a raise and my sister just finished her first marathon. Hope the rest of the year goes just as well!
- Surprise day off! There was water damage at the office so we were all sent home. Don't know what to do though.
- Found my ferret trying to bury my toothbrush in the yard. He looked really proud of himself. It was adorable. Time to buy a new toothbrush, though.

2) Set 2: Historical Present

- I was at the concert last Sunday, I'm sitting in the front row, and there's a woman two seats to the right, she's sleeping like a rock.
- She brought her computer in and the guy says she needs a new graphics card. So she asks how much that would cost, and he tells her to look it up on Google.

- So I was looking at the hiking boots, I'm trying on this really nice pair and Ashley thinks they're perfect, but then they tell me they don't have it in my size.
- I was jogging the other day, and behind me I see this man who must have been about 65, he's running twice as fast and he just whizzes by me.
- We had this really boring talk yesterday. Ten minutes into it we're all trying not to fall asleep. Then suddenly we hear someone snoring and it's James in the front row.
- Every time I raised my hand in that class, I'm thinking what if my answer is wrong? And I think, please don't call on me. And of course she always calls on me,
- I was just there to get ferret food. But I walk by the cages and there's this fat little ferret looking at me. And ten minutes later, I'm walking out the door with my third ferret.
- It was Christmas dinner, right? My mom spends all day cooking, and we're all excited, and then my sister says she can't eat anything because apparently she's vegan now.
- I just saw my coach do a really cool triple Axel. She does those three and a half turns in the air, lands perfectly, and shrugs as if that was the easiest thing she'd ever done.
- We were just talking about the news, and this guy walking in front of us joins in, we start talking about the election, and we end up having a really nice conversation.
- She was looking for something to do Sunday, so I say I'm free and invite her over for some coffee, and she comes over with cookies and we had a really nice afternoon.
- I started waiting for him at the usual spot in front of the office, but it turns out Portugal just made the final, so there's a huge party across the street and I can't see past the crowd.

3) Set 3: Topic Fronting

- Those printers there, they're colour printers, if you want to use them, you need to get the code from reception.

- So that bike that's on sale, the one I just tried, if I buy it next week, do I still get a discount?
- This one here with the dark fur, his name is Bruce, he's a little shy, but once he knows you he's very affectionate.
- Those wires over there, guests trip over them all the time, so you have to watch out especially when it's dark.
- A nice cold beer after work, that's always good, especially if it's summer and you have a balcony with a nice view.
- Six hours on a train, that's nothing, I usually chat with other passengers or I just sleep if I'm tired.
- Running three times a week, that's great for you, but if you don't do strength training as well, you don't improve as fast.
- This book, have you read it? It's by Terry Pratchett and he's one of the most hilarious writers I know.
- Cyclists, they've got a lot of those in Norway, it was a bit chaotic at first but now they follow the rules.
- Damian, he's a good trainer, he doesn't work you too hard and he always makes sure you have fun.
- Those new metro trains, have you tried them? They look nice but the handles are way too high for me.
- The iPod I have, it's about four years old, I've brought it with me around the world and it still works perfectly.

4) Set 4

- I've got a nice new table, it's made of cedar or something, it's pretty big, an office desk.
- She's built like a dancer, long legs, great posture, and she's really flexible.
- It's a nice museum, it's charming, not too fancy, very interesting art.
- It's a good show, very whimsical, it's a children's story but philosophical.
- That shop is really nice, all fair trade stuff, very nice owners and there's free coffee and tea.

- It's a pretty decent camera, feels solid, just fantastic picture quality, it's perfect for travel.
- That's just how my mom is, she talks a lot and sometimes she comes off as arrogant, but she's actually very sweet.
- Our new neighbours just moved in, middle-aged couple from Thailand, no kids, both are musicians.
- I really like your comics, nice choice of colours, interesting layout, and of course the stories are fascinating.
- It was a nice convention, lots of great talks and displays, really good food, and the venue was a hotel by the beach!
- I love this new camera, not too fancy like an SLR, feels good in the hands, and it's really good for traveling.
- The meeting was okay, just the regular topics like forecasts and finances, not too long, and we got free donuts.

5) Set 5

- Well, you certainly deserve the raise. You've worked there long enough and you know the software better than anyone. You have nothing to worry about.
- As soon as the plane takes off, I curl up and fall asleep. Most people can't sleep on planes, but I find them really comfortable.
- He was brushing his teeth when he slipped and scratched his leg. He didn't cry, though. He got back up right away and grabbed a Band-Aid.
- Their financial adviser told them they were ready to retire, but Vicky wasn't sure. She wants to work another five years and save up a little more.
- Everyone knows I love the ballet, so for my birthday I got three tickets to the ballet from three different people. Luckily they're all for three different shows!
- My coach says training is a lifestyle. When you decide to go biking instead of watching TV, or have an apple instead of cookies, you're already training.

- *My mother have a dog named Kurt. He's a Maltese and he has four years old.
My sister has a pug named Max. He and Kurt are best friends.
- *I like living in Montreal because we have many tree and park. My neighbour goes jogging every morning in the summer. I like to make a long walk.
- *Today it's really nice to go to the beach, but tomorrow there will be many rain.
You can go to museum or take bus to the city and go shopping.
- *My artist favourite is Van Gogh. In 2013 I went at Amsterdam and visiting his museum. I bought a print of Almond Blossoms for my living room.
- *Andy's sister is looking for work. She worked at a law firm during ten years but now she is boring with the job. She wants to work in animal welfare.
- *I'm thinking of repainting my work room. Right now it was red. I like red but it's too much strong for my eyes. I prefer something calming, like powder blue.