

Teaching French pronunciation to Chinese adult learners in communicative language classrooms:

Examining the effectiveness of explicit phonetic instruction

Wenrui Duan

Department of Integrated Studies in Education

McGill University, Montreal

June 2017

A thesis submitted to McGill University in partial fulfillment of the requirements of the degree of

Master of Arts in Second Language Education

Copyright © Wenrui Duan 2017

Acknowledgements

This thesis would not be finished without a lot of help from many people. Firstly, I would like to express my sincere gratitude to my supervisor Dr. Roy Lyster for the continuous support of my thesis and related research, for his patience, inspiration, and immense knowledge. Many of his published papers and those of his previous students inspired me and motivated me to undertake the challenges of conducting my research. He was always very supportive and open to my ideas of the research design. His guidance helped me during both the research and writing of this thesis. I could not have imagined having a better supervisor.

My sincere thanks also goes to Prof. Weicheng Zou, who, along with Dr. Roy Lyster, was always there to help me overcome obstacles in my journey of this thesis. Without his precious support and warm encouragements, it would not be possible to finish this thesis.

My days in Montreal would not have been so interesting without the people I met here at McGill. I am grateful to Prof. Bill Wang for giving me the opportunity to be his teaching assistant and his warm support. He has been a great mentor to me. I especially appreciate my students' positive feedback and they have made even my gloomiest days bright. I also want to express my gratitude to the lovely colleagues I worked with at McGill School of Continuing Studies. I owe a lot to their selfless help. Also I thank my friends in Montreal and in Beijing. Their positive energy was contagious to me. In particular, I am grateful to Mr. Andrew Lee for helping me out at almost every point of my research. He especially helped me with statistical analysis. He really inspired me a lot.

Last but not the least, I would like to express my deepest love to my family. My parents were always there supporting me spiritually and financially throughout writing this thesis and my life in general. I would like to express my special thanks to Junzhe Zou, who was always

standing beside me during the most difficult times in my life. Without their love, I would not have overcome the challenges during my entire three years of the Master's program. I owe them a lot.

Abstract

Explicit instruction (EI) on pronunciation integrated into form-focused instruction has proven effective in second language (L2) speech development (Saito, 2013). However, most studies examined L2 segmental targets (e.g., Lee & Lyster, 2016). Accordingly, building on previous studies, this study investigates the extent to which Chinese learners of French benefit from EI on their acquisition of three different French prosody patterns: declarative sentences, yes/no questions, and information questions.

Thirty-four Chinese learners of French were assigned to either a treatment group ($n = 20$) or a control group ($n = 14$). Each group attended four 1.5-hours instructional sessions that included exposure to both structured input and typographically enhanced input as well as participation in focused production tasks. In addition, the treatment group (but not the control group) received metalinguistic explanations regarding the three different prosody types as well as explicit correction of their nontargetlike prosody patterns.

A pretest and a posttest were conducted in a researcher-participant dyadic setting in which the participants completed sentence-reading tasks composed of trained and untrained sentences. The audio-recorded speech samples were filtered to avoid segmental influences, and then rated by three native speakers of French for analyses.

Results revealed that the treatment group overall significantly outperformed the control group at the posttest in both trained and untrained sentences. In particular, the participants benefited most from the EI on declarative sentences and information questions in the untrained sentences. This thesis concludes, therefore, by highlighting the effectiveness of EI on L2 suprasegmental targets.

Résumé

L'enseignement explicite de la prononciation intégré dans l'enseignement centré sur la forme s'est avéré efficace pour le développement d'une langue seconde (Saito, 2013). Cependant, la plupart des études ont examiné les prononciations segmentales (ex. : Lee & Lyster, 2016). En conséquence, s'appuyant sur les études précédentes, cette étude enquête sur le degré auquel les apprenants chinois du français profitent de l'enseignement explicite de la prononciation sur leur acquisition de trois différents types de prosodies de la langue française : les phrases déclaratives, les questions totales et les questions partielles.

Trente-quatre apprenants chinois du français ont été attribués soit au groupe expérimental ($n = 20$) soit au groupe témoin ($n = 14$). Chaque groupe a assisté à quatre sessions d'enseignement d'une durée d'une heure et demie chaque et comprenant l'exposition aux intrants structurés et à la mise en évidence textuelle.

En plus, le groupe expérimental (mais pas le groupe témoin) a reçu des explications métalinguistiques à propos des trois différents types de prosodie française ainsi que la correction explicite visant leurs productions non conformes à la norme

Un prétest et un posttest ont été effectués dans un cadre dyadique (chercheur-participant). Les participants ont lu à haute voix des phrases dont certaines ont fait l'objet de l'enseignement et d'autres non. Les échantillons de discours ont été d'abord enregistrés et ensuite filtrés afin d'éviter les influences des prononciations segmentales. Les productions ont été enfin évaluées par les évaluateurs francophones pour les analyses.

L'analyse des résultats a démontré que le groupe expérimental a nettement surclassé le groupe témoin au posttest dans les phrases ciblées par l'enseignement ainsi que dans celles qui ne l'étaient pas. En particulier, les participants ont profité le plus de l'enseignement explicite de

la prononciation sur les phrases déclaratives et sur les questions partielles dans les phrases non ciblées par l'enseignement. Enfin, ce mémoire conclut à l'efficacité de l'enseignement explicite de la prononciation sur L2 prononciation au niveau suprasegmental.

Table of Contents

Acknowledgements.....	2
Abstract	4
Résumé.....	5
Chapter 1: Introduction	11
1.1. Background of the Study	11
1.2. Major Theories and Research Context.....	12
1.3. Outline of the Thesis	13
Chapter 2: Literature Review	14
2.1. Phonological Development and Linguistic Foci of the Study	14
2.1.1. Phonological Learning Theories	14
2.1.2. L2 Intonation Learning Theories	15
2.1.2.1. L1 Transfer	16
2.1.2.2. Age	18
2.1.2.3. Ultimate Attainment	18
2.1.3. Linguistic Foci: French Prosody	18
2.1.3.1. Prosody Patterns in Three Types of Sentences	19
2.1.3.2. Prosodic Features of French and Mandarin Utterances	21
2.2. Different Techniques of Pronunciation Instruction	23
2.2.1. History of the Development of Pronunciation Instruction	23

2.2.2. From Focus-on-Forms to Focus-on-Meaning	24
2.2.3. Form-Focused Instruction	25
2.2.3.1. Explicit FFI and Implicit FFI	25
2.2.3.2. Communicative Framework in Pronunciation Teaching.....	26
2.2.4. Adding EI to FFI	27
2.3. Motivation for the Current Study	28
2.3.1. Pedagogical Importance of Teaching Suprasegmentals	29
2.3.2. Gaps in the Previous Research	31
Chapter 3: Methodology	33
3.1. Participants	33
3.2. Procedure	33
3.2.1. Pretest	34
3.2.2. Testing materials	34
3.2.3. Teacher training.....	37
3.2.4. Teaching materials.....	37
3.2.5. Instruction.....	37
3.2.5.1. Explicit Phonetic Instruction Treatment	37
3.2.5.2. Form-Focused Instruction	39
3.2.5.3. Classroom activities	40
3.3. Rating Tasks.....	41
3.4. Posttest Questionnaires and Exit Interviews	43

3.5. Data Analysis	43
Chapter 4: Results	45
4.1. Quantitative Results Results	45
4.1.1. Trained Sentences	48
4.1.2. Untrained Sentences Results	49
4.1.2.1. Sentence Type I: Declarative Sentences	50
4.1.2.2. Sentence Type II: Yes/No Questions	50
4.1.2.3. Sentence Type III: Information Questions	50
4.2. Qualitative Findings	51
Chapter 5: Discussion and Conclusion	55
5.1. The Effects of FFI+EI on the Trained Sentences	55
5.2. The Effects of FFI+EI on the Untrained Sentences	56
5.2.1. Account of L1 transfer in L2 prosody acquisition	57
5.3. Implication for French Language Education	58
5.4. Limitations	59
5.5. Conclusion	62
References	63
Appendix	76

List of Tables

Table 2.1. Pitch-Transcription Symbols	20
--	----

Table 3.1. Trained sentences	36
Table 3.2. Untrained sentences	36
Table 3.3. Comparison of the two groups	39
Table 4.1. Mean scores and standard deviations by sentence type, group, and (un)trained sentence	47

List of Figures

Figure 1. Trained sentences: Means by group, test, and sentence type	49
Figure 2. Untrained sentences: Means by group, test, and sentence type.....	51

Chapter 1

Introduction

1.1. Background of the Study

This study of the pronunciation of Mandarin-speaking learners of French as a second language (L2) was mainly inspired by the current situation of Chinese immigrants' French learning in Montreal. In 2010, the province of Quebec started a new immigration program aimed at encouraging foreign workers and international students completing their postsecondary studies to stay in Quebec after graduation. This initiative is called the Quebec Experience Program (PEQ, Programme de l'expérience québécoise in French).

The PEQ is a simplified process leading to permanent residency for two categories of applicants: temporary foreign workers and international students after fulfilling the necessary qualifications. As part of the PEQ requirement, people with eligible diplomas from a Quebec university who demonstrate a high intermediate level of French speaking and listening skills (B2 on the Common European Framework of Reference) can apply for permanent residency in Quebec and, by extension, Canada. This immigration program is considered by far the easiest and fastest for many people who plan to immigrate to Canada.

Since the program's inception, a cottage industry of French courses/tutors has sprung up all over Montreal aimed at helping immigrants achieve the required French level for immigration purposes. However, some education institutions in Montreal regard French language education simply as a means for making a profit at the expense of immigrants in Quebec. During my research, many participants in the current study complained of the quality of French education offered by some institutions, which were mostly exam-oriented. These instructors did not pay attention to students' needs to improve linguistic skills, not to mention pronunciation instruction,

which was usually “done within the first few hours of the whole program and never revisited in later classes,” as reported by some participants in the study.

As a French teacher myself in Montreal, I also found that most language schools do not attach great importance to French pronunciation teaching and, to my knowledge, in many of these French programs, pronunciation teaching is restricted to fewer than 6 hours at the beginning of the program and the subject is seldom revisited in later learning phases. As pronunciation is a very important element in L2 learners’ language development, the discrepancy between the needs of good pronunciation teaching and the fact that such instruction is largely neglected in real teaching motivated me to conduct this research.

1.2. Major Theories and Research Context

Pronunciation instruction has been long marginalized in the study of Second Language Acquisition (henceforth SLA), and empirical research into pronunciation teaching and learning is scarce (e.g., Derwing & Munro, 2015; Saito & Lyster, 2012). Among the scant research into pronunciation, linguistic targets are mostly single sounds that are at a segmental level. Attention to suprasegmentals such as intonation, rhythm and stress has been paid comparatively less than segmentals and not many studies focused on these features (e.g., Hahn, 2004), even though suprasegmental features are of great importance of communication and contribute more to an impression of foreign accents than segmentals. The spectrum of traditional pronunciation teaching methods goes from completely focus-on-forms (e.g., drill exercises), which emphasizes accuracy, to communicative language teaching which favours fluency over accuracy. It is high time to adopt a more counterbalanced approach to orient L2 learners’ attention to specific pronunciation forms and, at the same time, develop their communicative competence.

The quasi-experimental study comprising this thesis investigates the effect of explicit

phonetic instruction (EI) embedded in communicative lessons with form-focused instruction (FFI) on French prosody in declarative sentences, yes/no questions, and information questions, among 34 Chinese adult learners of French L2. In the current study, the definition of EI comprises three parts: (1) metalinguistic presentation of the patterns at the beginning of the class; (2) guided analysis or practice of the pronunciation form; and (3) explicit types of corrective feedback following students' problematic utterances. EI+FFI in this study is therefore considered an explicit type of FFI. As stated by Saito (2011a), EI triggers phonetically driven L2 phonological learning while FFI leads to lexically driven L2 phonological learning. This study attempts to examine the effects of explicit phonetic instruction on Chinese learners' French prosody development in both familiar and unfamiliar lexical contexts.

1.3. Outline of the Thesis

This thesis consists of a total of five chapters. In the preceding Chapter 1, the background of the research has been presented and the definition of EI provided. In Chapter 2, the theoretical framework of the study and relevant theories of French suprasegmental phonological development are explored and gaps identified. Chapter 3 lays out the methodology of the current study. Participants recruitment procedures, treatment, teacher training, teaching materials, and rating method are presented.

Chapter 4 presents the quantitative results of the data as well as the qualitative findings from questionnaires and interviews. The results are discussed in Chapter 5. Additionally, Chapter 5 discusses implications of the study for French language education as well as the limitations, and finally concluded the thesis by highlighting the effect of EI on the pronunciation of Chinese-speaking learners of French L2.

Chapter 2

Literature Review

In this chapter, theories of L2 intonation learning as well as the linguistic target of the study, French prosody, will first be discussed. Then, different techniques of pronunciation teaching will be explored. Finally, the motivation for conducting the research will be explained.

2.1. Phonological Development and Linguistic Foci of the Study

In this section, L2 phonological learning theories will be reviewed. Special attention is paid to a suprasegmental acquisition theory and the factors underlying the difficulties of certain linguistic features encountered by L2 learners. Subsequently, the linguistic foci, the French prosody of three types of sentences, will be presented, followed by a comparison of Mandarin intonation patterns and French counterparts. In this paper, the term suprasegmentals, prosody, and intonation are used interchangeably.

2.1.1. Phonological Learning Theories. Foreign accents can be partially attributed to L2 learners' different intonation patterns compared to the L2 norms, even after many years of exposure to the L2. By focusing on segmental acquisition of L2 speech production and perception, we have gained a fairly good understanding of segmental aspects of language differentiation, which allowed us to better account for the difficulties most L2 learners face when producing non-native segments (Flege, 1995; Best, 1995; Best & Tyler, 2007). I will briefly review two prominent models on segmental sound acquisition: Perception Assimilation Model and Speech Learning Model.

The Perceptual Assimilation Model (PAM) (Best, 1995) allows us to predict which L2 sounds will be difficult for the L2 learner to acquire. According to the PAM, a fully developed L1 phonemic inventory impedes the development of new sounds in an L2. Such impediments are

not based on Universal Grammatical constraints. However, the greater the phonetic distance between the L2 and L1 sounds, as in greater difference in pronunciation, the easier it is for the L2 learner to acquire (Guion, Flege, Akahane-Yamada, & Pruitt, 2000).

Similar to PAM, the Speech Learning Model (SLM) (Flege, 1995, 2003) hypothesizes that “learners can establish new L2 phonemic categories if they detect phonetic differences between an L2 sound and the nearest L1 sound” (Guion et al., 2000), therefore it can also predict the difficulty of acquiring certain L2 sounds for learners from different L1 backgrounds. The only difference is that SLM concentrates on how experienced L2 learners acquire sounds, rather than on which L2 sounds may be difficult to distinguish for a naïve listener.

While studies on segmental acquisition are well documented, the research on L2 suprasegmental acquisition is surprisingly scarce. This is probably because the “complex nature of intonation and its interaction with other prosodic parameters such as lexical prosody, tempo, duration, pauses, loudness, and voice quality ” (e.g., Nolan, 2006) render the problem of “establishing similarity of cross-language intonation” even more critical (Delais-Roussaire et al., 2015, p.172). In addition, it is “particularly difficult to establish whether certain intonation differences are categorical or gradient in nature” (Mennen, 2015, p. 172) since segments are somewhat easier to categorize, to analyze, and to test compared to suprasegments.

2.1.2. L2 Intonation Learning Theory. Among the scant research on L2 intonation learning, one particular theory that is relevant to the current study came to our attention. Mennen (2015) advanced the L2 Intonation Learning Theory (henceforth LILt). To further our understanding of cross-language similarity/dissimilarity in intonation, we use LILt to analyze language intonations.

The LILt recognizes four dimensions of intonations (modified from Ladd, 1996):

- (1) The inventory and distribution of categorical phonological elements ('systemic dimension');
- (2) The phonetic implementation of these categorical elements ('realizational dimension');
- (3) The functionality of the categorical elements or tunes ('semantic' dimension);
- (4) The frequency of use of the categorical elements ('frequency' dimension).

It is noted that the LILt hypothesizes that not all intonation dimensions constitute the same amount of difficulty in L2 learning.

One of the pillars of LILt is the Autosegmental-metrical (AM) framework (Pierrehumbert & Beckman, 1988). By distinguishing between phonological and phonetic components of intonation via a set number of categorical phonological elements that are utilized in continuous speech, we can "generate predictions as to the relative difficulty of producing and perceiving L2 intonation" (Mennen, 2015, p.173).

One of the assumptions of LILt is that L2 productions are perceptually motivated and, with the interference from L1 phonological categories, result in the deviant production of L2 segments (Strange, 2007). Therefore, adult learners, when trying to produce L2 intonation, seem also motivated by their perception of the target feature. So if the L2's intonation doesn't exist in the L1 or differs from the L1 then the learners' perception of intonational cues will be poor (Liang & Van Heuven, 2007; Trimble, 2013).

2.1.2.1. L1 Transfer. L2 learners may experience both positive transfer (i.e., when the same linguistic features are present in L1 and L2) and negative transfer (i.e., when there is a difference in the two languages), especially in the phonological aspect (Flege, 1995; Best & Strange, 1992; de Bot, 1986). Among the few empirical studies that examined L1 transfer in L2

prosody acquisition, most researchers, such as Bordan, Boula de Mareüil, Ding, and Hoffman (2015) reached similar conclusions that L1 plays a critical role in deviations in L2 pronunciation.

Guri Bordan (2015) compared Central African French with standard metropolitan French, and she concluded that the prosodic feature (i.e., lexical tone system) of the substrate language, Sango, contributed to the production of this variety of French. Likewise, Boula de Mareüil, Rilliard, Lehka-Lemarchand, Mairano, and Lai (2015) conducted experiments on Corsican French and obtained both production and perception data. The researchers concluded that the tonal configurations of yes/no questions in Corsican French are often comparable to what is observed in Corsican. Furthermore, Ding and Hoffmann (2013) showed that the rhythmic patterns observed in the German productions of Chinese learners of German could be attributed to negative transfer from Mandarin. As Mandarin is a syllable-timed language whereas German is stress-timed, Chinese learners of L2 German tend to produce a larger pitch range compared to native speakers, and they have difficulty adjusting the intonation patterns to match different sentence types in German.

However, interference of L1 cannot always account for the errors in L2 production. Santiago and Delais-Roussarie (2015) showed that the tonal configurations observed at the end of yes–no questions in L2 French produced by Mexican Spanish learners may result from the influence of their L1 (Mexican Spanish), but the configurations observed at the end of information questions cannot be considered as induced by interferences. Therefore, based on the existing studies, we may tentatively reach the conclusion that L1 prosody transfer to L2 makes a significant contribution to the problematic production in L2 intonation. However, this conclusion is drawn from a limited number of studies and should be interpreted with caution. More research in the domain should be conducted to obtain a fuller picture of this field.

2.1.2.2. Age. Age is regarded as an important factor that contributes to the difficulties L2 learners experience, especially in the acquisition of phonology. For example, the Critical Period Hypothesis posits that before reaching a certain age learners acquire L2 sounds more easily compared to later in life; that is, the earlier people start learning an L2, the more successful they will be, which exerts an influence on L2 segmental learning. (Flege, 1995; Flege et al., 1995; Piske et al., 2001); the same is true for L2 intonation learning. Therefore, LILt hypothesizes that the age of onset in an L2 speaking country is an important factor in predicting overall success in acquiring L2 intonation (Mennen, 2004; Chen & Fon, 2008; Huang & Jun, 2011). It should be noted that while age is an important factor for L2 intonation acquisition, more research is needed to determine exactly how it contributes to each dimension of L2 intonation.

2.1.2.3. Ultimate Attainment. It is widely accepted that it is challenging, if not impossible, to achieve native-like L2 pronunciation for adult L2 learners, especially for intonation, which contributes more to an impression of foreign accent than single sounds (Munro & Derwing, 2008; Munro, 1995; Kang, et al., 2010). Similar to segmental sound learning, the beginner L2 learner will rely on his/her L1 intonations for the production of L2 intonations, during which we most often observe interference of L1 on L2 intonations. However, there is evidence that L2 learners can approximate L2 norms as their experience with the L2 increases (Flege, 1995, 2003; McGory, 1997; Mennen, 2004; Jun & Oh, 2000; Ueyama & Jun, 1998). In addition, previous empirical studies (Mennen, 2004; De Leeuw et al. 2012) showed that although most L2 learners have difficulties to reach native-like intonation production, there are always exceptional learners whose production conforms with the norms of monolingual speakers of the target language. Therefore, learners should not be discouraged from pursuing native-like L2 pronunciation.

2.1.3. Linguistic Foci: French Prosody. In this thesis, French prosody is studied in terms of both intonation and rhythm. As there are dialectal variations in French pronunciation, this study mainly concerns General French prosody. Di Cristo (1998) defines the term General French as the variety used by educated people and professional radio and television speakers characterized by the absence of dialectal marks. He considers it equivalent to Received Pronunciation for British English and equivalent to General American for American English.

Intonation is regarded as one of the first elements of speech that “human infants attend to, react to, and produce themselves” (Lieberman, 1986, p.239). However, although it appears easy for adults to maintain and retain intonation in their L1, it is difficult, if not seemingly impossible, for them to learn L2 intonation. Due to its inherent complexity and the ensuing difficulty in learning and mastering it, intonation was ignored for many years in language teaching. However, it has regained recognition as an integral part of language fluency, competence, and proficiency. Rhythm may be considered the perceived regularity of prominent units in speech. As stated in Hardison (2004), the structure of rhythms of at either sentence or discourse levels reflects “hierarchical organization of the temporal sequence of speech sounds into syllables and higher level units of prosodic and syntactic structure.” It is also noted that the learning of the rhythmic organization is “part of learning a spoken language” (p.35). French is syllable-timed language and it has fixed stress. The minimal unit of prosody in French is the rhythmic group (also called stress group or prosodic word) in which the last syllable is pronounced with the most stress. Generally, in each rhythmic group, there are no more than three words and the function words are pronounced with lower pitch and content words, which carry more meanings, are pronounced with higher pitch.

2.1.3.1. Prosody Patterns in Three Types of Sentences. The linguistic feature of the

study is French prosody in simple declarative sentences, yes/no questions, and information questions. Each type of sentence has its distinct intonation pattern.

Hirst and Di Cristo (1998) proposed the International Transcription System for Intonation (INTSINT), which was considered as a prosodic equivalent of the International Phonetic Alphabet. In the transcription system INTSINT, there is a set of symbols indicating the change of pitch in an utterance: the symbols ∇ (Top) and \odot (Bottom) refer more globally to an extreme high or low value with respect to the speaker's range of voice; \uparrow (Higher) and \downarrow (Lower) represent pitch points relatively higher or lower than the immediate pitch point that precedes; $>$ (Downstep) and $<$ (Upstep) refer to a slight downstepping (lowering) or upstepping (raising) of pitch relative to the preceding point which may also imply a smaller pitch change than that transcribed as Higher or Lower. The square brackets are used to mark the boundaries of the intonation units and the left bracket is used to mark the beginning tone level. Table 2.1. shows a summary of the symbols (Hardison, 2004), which will be used in the current study.

Table 2.1. Pitch-Transcription Symbols

Higher	Lower	Same	Downstep	Upstep	Top	Bottom
\uparrow	\downarrow	\rightarrow	$>$	$<$	∇	\odot

In declarative sentences, the basic pronunciation rule is that the last syllable of each rhythmic group in the sentence should be pronounced at a higher pitch than the rest of the syllables. However, the final syllable in the last rhythmic group should be pronounced at a lower pitch. The intonation pattern of French simple declarative sentence is illustrated in Example 1.

Example 1: Simple declarative sentence

Je suis à la recherche d'un appartement. "I am looking for an apartment"

[→ > → < ∇ > > ©]

According to Di Cristo (1998), there are two question formations in French: total questions (i.e., yes/no questions) and partial questions (i.e., information questions). French yes/no questions are characterized by a rising pitch associated with the last stressed syllable of the utterance. The intonation pattern of yes/no question is illustrated in Example 2. The sentence "*Pourriez-vous m'aider*" is marked with a rising tone and a stress on the last syllable of "*aider*".

Example 2. Yes/no question

Pourriez-vous m'aider? "Could you help me?"

[< < ↑ > ∇]

In contrast, French information questions are characterized by an initial pitch prominence on the stressed syllable of the question word followed by a regular drop in pitch until the final syllable produced with a low pitch in the speaker's range of voice.

Example 3. Information question

Combien ça coûte? "How much is it?"

[∇ > > ©]

2.1.3.2. Prosodic Features of French and Mandarin Utterances. Mandarin is a tone language with four lexical tones and the lexical tones also interact with the intonation at the sentence level (Yuan, 2004). As Chinese is a tone language while French is non-tone language, Chinese L1 learners of French also demonstrate some non-nativelike features in their French L2. Chinese L1 speakers are very sensitive to changes of pitch in speech, but they are used to hearing pitch changes over single syllables, rather than over longer units. This is demonstrated in Liang and Van Heuven's (2007) study into L1 and L2 learners' perception of Chinese tones and

intonation. Results showed that Chinese L1 speakers primarily perceived lexical tones while non-tone language speakers perceived mostly intonation at the sentence level. Moreover, lexical tone proved to be a critical factor in reducing the sensitivity to pitch movement at the sentence level for speakers of a tonal language. In addition, Shen (1990) found that Chinese speakers of French L2 tend to have a wider pitch range and greater intra- and inter-syllabic pitch fluctuations. In Mandarin, at the *zi* (character) level there is no stress since every *zi* is monosyllabic. Therefore, Chinese learners of French tend to produce every syllable with the same amount of stress and with the same tempo. Thus Chinese learners of L2 French are likely to create an “auditory impression of staccato” while speakers of French L1 produce a “rhythm of legato” (Shen, 1990, p.121). Similarly, a study by Lee and Matthews (2014) of L1 speakers of Cantonese (another tonal language) acquiring French L2 also showed that L1 Cantonese speakers tend to assign Cantonese high level tone to syllables of French content words and assign low level tone to syllables of French function words, which renders the pitch fluctuation greater.

The literature in the contrastive analysis of the prosody patterns of French and Chinese is scant (Shen, 1989, 1990, 1993). After intensive study of large corpus data, Shen (1989) found that, in Mandarin, pitch movement in information questions generally ends with a low key. And in a statement sentence, the assertive intonation also has a falling ending. Interestingly, the F0 curve at the ending point of an information question falls almost as low as in statement questions. These intonation features of Mandarin are inconsistent with those in French. However, previous studies (e.g., Shen, 1990) on the prosody of French and Chinese showed that, although a distinctively higher pitch in both languages operates to indicate an unmarked *yes/no* question, this pitch is located on the final syllable in French, but at the beginning of an utterance in Chinese. In French the clue for differentiating statements from questions lies in the end of an

utterance; only the pitch direction of the final syllable plays a determinant part in the modality of an utterance. On the contrary, in Chinese the pitch level of the beginning of the utterance cues the modality. According to Lin (2001), there are two ways to construct a yes/no question in Mandarin: a) Ma question with a Ma question particle at the end of a declarative sentence; b) Bu question that replicates the verb and inserts a negative morpheme Bu or Mei. Both sentences display a falling pitch contour. Thus, of the three types of sentences that are the focus of the current study, the pitch movement of *yes/no* questions in L1 Mandarin differs most from the target language French.

2.2. Different Techniques of Pronunciation Instruction

In this section, I will review the techniques that instructors use to teach learners L2 pronunciation. It starts with an overview of the historical development of pronunciation instruction and then presents the spectrum of pronunciation teaching and zooms in on form-focused instruction. This section will also address the question of how to integrate communicative language teaching into FFI and the effects of explicit phonetic instruction.

2.2.1. History of the Development of Pronunciation Instruction. From the 1940s to 1960s, the prevailing L2 teaching technique was the audio-lingual method in the US and situational language teaching in the UK, where pronunciation enjoyed a prominent position in L2 teaching, during which time the pedagogical concern was accuracy rather than fluency. At this stage, pronunciation instruction was mainly comprised of drill exercises that emphasized mimicry repetition of native L2 sounds (Celce-Murcia, Brinton & Goodwin, 1996; Lightbown & Spada, 2006). Later, from the mid 1960s to mid 1980s, pronunciation was either completely ignored in L2 teaching or mainly involved decontextualized practice of minimal pairs of segments and individual sounds (Chun, 2002).

Since the decline of audiolingualism and the advent of Communicative Language Teaching (CLT), however, pronunciation instruction has been neglected and marginalized from mainstream L2 teaching. Pronunciation was viewed as part of linguistic rather than communicative competence from the late 1960s to the early 1980s. Notwithstanding, pronunciation teaching is very important and it is widely acknowledged that pronunciation is often “responsible for communication breakdowns” and it should “assume a central role in communicative instruction” (Issacs, 2009, p.3). “Ignoring students’ pronunciation needs is an abrogation of professional responsibility” (Morley, 1991, p.489).

2.2.2. From Focus-on-Forms to Focus-on-Meaning. The spectrum of pronunciation teaching goes from completely focus on forms (structure-based instruction) to exclusively focus on meaning (e.g., CLT). Traditional pronunciation teaching involving mainly decontextualized drill exercises suggests that it is “easily amenable to forms-focused instruction” (Issacs, 2009, p.5). As DeKeyser (1998) maintained, pronunciation is “relatively immune to all but the most intensive forms-focused treatments” (p. 43). Repetitive exercises benefit pronunciation acquisition in the way that they can increase the speed and efficiency in performing cognitive skills (Schneider & Chein, 2003).

The other end of the spectrum is CLT. As demonstrated in Morley’s (1991) study, L2 learners of English can be expected to perform well in English pronunciation when the pronunciation class is no longer isolated but integrated into an oral communication class (p. 496). Teaching pronunciation with a CLT approach aims at developing learners’ functional intelligibility, communicability, increased self-confidence, the development of speech monitoring abilities, and speech modification strategies for use beyond the classroom (p. 500). However, CLT’s problem lies in that in emphasizing fluency, it avoids repetitive exercises and

consequently it “falls short of promoting the automatization that facilitates the quick retrieval of information and makes processing more efficient” which is considered as a critical precondition to produce fluent speech (Gatbonton & Segalowitz, 2005).

2.2.3. Form-Focused Instruction. Form-focused instruction (henceforth FFI) is defined as “any pedagogical effort which is used to draw the learners’ attention to language form either implicitly or explicitly” (Spada, 1997, p. 73). Also, research suggests that FFI is more effective in a communicative context (Saito, 2013b). There are three instructional components in FFI: focused tasks (FT), corrective feedback (CF), explicit instruction (EI).

Although FFI has been taken to refer to a focus on grammar, vocabulary, or pronunciation in a meaning-oriented instructional context, morphosyntactic features have been the focal point of most of the research and FFI has demonstrated great effect (e.g., Yang & Lyster, 2010; Gozali & Harjanto, 2014; Parviz & Gorjian, 2013). The goal of FFI is to build on the effectiveness of naturalistic communicative teaching to promote fluency while compensating for its shortcomings by orienting learners’ attention to accuracy of linguistic forms (Gooch, 2015). In order to achieve this, FFI provides learners with enriched input, encourages more output from the learners and renders difficult L2 features more salient, and offers learners unambiguous CF (Ranta & Lyster, 2007).

However, few studies have looked into the applicability of FFI to pronunciation teaching. Saito and Lyster (2012) took a first step to investigating the effectiveness of FFI in L2 pronunciation development and it showed that FFI is facilitative of L2 pronunciation development. Lee and Lyster (2016), Gooch, Saito, and Lyster (2016) have also examined the effect of phonological FFI and corrective feedback.

2.2.3.1. Explicit FFI and Implicit FFI. Instructional treatment is considered to be

explicit if rule explanation comprises any part of the instruction or implicit if there is no rule presentation or directions to attend to particular forms (Norris & Ortega, 2000; Spada & Tomita, 2010). Evidently, explicit instruction is directed at intentional, explicit learning while implicit instruction is aimed at implicit, incidental learning (Ellis, 2016). Therefore, there are two types of FFI in terms of the explicitness of instruction, implicit FFI and explicit FFI. In explicit FFI, learners are guided to develop metalinguistic awareness of the rule and teachers use explicit types of feedback. In contrast, implicit FFI aims at guiding learners to infer rules without metalinguistic explanations and implicit types of feedback are used. Studies showed that explicit feedback was “significantly better at raising students’ awareness of their errors than was implicit feedback” (Derwing & Munro, 2015, p.90).

2.2.3.2. Communicative Framework in Pronunciation Teaching. As discussed in Issacs (2009), there is a current disjuncture between pronunciation instruction and CLT. The challenge of integrating pronunciation into communicative language teaching lies in that L2 phonological acquisition requires a considerable amount of repetitive practice that is an integral part of rote learning, which is considered incompatible with CLT. In addition, incorporating CLT with FFI is always easier said than done mainly for two reasons. First, CLT takes the attention away from language form, and second, the use of language in communicative activities should be as communicatively authentic as possible instead of highlighting the language items, which is the goal in language drills and exercises (Seidlhofer, 2001). It is thus crucial to find a counterbalanced approach to embedding FFI in a communicative framework in order to draw learner’s attention to the pronunciation form and, at the same time, develop learner’s communicative competence.

Gatbonton and Segalowitz (2005) proposed a theoretically motivated teaching framework

called Automatization in Communicative Contexts of Essential Speech Segments (ACCESS). The central innovation of ACCESS is that it elicits the necessary repetition to promote automatic fluency in a communicative framework that integrates attention to form (form-focused instruction). The main tenets are the following: (a) communication is genuine, with the exchange of new (unknown) information; (b) repetition is built into the task and is necessary for task completion; and (c) targeted expressions are formulaic, functional, and likely to be reencountered and reused in a future communicative situation.

Trofimovich and Gatbonton (2006) demonstrated the applicability of ACCESS to L2 phonology by investigating the rising and falling intonation in English. The study showed that learners benefited from both FFI and repetition in processing speech embedded in communicative tasks. However, the usefulness of such a framework is inevitably limited by knowledge of which features of pronunciation are most essential in terms of intelligibility and developing communicative competence. More research is called for to examine the feasibility and effect of communicative FFI in L2 pronunciation teaching.

2.2.4. Adding EI to FFI. EI has been used in previous pronunciation teaching research on a segmental level. For instance, Celce-Murcia, Brinton, and Goodwin (1996) explained that EI “consists of multiple exposures to a teacher’s model pronunciation of the target sounds followed by an explanation of relevant articulatory configurations to “raise learners’ consciousness” (p. 36). Saito (2012) defined EI as *explicit phonetic information* in teaching English segments to Japanese learners. Unlike previous research that solely tested EI in decontextualized pronunciation classes, Saito (2012) examined the role of EI in FFI. EI was designed to trigger phonetically driven L2 phonological learning whereas FFI for lexically driven L2 phonological learning. FFI with EI has been shown to be more effective than FFI without EI.

In pronunciation teaching, explicit phonetic instruction has demonstrated positive benefits (Lord, 2005), although some researchers contend that explicit instruction only aids the development of metalinguistic knowledge but fails to contribute to the acquisition of implicit knowledge (Doughty, 2003). EI is considered beneficial primarily because the explicit instruction includes metalinguistic activity that entails both awareness at the level of noticing and understanding and in doing so fosters the development of not just L2 explicit knowledge but also implicit knowledge (DeKeyser, 1998; Ellis, 2001; Schmidt, 2001).

Studies show that learners benefit from some type of explicit instruction prior to the activity to help them activate their knowledge of target language structures and facilitate awareness of the forms they will encounter (Skehan, 1996). Along the same lines, Derwing and Munro (2005) emphasized the importance of explicit phonetic instruction (i.e., explicitly teaching segmental and suprasegmental aspects of sounds), claiming that “students learning L2 pronunciation benefit from being explicitly taught phonological form to help them notice the difference between their own productions and those of proficient speakers in the L2 community” (p. 388). This is because EI is theorized to draw learners’ attention to phonetic information (Thomson & Derwing, 2015), which provides learners with declarative knowledge in order to speed their creation of new phonetic categories (Gooch, 2015). EI consists of explicit presentation of linguistic rules followed by communicative practice that can turn learners’ declarative knowledge of a linguistic feature into a procedural one (DeKeyser, 1998). Additionally, explicit instruction also provides learners with opportunities to learn language features incidentally like implicit instruction. Moreover, “instruction on suprasegmentals appears to yield better improvements in comprehensibility as opposed to instruction on segmentals only (see Derwing, et al., 1998)” (Gordon, Darcy & Ewert, 2013, p. 195).

2.3 Motivation for the Current Study

In this section I will explain the motivation for conducting the current study. I will first discuss the pedagogical importance of teaching suprasegmentals and then present the gap in previous research. Finally, research questions will be presented.

2.3.1. Pedagogical Importance of Teaching Suprasegmentals. The traditional theoretical linguistic basis for the learning and teaching of pronunciation was a focus on segmentals, i.e., the articulatory phonetics of individual sounds. Earlier, intonation had not been extensively researched either theoretically or acoustically and was considered a luxury in terms of teaching. Among research on L2 acquisition, the studies dedicated to the acquisition of L2 phonological systems concentrate mostly on segmental phonology. Very few studies have been done on the acquisition of suprasegmentals, and more work is needed to gain insights into why prosody is “one of the first components of language acquired by children but the last that adult language learners can potentially master” (Chun, 2002, p. 89). However, since the early 1980s, there have been a number of appeals to reverse the emphasis from segmentals to prosodic patterns (cf. Chun, 1988a, 1988b; Leather, 1983; Morley, 1991; Pennington & Richards, 1986; Yule, 1989).

Lian (1980) describes intonation as a special kind of “glue” that “holds the sound units together and arranges them with respect to one another” (p. 12). Different languages have different melodies that “arrange” the vowel and consonant sounds of each language in a specific way. Attempting to arrange the sounds with the wrong “glue” will result in structures of the wrong kind which are unintelligible. For instance, in order for communication to occur between a French person and a learner of French, the latter must organize the various sounds that he utters according to a system of melodies which the French person will recognize. Should the learner

use his own mother tongue's melodies, he is likely to produce an utterance which is unintelligible to the French person, even if the individual vowel and consonant sounds produced are all of acceptable quality.

Intonation is essential to communication. It is with little doubt that intonation is essentially communicative and a critical component of communicative language teaching (Chun, 1988, 2002). In order for learners to communicate in a socially acceptable way, they need to know such interactional conventions as how to ask questions politely and how to interrupt more than they need to know how to pronounce individual sounds perfectly (Chun, 2002, p. 83). The same sequence of words pronounced with different intonations will convey different messages. For instance, in the word sequences “Marie est rentrée,” if pronounced with a falling intonation, the sentence is a statement regarding the fact that Marie came back. If pronounced with a rising intonation, it would become a yes/no question meaning “Did Marie come back?” If pronounced with yet another kind of intonation, the sentence could also convey the surprise or anger the speaker intended (Lian, 1980). While some would argue that intonation seems to be redundant when syntax and lexis can already clearly convey the meaning of a sentence, it nevertheless helps an interlocutor, especially communicating in a L2, to better understand an utterance which is not fully heard.

While nonnative pronunciation at both segmental and suprasegmental levels leads to the impression of foreign accents (Munro & Derwing, 2008), suprasegmental errors contribute more to foreign accentedness and reduce more L2 comprehensibility and intelligibility perception compared to segmental ones (Derwing, 1995; Kang et al., 2010). Foreign accent is very typical of L2 learners and many learners are often concerned with reducing the “foreign” quality of their accent, even though it has been argued that comprehensibility and intelligibility are more

important to communicative competence than accentedness (Derwing & Munro, 2009). In addition, studies that investigated EFL and ESL learners' attitudes about pronunciation found that the vast majority of learners wanted to achieve native-likeness in L2 pronunciation (e.g., Derwing, 2003; Timmis, 2002). There is evidence that while native speakers are relatively accepting of low proficiency learners' "foreign" accents, the possibility that learners will suffer negative evaluations because of their accent increases with increasing L2 proficiency (Galloway, 1980). Therefore, teaching suprasegmentals in addition to segmentals will reduce the accentedness and increase perceptions of intelligibility and comprehensibility.

Additionally, the acquisition of intonation is facilitative of learning other aspects of language. Pennington and Ellis (2000) demonstrated that directing learners' attention to and raising their awareness of prosodic features of the L2 during training improved their interpretation of sentence meaning. This is because intonation has a segmenting function and such segmentation is to a certain degree related to the syntax of the language and to the rate of speech (Lian, 1980, p.12).

Taken together, intonation is of great value in L2 pronunciation acquisition and communication. More research is called for in this domain.

2.3.2. Gaps in the Previous Research. Amongst the research investigating the effects of different pronunciation instructions, most have focused on ESL (e.g., Derwing et al., 2000; Saito & Lyster, 2012a, 2012b; Lee & Lyster, 2016; Gooch, Saito, & Lyster, 2016). Very few studies have focused on French (e.g., Baker & Smith, 2010; Levy & Law, 2010; Sturm, 2013), even fewer on suprasegmental level of French phonological acquisition (e.g., Hardison, 2004; Gordon, Darcy, & Ewert, 2013). To the best of my knowledge, none of the studies have investigated the effects of explicit pronunciation instruction on French prosody development for

Chinese learners in a classroom context. Additionally, the proven effectiveness of phonological FFI and that of adding EI to FFI in previous studies (e.g., Saito, 2011a, 2012) have yet to be explored within a variety of different contexts. Importantly, given the large population of Chinese learners of L2 French and the lack of research in this domain, this study attempts to fill this gap in the SLA literature.

The two research questions of this study are as follows:

1. To what extent does FFI+EI facilitate the development of French prosody by Mandarin-speaking learners of French in trained sentences (declarative sentences, yes/no questions, and information questions)?
2. To what extent does FFI+EI facilitate the development of French prosody by Mandarin-speaking learners of French in untrained sentences (declarative sentences, yes/no questions, and information questions)?

Chapter 3

Methodology

In this chapter, I discuss the methodology adopted to investigate the research questions. First, characteristics of the participants and recruiting procedures are explained. Second, the procedures comprising the research design are presented, including pre-test post-test design, teacher training, classroom instruction, and rating tasks. Finally, the statistical design for analyzing the test results is introduced.

3.1. Participants

The study was conducted at a public university in Montreal, Canada. In order to recruit participants, the researcher created advertisements that offered free 6-hour communicative French lessons. Eligible participants had to fulfill the following criteria: Adult, born and raised in Mainland China and speaking Mandarin, high beginner to low intermediate level French learners (French level between A2-B1 according to the Common European Framework of Reference for Languages). The advertisements were distributed to students at several local universities and were also posted on a few social media websites. The participants were not compensated for this study. Interested participants contacted the researcher through e-mail to set up a time for their first interview and pretest session. After the screening process, 40 participants (20 per group) initially participated in the study. However, 6 participants in the control group either did not complete the instructional treatment or did not participate in the posttest for personal reasons, and were thus excluded from the data. In the end, a total of 34 participants (females, $n = 23$; males, $n = 11$) were included in the final analysis (age: $M = 28.20$, $SD = 4.25$).

3.2. Procedure

This four-week study followed a quasi-experimental pre- and posttest design. During the

first week, the participants took the pretest and completed a questionnaire eliciting their basic personal information. Then the participants were assigned to two groups: the treatment group and the control group. Each group was then further divided into two classes, with 10 people attending each class. The instruction took place in the second and the third week. There were in total 4 sessions for each class, each lasting 1.5 hours. During the last week, the participants completed the posttest and questionnaires and finally were interviewed by the researcher.

3.2.1. Pretest. Before the instructional sessions, each participant was given a 30-minute time slot to take the pretest at the research laboratory individually. The participants were asked to read two lists of French sentences including declarative and interrogative sentences (yes/no questions and information questions). The speech samples of the sentence-reading test were recorded in a researcher-participant dyadic setting as the participants spoke into the microphone at a conversational rate. Before the actual recording, each participant was given 5 minutes to practice reading the sentences to avoid the negative influences of nervousness. During the pretest, participants were also asked to fill out a questionnaire eliciting their basic personal information.

3.2.2. Testing materials. The following factors were taken into consideration when the researcher selected the sentences for testing: (a) vocabulary and length tailored to learners' high beginner to low-intermediate French level; (b) functional value for the learners' daily life communication in Montreal; and (c) variety in sentence types. The sentence-reading test was composed of two lists of sentences. In each list there were 15 sentences, including 5 simple declarative sentences, 5 yes/no question sentences and 5 information question sentences. The sentences in the first list were extracted from the teaching materials that were used in class, which we later refer to as 'trained sentences' for data analysis. In the second list, the sentences

selected were not taught in class but had similar lengths and vocabulary level as the trained sentences, and were thus referred to as ‘untrained sentences’. The purpose of including both trained and untrained sentences in the testing materials was to test the generalizability of instructional gains in French intonation. This design was to determine whether the students could transfer their knowledge of French prosody patterns in different types of sentences to new contexts or could only improve on the trained sentences. In addition, in order to avoid differences between trained and untrained sentences that were due to test-retest effects, the untrained sentences were tested at both pretest and posttest. The sentences being tested are presented in Tables 3.1 and 3.2.

Table 3.1 Trained Sentences

Declarative Sentences	Yes/no Questions	Information Questions
Je voudrais offrir un parfum à mon amie.	Est-ce qu'il est meublé, cet appartement?	Ça coûte combien?
Je suis à la recherche d'un appartement.	Est-ce que je peux vous aider?	Qu'est-ce que tu veux boire?
C'est au deuxième étage.	Vous avez un dossier chez nous?	Quel modèle préférez-vous?
J'aimerais essayer le pantalon noir.	Ça vous dirait de venir chez nous?	Elle est comment, votre amie?
Merci beaucoup pour votre information.	Ça vous convient?	Quelle taille faites-vous?

Table 3.2 Untrained Sentences

Declarative Sentences	Yes/no Questions	Information Questions
Je suis allé à l'agence de voyage.	Ça vous a plu?	Quel est votre budget cette année?
Je voudrais connaître vos tarifs.	Est-ce que je peux le changer?	D'où viens-tu, mademoiselle?
Mon ami Paul est un garçon très sérieux.	Pourriez-vous m'aider?	Quel âge a ton professeur?
Carine préfère le vin rouge de France.	Cette maison est à vous?	Pardon, vous avez l'heure?
Il a une sœur et un frère.	Vous êtes monsieur Dupont?	Qu'est-ce que je dois faire?

3.2.3. Teacher training. The researcher's supervisor hired two experienced female FSL teachers who each taught one group of students. One teacher is originally from France and the other is from Morocco who before coming to Canada lived in France for ten years. They each have over twenty years' experience teaching French as a second language at local public schools. Before the classes began, they each received training from the researcher on how to give the required instruction in class. The researcher explained the purpose of the study to the teachers and discussed the teaching materials and also teaching techniques with them.

3.2.4. Teaching materials. There were four sessions of French lessons and each session had a different theme. The teaching materials were adapted from the textbook *Communication Progressive du Français (Niveau intermédiaire)* (Leroy-Miquel, 2003). Four situations close to daily life in Montreal were created: renting an apartment; shopping; making phone calls to client service and making reservations; inviting friends to a party and visiting friends at home. Scenarios were written aiming for authenticity of colloquial expressions. The texts were in the form of conversations and dialogues. By learning and practicing these dialogues, the participants could work on both declarative sentences and interrogative sentences. Printed copies of the teaching materials were distributed to the participants at the first session. In order to help the students gain mastery of the vocabulary and key sentences in different scenarios, the researcher also created a section of *Façon de Parler* in the materials where teachers could elaborate on the usages of key words and expressions. The teaching materials are displayed in the appendix.

3.2.5. Instruction

3.2.5.1. Explicit Phonetic Instruction Treatment. The teacher in the experimental group was trained to spend the first ten minutes of the class on metalinguistic explanations of the target pronunciation and doing relevant exercises with the participants. During the first session, the

teacher first explained the notion of rhythmic group (2 min.) and general intonation patterns in simple declarative sentences, yes/no questions, and information questions by using the examples from the teaching materials. Then the teacher drew on the blackboard the pitch contour of a sentence by indicating the rise and fall of the intonation and the stress (3 min.). Moreover, in order to help students to develop better perception of the intonation patterns, the teacher also hummed the melody of the example sentences and let the students hum along. Finally, the students were given an exercise on practicing the pronunciation of different types of sentences (5 min.). In the remaining three sessions, the teacher repeated the same routine during the first 10 minutes of the class but spent less time on metalinguistic explanation. Instead, the teacher gave more time for students to practice the target pronunciation features.

During teacher-student interactions, the teacher gave corrective feedback on learners' problematic pronunciation. The experimental group teacher used a combination of feedback types: recasts, prompts (metalinguistic feedback) and explicit correction to help correct the learners' errors. According to Lyster and Ranta's (1997) classification of feedback types, recasts are defined as "the teacher's reformulation of all or part of a student's utterance minus the error" (p. 46). Explicit correction refers to the explicit provision of the correct form. As the teacher provides the correct form, he or she clearly indicates that what the student had said was incorrect (e.g., "Oh, you mean", "You should say"). Metalinguistic feedback contains either comments, information, or questions related to the well-formedness of the student's utterance, without explicitly providing the correct form (p. 47).

Table 3.3. Comparison of the two groups

Instruction	Treatment Group	Control Group
EI	Yes	No
Types of CF	Prompts+Explicit Correction+Recasts	Recasts only

The control group shared the same curriculum and classroom activities with the experimental group. However, the critical difference between the two groups was that the control group teacher did not provide metalinguistic explanations in class. Instead, the teacher gave implicit instruction by providing only recasts on students' problematic intonation without explanation.

3.2.5.2. Form-Focused Instruction. In order to draw the learners' attention to the linguistic feature, French prosody, all the lessons were designed based on form-focused instruction. In previous studies, FFI was proved to be beneficial for L2 learners' phonological development (e.g. Saito & Lyster, 2012). In the current study, FFI was adopted in the teaching following Saito and Lyster's (2012) operationalization of FFI:

- Structured input (Van Patten, 2004): The instructors first read the dialogue in the textbook to give a modeling of the pronunciation of the sentences. The learners were exposed to standard pronunciation while learning the French expression for communication.
- Typographically enhanced input (Han, Park, & Combs, 2008): On the teaching materials, the trained sentences were marked bold as key sentences.
- Focused task (Ellis, 2006): The learners were asked to pay attention to their French

prosody while practicing the dialogues in the teaching materials and performing role-plays in front of the class.

The instructional treatment is also compatible with the pedagogical sequence termed Noticing-Awareness-Practice (see Ranta & Lyster, 2007; Saito, 2011a).

3.2.5.3. Classroom activities. The classroom activities were designed to motivate the learners to practice their French speaking skills. During the first session, there was an ice-breaking activity. The participants were asked to introduce themselves to others and the teacher interacted with them by asking some questions during their self-introduction. Then, according to each session's theme, teachers asked relevant questions to trigger students' interest in the topic. For example, when the theme of the lesson was to look for an apartment, teachers asked the learners about their apartment renting experiences in Montreal. This activity also helped the instructors to better understand the students' vocabulary level and teach the content accordingly.

The major activities were read-aloud, pair discussion, and role-play. The learners first listened to the teachers' modeling of pronunciation of the sentences in the text, then they tried to imitate by reading aloud. During the read-aloud activity, if learners pronounced correctly, the instructor expressed her confirmation such as 'Très bien', 'Parfait' and 'Excellent'. On the contrary, if learners produced ill-formed intonation, the instructor gave them corrective feedback right away.

The instructors then explained the use of key vocabulary and sentences in the text, after which the learners worked in pairs to practice the dialogues in the textbook. In order to help the learners to practice the expressions that they were taught, the instructors created similar scenarios to each session's theme for the learners to design their own skit and perform the role-play in front of the class. Most participants wrote down their dialogues to practice with their partners,

while some who felt more confident with their speaking just performed without script. During the role-play activity, the instructor also gave corrective feedback on learners' pronunciation, but not as frequently as during the read-aloud activity in order to avoid the nervousness of the learners while they were performing and not to interrupt the flow of the dialogue.

3.3. Rating Tasks

Three native speakers of French participated in the research as human raters and they were familiar with Chinese-accented French. They received training from the researcher on how to evaluate the pronunciation quality of the speech samples. They were asked to focus on French prosody (intonation and rhythm) of the recorded productions. In order to avoid segmental influences when the raters evaluated the prosody quality, each speech sample was filtered with a low-pass filter using the software Praat 4.3.14 (Boersma & Weenink, 2005) that removed the information concerning the consonant and vowel segments (see also Derwing & Munro, 1997; Munro, 1995). The cutoff frequency was set at 200 Hz for the male voices and 300 Hz for the female voices. To ensure that there was no segmental information, two phonetically trained native French speakers who had not heard the original recordings listened to the filtered samples. As they were unable to identify correctly any of the words in the speech samples, we could be certain that the speech samples were unintelligible.

During the rating tasks, the pretest and posttest scripts were provided to the human raters so that they could track the sentences while listening to the recordings. Each participant had two sound files respectively for pretest and posttest but raters were not informed which one was for pretest and which one was for posttest. Raters did the rating tasks individually in a sound treated room where they assigned scores to the sentences by pressing numbers on a computer keyboard.

The raters were instructed to use a 9-point scale to evaluate the speech samples with

number 1 the least native-like and number 9 the most native-like. The utterances were rated depending on their nativeness as used in Warren, Elgor, and Crabbe (2009) where nativeness was defined as “how different a speaker’s accent is from that of the L1 community” (Derwing & Munro, 2005, p.385). In this study, the evaluation criterion was the extent to which the utterance (declarative sentence or yes/no question or information question) was like a native speaker in terms of intonation and rhythm.

The reason for using a 9-point Likert scale is that in other studies this has proved to yield highly reliable ratings (see Derwing & Munro, 1997; Munro & Derwing, 1995). In addition, some productions of native speakers were also included in order to make sure that the raters were able to rate native-like French prosody appropriately (Hardison, 2004). It turned out that those speech samples of native speakers obtained ratings of 9 (the most native-like). The raters were asked to rate each sentence of the speech sample from every participant. When, however, the raters were not sure of the sentence they heard, they could listen to the sample again and again until they assigned a score to it. Finally, each participant obtained an averaged score from the three raters respectively on three types of sentences: declarative sentences, yes/no questions and information questions in both trained and untrained sentences.

The reasons for testing participants’ performance on these three different types were twofold. First, these three types of sentences are among the most frequently used in basic daily communication. Second, the prosody patterns of the three types of sentences are different, which may differ the learnability of these sentences as well. In light of Pienemann, Johnston, and Brindley’s (1988) view of developmental sequences of language acquisition in an ESL context, in which there are six stages in the development of question formation, we hypothesize that the Chinese learners in the current study may have different performance on French declarative

sentences, yes/no questions and information questions. As a result, the participants' productions were also evaluated by sentence type.

3.4. Posttest Questionnaires and Exit Interviews

Inspired by Hardison's (2004) study investigating English L1 speakers learning French, I designed open-ended questions to inquire about the Chinese participants' reflections on their French learning during the two weeks of instruction and their views on the explicit phonetic instruction.

The first question was: What do you think/feel your attention was focused on during the 2 weeks of practice? This question was designed to see if the FFI on French prosody really helped the learners to focus on form. The second question was: What do you feel you've accomplished in terms of your pronunciation in French? This was to see the learners' reflection on their gains. The third question was regarding the explicit phonetic instruction: Do you think the teacher helped you to notice and correct your pronunciation errors?

During the exit interview, the researchers mainly asked two questions. The first one was: Do you like the way the teacher corrects your pronunciation? Why or why not? The second one was: Did the teaching help with your French speaking skills? Please elaborate on the reason why or why not. The participants were told that they could answer all the questions in Chinese.

3.5. Data Analysis

The quantitative data were analyzed using repeated measures ANOVA to examine the effectiveness of explicit phonetic instruction. The questionnaire items and recorded interviews were transcribed to show insight into participants' opinions towards the instruction they received in the current study and towards their French learning and pronunciation acquisition.

In summary, this chapter described the research methods employed in the present study.

The study adopted a quasi-experimental pretest-posttest design to investigate the effect of explicit phonetic instruction in the acquisition of French prosody and its generalizability to new lexical contexts. In the four instructional sessions, participants from both groups learned French expressions under different scenarios through communicative activities. In order to evaluate the participants' development in the pronunciation of three types of French sentences, audio-recorded speech samples were first filtered and then provided to three human raters. Each participant obtained an averaged score respectively for declarative sentences, yes/no questions and information questions.

The next chapter presents the analysis and results of the study with respect to repeated ANOVA results based on the participants' test scores across different groups over time and data from interview as well as questionnaire.

Chapter 4

Results

This chapter presents results of the current study, divided into two sections. The first section entails quantitative analyses with respect to NS rating scores on the speech samples produced by the Chinese participants in the sentence reading tests. The second section reports qualitative results from the questionnaires and exit interviews regarding participants' attitudes towards the instruction, their confidence, and willingness to speak French in daily life.

4.1. Quantitative Results

In order to examine the effects of explicit phonetic instruction in communicative FFI, two sets of three-way mixed-design analysis of variance (ANOVA) were conducted, one of which was with trained sentences and the other of which was with untrained sentences. As for each analysis, a 2 (Group: Control group, Treatment group) \times 3 (Sentence Type: Declarative sentences, Yes/no questions, Information questions) \times 2 (Time: Pretest, Posttest) three-way mixed-design ANOVA was conducted in the current study with an alpha level of .05. The statistical assumptions were verified prior to conducting each analysis. For instance, there was no presence of possible outliers based on the examination of studentized residuals for values greater than ± 3 . As Levene's, Mauchly's, and Box's M tests were insignificant ($p > .05$), it was ensured that there was homogeneity of variances and covariances and that the assumption of sphericity was also met.

Given the nature of the statistical design, if a three-way interaction effect was significant in each three-way mixed-design ANOVA, the interaction effect was only followed up in the analysis by conducting a 2 (Group: Control group, Treatment group) \times 2 (Time: Pretest, Posttest) mixed-design ANOVA for each sentence type. Significant main effects of Group and Time were

not followed. Instead, if a Group \times Time interaction effect was significant, it was teased apart by simple effects analyses with Bonferroni-adjusted multiple comparisons. If a three-way interaction effect was not significant and two-way interaction effects were significant in each three-way mixed-design ANOVA, considering the research questions, some of the two-way interaction effects were followed up by simple effects analyses with Bonferroni-adjusted multiple comparisons without following up any main effects.

For each Bonferroni-adjusted comparison, in order to quantify the effect size, Cohen's d (1988) was calculated and classified as small ($.40 \leq d < .70$), medium ($.70 \leq d < 1.00$), or large ($1.00 \leq d$) effect sizes for between-group contrasts, and small ($.50 \leq d < 1.10$), medium ($1.10 \leq d < 1.60$), or large ($1.60 \leq d$) effect sizes for within-group contrasts (Plonsky & Oswald, 2014).

Table 4.1. summarizes means and standard deviations by sentence type, group, and (un)trained sentence. Figure 1 illustrates the data with trained sentences, whereas Figure 2 visualizes the data with untrained sentences.

Table 4.1.

Mean scores and standard deviations by sentence type, group, and (un)trained sentence

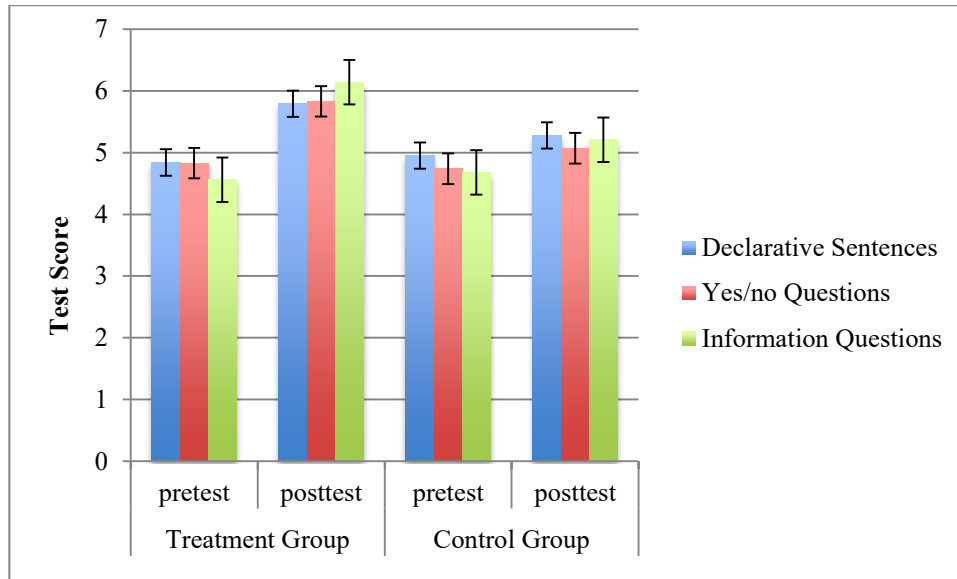
			Trained Sentences				Untrained Sentences			
			Declarative	Yes/no	Information	S _{total}	Declarative	Yes/no	Information	S _{total}
			Sentences	questions	questions		Sentences	questions	questions	
Treatment (n = 20)	Pretest	M	4.84	4.83	4.56	4.74	4.83	5.06	4.75	4.88
		SD	1.11	1.00	1.09	1.02	0.98	0.83	0.96	0.91
	Posttest	M	5.79	5.83	6.14	5.92	5.42	5.39	5.69	5.50
		SD	1.08	0.99	1.00	0.97	0.94	0.79	0.86	0.83
Control (n = 14)	Pretest	M	4.95	4.74	4.68	4.79	4.99	4.67	4.68	4.78
		SD	1.21	1.07	1.18	1.08	1.37	1.13	1.14	1.19
	Posttest	M	5.28	5.07	5.21	5.19	5.12	5.13	5.01	5.09
		SD	1.17	0.96	1.02	1.00	1.23	1.01	0.96	1.03

Note. S_{total} = The average of the test scores of declarative sentences, yes/no questions and information questions.

4.1.1. Trained Sentences. The analysis of participants' use of trained sentences revealed a main effect for Time, $F(1, 32) = 160.86, p < .001, \eta_p^2 = .834$. The effect of Sentence Type, however, was not significant, $F(2, 64) = .60, p = .554, \eta_p^2 = .018$. A main effect of Group also failed to reach significance, $F(1, 32) = .98, p = .331, \eta_p^2 = .030$. A significant two-way interaction effect was found between Time and Group, $F(1, 32) = 39.97, p < .001, \eta_p^2 = .555$. In addition, there was a significant two-way interaction effect between Time and Sentence Type, $F(2, 64) = 11.68, p < .001, \eta_p^2 = .267$. However, there was no significant two-way interaction between Sentence Type and Group, $F(2, 64) = .962, p = .387, \eta_p^2 = .029$. Moreover, a three-way interaction effect did not reach statistical significance either, $F(2, 64) = 2.96, p = .590, \eta_p^2 = .085$. Given that the three-way interaction effect was not significant and that the two-way interaction effect between Time and Group was the only interest in the analysis, it was followed up by simple effects analyses as follows.

At the pretest, there were no significant differences between the control group and the treatment group with a small effect size ($M_{diff} = .49, SE = .37, p = .895, d = .05$). At the posttest, however, the scores of the treatment group were significantly higher than those of the control group with a medium effect size ($M_{diff} = .74, SE = .34, p = .039, d = .75$). For the pretest-posttest comparison, both treatment and control groups showed significantly higher scores at the posttest than at the pretest (treatment group: $M_{diff} = 1.18, SE = .08, p < .001, d = 1.19$; control group: $M_{diff} = .40, SE = .095, p < .001, d = .38$), the former of which revealed a medium effect size and the latter of which showed a small effect size.

Figure 1. Trained sentences: Means by group, test, and sentence type



4.1.2. Untrained Sentences. The analysis of participants' gains in their use of untrained sentences revealed a main effect for Time, $F(1, 32) = 45.01, p < .001, \eta_p^2 = .584$. The effect of Sentence Type was not significant, $F(2, 64) = .40, p = .676, \eta_p^2 = .012$. A main effect of Group also failed to reach significance, $F(1, 32) = .60, p = .446, \eta_p^2 = .018$. The two-way interaction effect between Time and Group was significant, $F(1, 32) = 5.00, p = .033, \eta_p^2 = .135$; so was the two-way interaction effect between Time and Sentence Type, $F(2, 64) = 5.00, p < .001, \eta_p^2 = .217$. The two-way interaction effect between Sentence Type and Group, however, was not significant, $F(2, 64) = 3.10, p = .052, \eta_p^2 = .088$. Finally, there was a significant three-way interaction between Time, Group and Sentence Type, $F(2, 64) = 15.65, p < .001, \eta_p^2 = .328$. As planned, the three-way interaction effect was only followed by carrying out three sets of two-way Time \times Group mixed design of ANOVA for each sentence type.

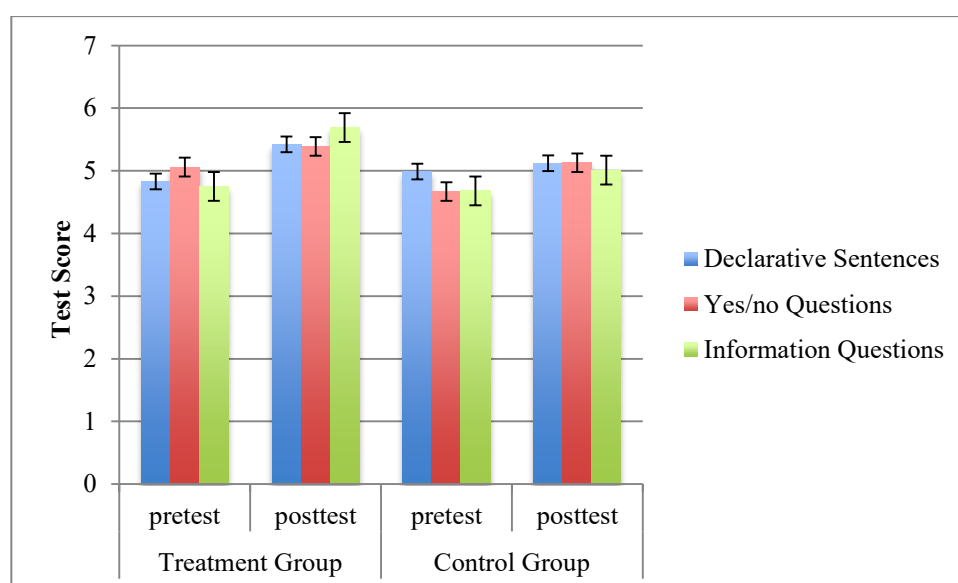
4.1.2.1. Sentence Type I: Declarative Sentences. The analysis of participants' use of declarative sentences showed that a significant main effect for Time, $F(1, 32) = 21.24, p < .001, \eta_p^2 = .399$, whereas a main effect for Group failed to reach significance, $F(1, 32) = .040, p = .843, \eta_p^2 = .001$. There was a significant interaction effect between Time and Group, $F(1, 32) = 8.64, p = .006, \eta_p^2 = .213$. Concerning the interaction effect, simple effects analyses showed that, at the pretest and posttest, there were no significant differences between the control group and the treatment group with small effect sizes (pretest: $M_{diff} = .16, SE = .40, p = .701, d = .14$; posttest: $M_{diff} = .31, SE = .37, p = .415, d = .29$). As for the pretest-posttest comparison, the control group showed no significant differences between the pretest and the posttest ($M_{diff} = .13, SE = .12, p = .284, d = .11$) with a small effect size. The treatment group, on the contrary, revealed significantly higher scores at the posttest than at the pretest with a small effect size ($M_{diff} = .59, SE = .10, p < .001, d = .62$).

4.1.2.2. Sentence Type II: Yes/No Questions. The analysis of untrained yes/no questions revealed a main effect for Time, $F(1, 32) = 44.16, p < .001, \eta_p^2 = .580$, but no main effect for Group, $F(1, 32) = 1.05, p = .314, \eta_p^2 = .032$. There was no significant interaction effect between Time and Group, $F(1, 32) = 1.40, p = .246, \eta_p^2 = .042$.

4.1.2.3. Sentence Type III: Information Questions. Finally, the statistical analysis of untrained information questions demonstrated a significant main effect for Time, $F(1, 32) = 41.65, p < .001, \eta_p^2 = .566$, but no main effect for Group, $F(1, 32) = 1.32, p = .259, \eta_p^2 = .040$. A significant interaction effect was found between Time and Group, $F(1, 32) = 9.53, p = .004, \eta_p^2 = .229$. As for the interaction effect, simple effects analyses demonstrated that, at the pretest, there were no significant differences between the control group and the treatment group ($M_{diff} = .07, SE = .36, p = .854, d = .06$) with a small effect size. However, at the posttest, the treatment

group significantly outperformed the control group with a medium effect size ($M_{diff} = .68$, $SE = .31$, $p = .039$, $d = .74$). For the pretest-posttest comparison, the control group and the treatment group had significant higher scores at the posttest than at the pretest with small effect sizes (treatment group $M_{diff} = .94$, $SE = .13$, $p < .001$, $d = 1.03$; control group: $M_{diff} = .33$, $SE = .15$, $p = .036$, $d = .32$).

Figure 2. Untrained sentences: Means by group, test, and sentence type



In summary, the analysis of the participants' production of trained sentences revealed that the treatment group significantly outperformed the control group with no specific differences in terms of sentence types. Interestingly, however, in the test of untrained sentences, the treatment group exceeded the control group selectively on declarative sentences and information questions. In the analysis of the production data of yes/no questions, there was no difference between the two groups.

4.2. Qualitative Findings

The qualitative findings from the questionnaires and exit interviews will be presented in

this section. After the posttest, the participants completed questionnaires and engaged in one-on-one exit interviews with the researcher. These findings provided supplementary information regarding the participants' attitudes towards explicit phonetic instruction and reflections on their own learning.

In response to the question "What do you think/feel your attention was focused on during the 2 weeks of practice? ", 17 participants from the treatment group reported "French intonation," "rhythm," "rise and fall in sentences," "the melody of French sentences" or "the flow of French speech," whereas in the control group only 6 people gave answers related to French prosody. When asked "What do you feel you've accomplished in terms of your pronunciation in French?", 15 participants in the treatment group reported "French intonation and rhythm" and 3 mentioned that "I feel that my French pronunciation is more standard and native-like." Interestingly only 2 participants answered "intonation" and "rhythm" in the control group, 9 participants answered some segmental aspects of French pronunciation such as the sound of /y/ and /œ/ or liaison. Moreover, 3 participants from the control group even reported that they did not think they had made progress on French pronunciation at all during the two weeks' instruction. In response to the question "Do you think the teacher helped you to notice and correct your pronunciation errors?", the majority of the treatment group ($n = 19$) answered positively, whereas in the control group, only half of the participants ($n = 7$) answered "yes".

During the exit interview, the participants expressed their views on the pronunciation instruction they received. In the treatment group, when asked whether they liked the explicit phonetic instruction, most participants provided positive answers. Some participants expressed their positive feelings towards the feedback from the instructor such as "I like being corrected by the teacher because this helps me improve my pronunciation," and "I don't see the reason why I

would not like being corrected. It's a perfect opportunity to be corrected by a native speaker so that I can improve my pronunciation and become more native-like." Particularly, one participant spoke highly of the metalinguistic explanations and exercises that the treatment group teacher used at the beginning of the class: "I like the way that the teacher gave clear instruction on how to pronounce sentences and the exercises. I don't think it is drill exercise and I can bear in mind the rules when we do the role-play later." Only 2 participants in the treatment group reported being "a little bit embarrassed when I still couldn't pronounce correctly after being corrected several times." As for the control group participants, 5 participants noted that they were satisfied with the way the teacher taught pronunciation. It is worth noting that 8 participants commented that it would be more beneficial if they could have some pronunciation exercises focusing on the pronunciation rules, which were similar to the foreign language instruction in China that the participants went through.

The participants also expressed their opinions on the two-week French course's influence on their French development. In the treatment group, all the participants stated that they benefited from the teaching. Some participants said that they paid more attention to their French pronunciation and were willing to invest more time in pronunciation improvement. Generally they thought that with improved pronunciation they had more confidence and willingness to communicate in French with native speakers in their daily life. One participant in particular pointed out that "Good pronunciation and neutral accent allows you to become a pleasant communicator and will enable you to enjoy speaking more" and another stated,

Good pronunciation can make you confident, and your confidence in turn opens up for you many opportunities. On the contrary, bad pronunciation may be confusing and hard to understand for those who listen to you. Eventually native speakers will slow down and modify their speech to make it simpler for me so I cannot learn authentic French.
(Anonymous participant, personal interview, August 11, 2015)

In the control group, the participants mainly reported their gains on learning some useful expressions for daily life. They did not mention the influence of pronunciation instruction.

It should be also noted that all the participants reported being satisfied with this French communicative language course. They commented that the content was “useful in real life” and “interesting.” Many found the class very engaging and reported having plenty of opportunities to practice oral French, which in turn motivated them to learn.

This chapter analyzed the quantitative results of the NS ratings of learner production data, which revealed a positive effect of EI on the participants’ pronunciation development in French, especially in declarative sentences and information questions. Thus the quantitative results showed that participants in the treatment group benefited from the instruction. The qualitative findings demonstrated that the explicitness of the instruction was very well received.

Chapter 5

Discussion and Conclusion

In this chapter, the research questions will first be answered, then the effects of FFI+EI will be discussed, and the factors that may have contributed to some unexpected results will also be examined. Finally, the implications for French language education and the limitations of the study will be explored.

5.1. The Effects of FFI+EI on the Trained Sentences

The first research question was: To what extent does FFI+EI facilitate the development of French prosody by Mandarin-speaking learners of French in trained sentences (declarative sentences, yes/no questions, and information questions)? The quantitative results revealed that FFI+EI was to some degree facilitative of the participants' French pronunciation development of prosody in trained sentences regardless of sentence types. The learners in the treatment group thus improved their pronunciation in all the three types of sentences. After two weeks of instruction by a native French-speaking teacher, the learners who were at a high beginner to low intermediate level of French benefited from the teaching. In terms of the sentence type, learners showed no differences when they pronounced declarative sentences, yes/no questions or information questions during the tests.

EI had a facilitative role in the current study, as demonstrated also by some previous pronunciation instruction studies. Explicit pronunciation instruction at the beginning of the class included metalinguistic activities that entailed both awareness at the level of noticing and understanding (Ellis, 2001; Schmidt, 2001). As discussed by Derwing and Munro (2015), when the phonological targets are explicitly taught, learners can notice the differences between their own productions and “those of proficient speakers in the L2 community” (p. 388). In addition, as

stated by Saito (2011a), EI provided at the beginning of FFI enables learners to “use limited attentional resources to attend to new sound form,” which is especially true for those features that are difficult to notice “through mere exposure to L2 input” (p. 169). Furthermore, the treatment group teacher provided a combination of corrective feedback types (explicit correction, metalinguistic feedback, and recasts) compared to the control group teacher who only provided recasts. The explicitness of the feedback rendered the learners’ errors more salient and might have enabled learners to notice their problematic pronunciation. Moreover, the explicit FFI instruction guided the learners to practice the target sound feature via communicative activities so that learners could proceduralize more target-like representations (Saito, 2011a).

5.2. The Effects of FFI+EI on the Untrained Sentences

The second research question was: To what extent does FFI+EI facilitate the development of French prosody by Mandarin-speaking learners of French in untrained sentences (declarative sentences, yes/no questions, and information questions)? The analysis of the untrained sentences revealed unexpected results. FFI+EI was facilitative of Chinese learners’ French pronunciation development of prosody specifically in declarative sentences and information questions, but not in yes/no questions.

As shown in the section of the quantitative results (4.1.1.), the treatment group outperformed the control group on the trained sentences although the learners’ gains did not differ by sentence type, indicating that students benefited from the explicit phonetic instruction regardless of sentence type. In other words, in the explicit instruction environment, students improved their pronunciation across all three types of sentences. Interestingly, in the untrained sentences, the treatment group outperformed the control group on declarative sentences and information questions, but not on yes/no questions. This suggests that learners benefited from the

instruction selectively. The reason for this will be explored in the next section.

The results indicate that FFI and EI were generally beneficial for the learners to learn French prosody. The benefits seemed to be constrained by item-based learning, insofar as the learners were unable to apply the newly acquired knowledge beyond the trained language items. Thus, one particular question arises from the answers to the research questions: Why did learners show progress selectively on the two types of sentences in the untrained sentences? The answer will be explored in the following section.

5.2.1. Account of L1 transfer in L2 prosody acquisition. As for why the learners only benefited from the instruction on declarative sentences and information questions but not on yes/no questions, transfer from their L1 Mandarin can probably account for the results. Most research into L2 prosody finds that L1 transfer is a critical component in L2 prosody learning (Rasier & Hiligsmann, 2007). In Chapter 2, we reviewed the prosodic features of French and Mandarin and found some similarities and inconsistencies of prosody patterns among the three types of sentences in the two languages. Previous studies on Mandarin prosody and French prosody (Shen, 1989, 1990; Hirst & Di Cristo, 1998; Lin, 2001) found that declarative sentences and information questions in both languages have a falling intonation contour. However, the intonation patterns of yes/no questions differ by language. In the learners' L1 Mandarin, yes/no questions are pronounced generally with a falling intonation and the pitch is located at the beginning of the sentence. On the contrary, French yes/no questions are pronounced with a rising intonation and the pitch is located on the final syllable. Contrastive analyses (Shen, 1990) in previous research showed that Chinese L2 French adult learners had difficulties learning French yes/no questions, owing to negative transfer from the learners' L1 Mandarin. In addition, according to the L2 Intonation Learning Theory, Mandarin-speaking learners of French L2 may

have difficulties in the phonetic realization dimension. In Mandarin, yes/no questions (Ma questions) are pronounced with rising pitch and increased duration whereas in French yes/no questions are not only realized by rising pitch and increased duration but also by adding stress on the last syllable of every word. Therefore, French yes/no questions are more complex for Chinese learners of French L2. In the same vein, because declarative sentences and information questions in both French and Mandarin are pronounced with a generally falling intonation, the participants in the present study benefited from positive transfer in their production of these sentence types in French L2.

Taken together, we may reach the conclusion that explicit pronunciation instruction and FFI are beneficial for learning the trained sentences, with potential limitations in transferring the skills to untrained sentences where L1 transfer plays a major role in learners' performance.

5.3. Implication for French Language Education

As shown by the present study and others, explicit phonetic instruction is beneficial for the development of prosody in French L2. From the learners' perspective, they also speak positively of the explicitness of the instruction and they welcome corrective feedback from their teachers when they have pronunciation errors. Although communicative language teaching has been perceived as incompatible with explicit pronunciation instruction (Darcy, Ewert, & Lidster, 2012; Derwing & Foote, 2011), it is nevertheless feasible to incorporate explicit pronunciation instruction into a communicative framework. In the current study, some participants in the treatment group expressed their satisfaction with the metalinguistic explanations and relevant exercises provided during the first ten minutes of class. In addition, some participants in the control group who received implicit FFI reported to the researcher that it would be better to have more explicit explanations of the pronunciation rules first so that they could practice before

moving on to the communicative classroom activities. Therefore, explicitness in L2 pronunciation instruction is called for in classroom settings.

The results of the study showed that it is beneficial to incorporate a focus on suprasegmentals in L2 pronunciation teaching. In the current study, the participants were taught primarily French prosody and they reported positively on the learning of this aspect of pronunciation. As some research has shown, explicit instruction of suprasegmental features enhances comprehensibility in learners even when instruction is limited to a short period of time in class (Gordon, Darcy, & Ewert, 2013, Derwing, Munro, & Wiebe, 1998). Therefore, instead of considering prosody as redundant in pronunciation teaching, teachers should endeavor to design exercises for the students to practice suprasegmental features.

As discussed in the previous section, L1 transfer played a role in the learners' acquisition of French prosody in this study. It is therefore important for teachers to take into account the similarities and discrepancies between the learners' L1 and L2 regarding certain linguistic features. Knowing the likelihood of positive and negative transfer from the learners' L1 can help teachers to predict the learners' difficulties in their L2 acquisition so that they can teach accordingly. Associating certain linguistic features in the learners' L1 with those in their L2 or differentiating one from each other may better draw learners' attention to the form and even leave the learners with a deep impression of this linguistic feature, which is conducive to acquisition.

5.4. Limitations

There are several limitations to this study. The first limitation is that the study was conducted with only 34 participants. Statistical results are thus less robust than they would have been with a larger sample. Moreover, six participants assigned to the control group did not finish

the program, so they were excluded from the data analysis, which resulted in an unequal number of participants in the treatment and control groups. The results would have been more reliable with two groups of similar size. Also, as the participants were recruited from all across Montreal, the learners were not a homogeneous group regarding their level of French. Although the researcher had a meeting with each participant prior to the research to make sure their French level met the requirements of the study according to their performance on the reading of the teaching materials and their answers to the random questions the researcher posed in French, variation in the participants' French levels of proficiency was inevitable without a rigorous means of measurement. It was also noted that some participants took other French courses at the same time as participating in the study. Therefore, the instruction the participants received in the study was not the sole source of French learning for some. It would be more helpful to recruit participants from a French class of the same level in order to ensure that the learners' gains in French prosody were made due to no factors other than the treatment implemented in the study.

Second, there is the issue of the duration of the study. The French communicative class lasted only two weeks and the learners received only six hours of instruction in total. As discussed earlier in this thesis (5.2.), the instruction was probably not long enough for the learners to fully apply what they learned to new lexical contexts. Thus, the learners might have benefited more from the teaching if the instruction sessions had been longer. Moreover, a delayed posttest would have been useful to assess whether learners were able to retain the learning outcomes. Without one, the long-term effects of FFI+EI on the participants' pronunciation development remains unknown.

Finally, the testing and evaluation methods used in the study could be improved, which would allow a more accurate and rigorous analysis of the data. As spontaneous speech data were

not easy to obtain, the current study used oral reading samples to analyze learners' prosody quality. However, using read speech as a testing method might have interfered with the results as well. The prosody used when people read can differ from that used in spontaneous communication. Spontaneous speech "predominantly contains rises", whereas read speech "predominantly contains falls" (Silverman et al., 1992). This fact may have had an influence on the participants' performance on different sentence types. It is possible that the participants found it easy to pronounce sentences with falling intonation and thus pronounced French declarative sentences and information questions with little difficulty. On the contrary, when producing French yes/no questions characterized by rising intonation, the learners' might have been influenced by a falling tendency in reading intonation. Furthermore, L2 learners might not necessarily put into practice in spontaneous speech what they learn under controlled tasks (Celce-Murcia, Brinton, & Goodwin, 2010). It therefore remains unclear whether the instruction was helpful in improving learners' performance in daily communication when spontaneous speech is predominant. More studies with spontaneous speech data are called for in the future.

Finally, the script being tested was decontextualized so the participants' performance may not have revealed their actual level of French prosody. As for the rating method, only human raters were used to evaluate the participants' production. Human raters inevitably experience listening fatigue while conducting the rating tasks, which might have influenced the accuracy of the results. Therefore, results would be more convincing if acoustic analyses were also involved to measure the participants' prosody quality.

The limitations in the current study could be overcome in future research with a larger sample of participants, a more rigorous screening of the participants' French level to ensure a homogeneous group with respect to language level, a longer duration of the instruction, and a

more rigorous design of testing methods.

5.5. Conclusion

In summary, the current study has taken a step towards examining the effect of explicit phonetic instruction embedded in communicative FFI. Whereas previous research mainly focused on segmental pronunciation teaching and took place in ESL settings, this study, with its combination of the linguistic target, French prosody, and the L1 background of the participants, Mandarin, attempted to widen the scope of pronunciation instruction in the SLA. EI in the current study proved to be facilitative of French prosody development by Mandarin-speaking learners of French in both familiar (trained sentences) and unfamiliar (untrained sentences) lexical contexts. The efficacy of EI was most salient in declarative sentences and information questions. On yes/no questions, learners in the study experienced more difficulties owing mostly to L1 negative transfer. Future studies of different linguistic targets and learners of different L1 backgrounds are called for to provide us with a better picture of the effectiveness of explicit phonetic instruction.

References

- Baker, W., & Smith, L. C. (2010). The impact of L2 dialect on learning French vowels: Native English speakers learning Quebecois and European French. *Canadian Modern Language Review*, 66(5), 711-738.
- Best, C. T., & Strange, W. (1992). Effects of phonological and phonetic factors on cross-language perception of approximants. *Journal of Phonetics*, 20(3), 305-330.
- Best, C. T., & Tyler, M. D. (2007). Nonnative and second-language speech perception: Commonalities and complementarities. In M.J. Munro & O.-S. Bohn (Eds.), *Second language speech learning: The role of language experience in speech perception and production* (pp. 13-34). Amsterdam: John Benjamins.
- Boersma, P., & Weenink, D. (2005). Praat (version 4.3.31) [Computer software]. (2005). Amsterdam: University of Amsterdam. Retrieved from: <http://www.fon.hum.uva.nl/praat>.
- Bohn, O.-S., & Munro, M. J. (2007). *Language experience in second language speech learning*. Amsterdam: John Benjamins.
- Bordal, G. (2015). Traces of the lexical tone system of Sango in Central African French. In E. Delais-Roussarie, M. Avanzi, & S. Herment (Eds.), *Prosody and language in contact: L2 acquisition, attrition and languages in multilingual situations* (pp. 29-49). Berlin, Germany: Springer.
- Celce-Murcia, M., Brinton, D., & Goodwin, J. (1996). *Teaching pronunciation: A reference for teachers of English to speakers of other languages*. Oxford, UK: Oxford University Press.
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching pronunciation hardback with audio CDs (2): A course book and reference guide*. Cambridge, UK: Cambridge

- University Press.
- Chen, S., & Fon, J. (2008). The peak alignment of prenuclear and nuclear accents among advanced L2 English learners. In P. A. Barbosa, S. Madureira, & C. Reis (Eds.), *Proceedings of the Speech Prosody 2008 Conference* (pp. 643–646). Campinas: State University of Campinas.
- Chun, D. M. (1988a). Teaching intonation as part of communicative competence: Suggestions for the classroom. *Die Unterrichtspraxis/Teaching German*, 21(1), 81-88.
- Chun, D. M. (1988b). The neglected role of intonation in communicative competence and proficiency. *The Modern Language Journal*, 72(3), 295-303.
- Chun, D. M. (2002). *Discourse intonation in L2: From theory and research to practice*. Amsterdam: John Benjamins.
- De Bot, K. (1986). The transfer of intonation and the missing database. In E. Kellerman & M.S. Smith (Eds.), *Crosslinguistic influences in second language acquisition* (pp. 110-119). New York, NY: Pergamon.
- Delais-Roussarie, E., Avanzi, M., & Herment, S. (Eds.). (2015). *Prosody and language in contact: L2 acquisition, attrition and languages in multilingual situations*. Berlin, Germany: Springer.
- De Mareüil, P. B., Rilliard, A., Lehka-Lemarchand, I., Mairano, P., & Lai, J. P. (2015). Falling yes/no questions in Corsican French and Corsican: evidence for a prosodic transfer. In E. Delais-Roussarie, M. Avanzi, & S. Herment (Eds.), *Prosody and language in contact: L2 acquisition, attrition and languages in multilingual situations* (pp. 101-122). Berlin, Germany: Springer.
- De Leeuw, E., Mennen, I., & Scobbie, J. M. (2012). Singing a different tune in your native

- language: first language attrition of prosody. *International Journal of Bilingualism*, 16(1), 101-116.
- DeKeyser, R. (1998). Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In C. Doughty, & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 42–63). Cambridge, UK: Cambridge University Press.
- Derwing, T., & Foote, J. (2011). 2010 National survey of pronunciation teaching: Deja vu. Paper presented at the *Annual Association for Applied Linguistics*, Chicago, IL, March 26, 2011.
- Derwing, T. M., & Munro, M. J. (1997). Accent, intelligibility, and comprehensibility: Evidence from four L1s. *Studies in Second Language Acquisition*, 19, 1-16.
- Derwing, T. M., Munro, M. J., & Wiebe, G. E. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning*, 48, 393-410.
- Derwing, T. M., Munro, M. J., & Carbonaro, M. D. (2000). Does popular speech recognition software work with ESL speech? *TESOL Quarterly*, 34, 592–603.
- Derwing, T. M. (2003). What do ESL students say about their accents? *Canadian Modern Language Review*, 59, 547–566.
- Derwing, T. M., Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39, 379-397.
- Derwing, T. M. & Munro, M. J. (2009). Putting accent in its place: Rethinking obstacles to communication. *Language Teaching and Research*, 42(4), 476-490.
- Derwing, T. M. & Munro, M. J. (2015). *Pronunciation Fundamentals: Evidence-based Perspectives for L2 teaching and research*. Amsterdam: John Benjamins.

- Di Cristo, A. (1998). Intonation in French. In D. Hirst & A. Di Cristo (Eds.), *Intonation systems: A survey of twenty languages* (pp. 195-218). Cambridge, UK: Cambridge University Press.
- Ding, H., & Hoffmann, R. (2013). An investigation of vowel epenthesis in Chinese learners' production of German consonants. Paper presented at *14th Annual Conference of the International Speech Communication Association*, Lyon, France, August 25, 2013.
- Doughty, C. (2003). Instructed SLA: Constraints, compensation, and enhancement. In C. Doughty & M. H. Long (Eds.), *Handbook of second language acquisition* (pp. 256-310). New York: Basil Blackwell.
- Ellis, R. (2001). Introduction: Investigating form-focused instruction. *Language learning*, 51(1), 1-46.
- Ellis, R. (2006). Researching the effects of form-focused instruction on L2 acquisition. *AILA Review*, 19(1), 18-41.
- Ellis, R. (2015). *Understanding second language acquisition. 2nd Edition*. Oxford, UK: Oxford University Press.
- Ellis R. (2016). Focus on form: A critical review. *Language Teaching Research*, 20(3), 405-428. doi:10.1177/1362168816628627.
- Escudero, P., & Boersma, P. (2004). Bridging the gap between L2 speech perception and phonological theory. *Studies in Second Language Acquisition*, 26(4), 551-585.
- Flege, J., Takagi, N., & Mann, V. (1995). Japanese Adults can learn to produce English /ɪ/ and /I/ accurately. *Language and Speech*, 38(1), 25-55.
- Flege, J. (1995). Second language speech learning. In W. Strange (Ed.), *Speech perception and linguistic experience: Issues in cross-language research* (pp. 233-277). Timonium, MD:

- York Press.
- Flege, J. E. (2003). Assessing constraints on second-language segmental production and perception. In N.O. Schiller & A. S. Meyer (Eds.), *Phonetics and phonology in language comprehension and production: Differences and similarities* (pp. 319-355). Berlin: Mouton de Gruyter. M. Qian & Z. Zhou
- Galloway, V. B. (1980). Perceptions of the communicative efforts of American students of Spanish. *The Modern Language Journal*, 64(4), 428-433.
- Gatbonton, E., & Segalowitz, N. (2005). Rethinking communicative language teaching: A focus on access to fluency. *Canadian Modern Language Review*, 61(3), 325-353.
- Gooch, R. (2015). *Teaching English /ɹ/ to Korean Adult EFL Learners: The Role of Corrective Feedback Type in Phonological FFI* (Master's thesis). McGill University, Montreal.
- Gooch, R., Saito, K., & Lyster, R. (2016). Effects of recasts and prompts on L2 pronunciation development: Teaching English /r/ to Korean adult EFL learners. *System*, 60, 117-127.
- Gordon, J., Darcy, I., & Ewert, D. (2013). Pronunciation teaching and learning: Effects of explicit phonetic instruction in the L2 classroom. In J. Levis & K. LeVelle (Eds.). *Proceedings of the 4th Pronunciation in Second Language Learning and Teaching Conference* (pp. 194-206). Ames, IA: Iowa State University.
- Gordon, J., Darcy, I., & Ewert, D. (2012, August). Pronunciation teaching and learning: Effects of explicit phonetic instruction in the L2 classroom. In *Proceedings of the 4th Pronunciation in Second Language Learning and Teaching Conference* (pp. 194-206).
- Gozali, I., & Harjanto, I. (2014). Improving the grammatical accuracy of the spoken English of Indonesian international kindergarten students. *TEFLIN Journal*, 25(2), 168-184.
- Guion, S. G., Flege, J. E., Akahane-Yamada, R., & Pruitt, J. C. (2000). An investigation of

- current models of second language speech perception: The case of Japanese adults' perception of English consonants. *The Journal of the Acoustical Society of America*, 107(5), 2711-2724.
- Han, Z., Park, E., & Combs, C. (2008). Textual enhancement of input: Issues and possibilities. *Applied Linguistics*, 29(4), 597-618.
- Hahn, L.D. (2004). Primary stress and intelligibility: research to motivate the teaching of suprasegmentals. *TESOL Quarterly*, 38(2), 201-223.
- Hardison, D. M. (2004). Generalization of computer-assisted prosody training: Quantitative and qualitative findings. *Language Learning & Technology*, 8(1), 34-52.
- Hirst, D., & Di Cristo, A. (1998). *Intonation systems: a survey of twenty languages*. Cambridge, UK: Cambridge University Press.
- Huang, B. H., & Jun, S. A. (2011). The effect of age on the acquisition of second language prosody. *Language and Speech*, 54 (3), 387-414. doi: 10.1177/0023830911402599.
- Isaacs, T. (2009). Integrating form and meaning in L2 pronunciation instruction. *TESL Canada Journal*, 27(1), 1-12.
- Jun, S. A., & Oh, M. (2000, May). Acquisition of second language intonation. *Proceedings of International Conference on Spoken Language Processing*, 4, 76-79.
- Kang, O., Rubin, D. O. N., & Pickering, L. (2010). Suprasegmental measures of accentedness and judgments of language learner proficiency in oral English. *The Modern Language Journal*, 94(4), 554-566.
- Ladd, R. D. (1996). *Intonational phonology*. Cambridge, UK: Cambridge University Press.
- Leather, J. (1983). State of the art: Second-language pronunciation learning and teaching. *Language Teaching*, 16, 198-219.

- Lee, A. H., & Lyster, R. (2016). Effects of different types of corrective feedback on receptive skills in a second language: A speech perception training study. *Language Learning*, 66(4), 809-833.
- Lee, J., & Matthews, S. (2015). When French becomes tonal: Prosodic transfer from L1 Cantonese and L2 English. In J. Levis, R. Mohammed, M. Qian & Z. Zhou (Eds). *Proceedings of the 6th Pronunciation in Second Language Learning and Teaching Conference* (pp. 63-72). Ames, IA: Iowa State University.
- Levy, E. S., & Law, F. F. (2010). Production of French vowels by American-English learners of French: Language experience, consonantal context, and the perception-production relationship. *The Journal of the Acoustical Society of America*, 128(3), 1290-1305.
doi:10.1121/1.3466879
- Lian, A. P. (1980). *Intonation patterns of French, teachers book*. Sydney, Australia: River Seine.
- Liang, J., & Van Heuven, V. J. (2007). Chinese tone and intonation perceived by L1 and L2 listeners. *Tones and Tunes*, 2, 27-61.
- Lieberman, M. A. (1986). Social supports--the consequences of psychologizing: A commentary. *Journal of Consulting and Clinical Psychology*, 54, 461-465.
- Lightbown, P. M., & Spada, N. (2006). *How languages are learned*. Oxford, UK: Oxford University Press.
- Lin, H. (2001). Stress and the distribution of the neutral tone in Mandarin. In D. B. Xu (Ed.), *Chinese phonology in generative grammar* (pp. 139-161). San Diego: Academic Press.
- Lord, G. (2005). (How) Can We Teach Foreign Language Pronunciation? *Hispania*, 88, 557-567.
- Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in Second Language Acquisition*, 19, 37-66.

- McGory, J. T. (1997). Acquisition of intonational prominence in English by Seoul Korean and Mandarin Chinese speakers (Ph.D. thesis). Ohio, Ohio State University.
- Mennen, I. (2004). Bi-directional interference in the intonation of Dutch speakers of Greek. *Journal of Phonetics*, 32, 543–563.
- Mennen, I. (2015). Beyond segments: Towards a L2 intonation learning theory. In E. Delais-Roussarie, M. Avanzi, & S. Herment (Eds.), *Prosody and language in contact: L2 acquisition, attrition and languages in multilingual situations* (pp. 171-188). Berlin, Germany: Springer.
- Leroy-Miquel, C. (2003). *Communication progressive du français: Avec 365 activités*. Paris: CLE International.
- Morley, J. (1991). The pronunciation component in teaching English to speakers of other languages. *TESOL Quarterly*, 25(3), 481-520.
- Munro, M. J., & Derwing, T. M. (1995). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, 45, 73–97.
- Munro, M. J., (1995). Nonsegmental factors in foreign accent. *Studies in Second Language Acquisition*, 17(1), 17-33.
- Munro, M. J., & Derwing, T. M. (2008). Segmental acquisition in adult ESL learners: A longitudinal study of vowel production. *Language Learning*, 58, 479-502.
- Nolan, F. (2006). Intonation. In B. Aarts & A. McMahon (Ed.), *Handbook of English linguistics*, (pp. 433–457). Oxford, UK: Blackwell.
- Norris, J., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50, 417-528.
- Parviz, M., & Gorjian, B. (2013). The effect of form-focused instruction (FFI) on teaching

- English grammar to Iranian learners at the intermediate level. *International Journal of Language Learning and Applied Linguistics World*, 4(4), 450-462.
- Pennington, M. C., & Ellis, N. C. (2000). Cantonese speakers' memory for English sentences with prosodic cues. *The Modern Language Journal*, 84(3), 372-389.
- Pennington, M. C., & Richards, J. C. (1986). Pronunciation revisited. *TESOL Quarterly*, 20(2), 207-225.
- Pienemann, M., Johnston, M., & Brindley, G. (1988). Constructing an acquisition-based procedure for second language assessment. *Studies in Second Language Acquisition*, 10(2), 217-243.
- Pierrehumbert, J., & Beckman, M. (1988). Japanese tone structure. *Linguistic Inquiry Monographs*, (15), 1-282.
- Piske, T., MacKay, I. R., & Flege, J. E. (2001). Factors affecting degree of foreign accent in an L2: A review. *Journal of Phonetics*, 29(2), 191-215.
- Plonsky, L., & Oswald, F. L. (2014). How big is “big”? Interpreting effect sizes in L2 research. *Language Learning*, 64(4), 878-912.
- Ranta, L. & R. Lyster (2007). A cognitive approach to improving immersion students’ oral language abilities: The Awareness–Practice–Feedback sequence. In R. DeKeyser (ed.), *Practice in a second language: Perspectives from applied linguistics and cognitive psychology* (pp. 141–160). Cambridge: Cambridge University Press.
- Rasier, L., & Hiligsmann, P. (2007). Prosodic transfer from L1 to L2. Theoretical and methodological issues. *Nouveaux Cahiers de Linguistique Française*, 28, 41-66.
- Saito, K. (2013). Re-examining effects of form-focused instruction on L2 pronunciation development: The role of explicit phonetic information. *Studies in Second Language*

- Acquisition*, 35, 1-29. doi:10.1017/S0272263112000666.
- Saito, K. (2012). Effects of instruction on L2 pronunciation development: A synthesis of 15 quasi-experimental intervention studies. *TESOL Quarterly*, 46(4), 842-854.
- Saito, K., & Lyster, R. (2012a). Effects of form-focused instruction and corrective feedback on L2 pronunciation development of /r/ by Japanese learners of English. *Language Learning*, 62, 595-633.
- Saito, K., & Lyster, R. (2012b). Investigating pedagogical potential of recasts for L2 vowel acquisition. *TESOL Quarterly*, 46, 387-398.
- Saito, K. (2011a). *Effects of form-focused instruction on L2 pronunciation development of /ɹ/ by Japanese learners of English* (Doctoral thesis). McGill University, Montreal.
- Saito, K. (2011b). Examining the role of explicit phonetic instruction in native-like and comprehensible pronunciation development: An instructed SLA approach to L2 phonology. *Language Awareness*, 20(1), 45-59.
- Saito, K. (2007). The influence of explicit phonetic instruction on pronunciation teaching in EFL settings: The case of English vowels and Japanese learners of English. *Linguistic Journal*, 3(3), 17-41.
- Santiago, F., & Delais-Roussarie, E. (2015). The acquisition of question intonation by Mexican Spanish learners of French. In E. Delais-Roussarie, M. Avanzi, & S. Herment (Eds.), *Prosody and language in contact: L2 acquisition, attrition and languages in multilingual situations* (pp. 243-270). Berlin, Germany: Springer.
- Schmidt, R., & Watanabe, Y. (2001). Motivation, strategy use, and pedagogical preferences in foreign language learning. *Motivation and Second Language Acquisition*, 23, 313-359.
- Schneider, W., & Chein, J. M. (2003). Controlled & automatic processing: behavior, theory, and

- biological mechanisms. *Cognitive Science*, 27(3), 525-559.
- Seidlhofer, B. (2001). Closing a conceptual gap: The case for a description of English as a lingua franca. *International Journal of Applied Linguistics*, 11(2), 133-158.
- Shen, X. (1989). *The Prosody of Mandarin Chinese*, Berkeley: University of California Press.
- Shen, X. S. (1990). Ability of learning the prosody of an intonational language by speakers of a tonal language: Chinese speakers learning French prosody. *IRAL-International Review of Applied Linguistics in Language Teaching*, 28(2), 119-134.
- Shen, X. S. (1991). Question intonation in natural speech: a study of Changsha Chinese. *Journal of the International Phonetic Association*, 21(1), 19-28.
- Shen, X. S. (1993). The use of prosody in disambiguation in Mandarin. *Phonetica*, 50(4), 261-271.
- Silverman, K., Beckman, M., Pitrelli, J., Ostendorf, M., Wightman, C., Price, P., ... & Hirschberg, J. (1992). ToBI: A standard for labeling English prosody. Paper presented at the *International Conference on Spoken Language Processing*, Banff, Canada, October 16, 1992.
- Skehan, P. (1996). A framework for the implementation of task-based instruction. *Applied linguistics*, 17(1), 38-62.
- Spada, N., & Tomita, Y. (2010). Interactions between type of instruction and type of language feature: A meta-analysis. *Language Learning*, 60(2), 263-308.
- Spada, N. (1997). Form-focused instruction and second language acquisition: A review of classroom and laboratory research. *Language Teaching*, 29, 73-87.
- Strange, W. (Ed.). (1995). *Speech perception and linguistic experience: Issues in cross-language research*. Baltimore: York Press.

- Sturm, J. L. (2013). Explicit phonetics instruction in L2 French: A global analysis of improvement. *System*, 41(3), 654-662.
- Thomson, R. & Derwing, T. (2015). The effectiveness of L2 pronunciation instruction: A narrative review. *Applied Linguistics*. Advanced online publication.
doi:10.1093/applin/amu076.
- Timmis, I. (2002). Native-speaker norms and International English: A classroom view. *ELT Journal*, 56(3), 240-249.
- Trimble, J. C. (2013). Perceiving intonational cues in a foreign language: Perception of sentence type in two dialects of Spanish. In Chad Howe (Ed.), *Selected proceedings of the 15th Hispanic linguistics symposium* (pp. 78-92). Somerville, MA: Cascadilla Proceedings Project.
- Trofimovich, P., & Gatbonton, E. (2006). Repetition and focus on form in processing L2 Spanish words: Implications for pronunciation instruction. *The Modern Language Journal*, 90(4), 519-535.
- VanPatten, B. (2004). *Input processing and grammar instruction in second language acquisition*. Westport, CT: Ablex.
- Warren, P., Elgort, I., & Crabbe, D. (2009). Comprehensibility and prosody ratings for pronunciation software development. *Language Learning & Technology*, 13(3), 87-102.
- Yang, Y., & Lyster, R. (2010). Effects of form-focused practice and feedback on Chinese EFL learners' acquisition of regular and irregular past-tense forms. *Studies in Second Language Acquisition*, 32(2), 235-263.
- Yuan, J. (2004). *Intonation in Mandarin Chinese: Acoustics, Perception, and Computational Modeling* (Unpublished doctoral dissertation), Cornell University, NY.

Yule, G. (1989). The spoken language. *Annual Review of Applied Linguistics*, 10, 163-172.

Appendix

Teaching Materials

Leçon I Louer un appartement

Objectifs: Apprendre à louer un appartement

Apprendre à rapporter un problème à propos de l'appartement

Situation I: Chercher un appartement

A: Bonjour, **est-ce que je peux vous aider?**

B: Oui, **je suis à la recherche d'un appartement..**

A: D'accord, vous avez une préférence pour un endroit particulier?

B: Si possible, je voudrais être au centre-ville...

A: Au centre-ville, oui... quel type d'appartement vous recherchez?

B: En fait ça dépendra du prix, je ne voudrais pas dépasser 500 dollars par mois.

A: Au centre ville pour moins de 500 dollars, vous devez partager l'appartement avec quelqu'un d'autre car ce n'est pas facile de trouver un appartement à vous seul.

B: Ah bon? Même pas un studio?

A: Non, malheureusement. Comptez 600 dollars minimum pour un studio... Attendez, j'ai peut-être quelque chose pour vous... Ah voilà, j'ai un grand studio, 38 mètres carrés avec un balcon.

B: Est-ce qu'il est lumineux?

A: Oui, c'est un studio agréable qui donne sur le Mont Royal. Il est au cinquième étage.

B: Au cinquième? Il y a un ascenseur?

A: Oui.

B: **Est-ce qu'il est meublé, cet appartement?**

A: Non. Mais la cuisine est bien équipée. Il y a une cuisinière électrique avec un four, un frigo et un four à micro-ondes.

B: D'accord. Et je voudrais aussi savoir s'il y a une machine à laver?

A: Non, mais il y a une laverie automatique payante près de l'entrée de cet immeuble.

B: Ah, et le loyer est à combien?

A: C'est 600 dollars.

B: 600 dollars, c'est cher...

A: Oui, ça dépasse un peu votre budget mais le chauffage, l'électricité, l'eau, tout est compris.

B: Et l'internet?

A: L'internet vous devez le payer en plus. Vous voulez quand même le visiter?

B: Oui, ça ne coûte rien d'aller voir.

A: Vous ne le regretterez pas.

Façon de parler

- Je suis à la recherche d'un appartement 我想找间公寓……
- Si possible, je voudrais....如果可能的话, 我想……
- Le loyer est à combien? 月租多少钱?
- Est-ce qu'il est meublé, cet appartement? 这公寓有家具么?
- Le chauffage, l'électricité, l'eau, tout est compris 水电暖全包

Situation II: Se plaindre à un propriétaire de 1. Une fuite d'eau 2. La fenêtre**Dialogue1**

- A: Allô, monsieur Dupont? C'est moi, le locataire de l'appartement 203. Voilà, il y a un problème dans la salle de bain, il y a de l'humidité sur le mur. La peinture est en train de tomber. Je pense qu'il y a une fuite d'eau.
- B: Alors, il faut d'abord voir si c'est bien ça!
- A: Oui, bien sûr, mais qu'est-ce qu'on fera, après?
- B: Il faut prévenir votre assurance!

Dialogue2

- A: Quand nous avons loué cet appartement, vous deviez changer les fenêtres. Ça fait trois mois que nous sommes là, et les fenêtres ne ferment toujours pas!
- B: Oui, mais je n'ai pas eu le temps, ce n'est pas ma faute!
- A: Écoutez, une fenêtre, ça doit se fermer! Nous ne pouvons pas rester avec de l'air qui entre partout! Nous sommes en novembre, c'est complètement fou!
- B: Bon, je vais envoyer quelqu'un.
- A: J'espère! C'est urgent, maintenant!
- B: Quelqu'un va venir demain, sans faute!

Façon de parler

- J'ai un problème... il y a un problème... Je crois qu'il y a un problème...我有个问题……有一个问题……我认为有一个问题……
- Je crois qu'il y a une fuite d'eau.我认为漏水了。
- Comment est-ce qu'on fait? Qu'est-ce que nous faisons? 我们该怎么办? 我们得做什么?
- Ça ne marche toujours pas. 一直不好使
- Vous deviez...mais... 本该……但是……
- C'est urgent!很紧急
- C'est complètement fou! 太过分了!

Leçon II. Faire les courses!

Objectifs: Apprendre à choisir un cadeau dans une boutique

Apprendre à acheter un vêtement

Situation I: A la parfumerie

A: Bonjour, monsieur, je peux vous aider?

B: Oui, **je voudrais offrir un parfum à mon amie**, mais je ne sais pas quoi choisir...

A: **Elle est comment, votre amie?**

B: Comment ça, elle est comment?!

A: Je veux dire: elle est grande, petite, blonde, brune?

B: C'est une petite brune, très sportive. Pourquoi? C'est important?

A: Bien sûr, pour choisir un parfum, il faut connaître la personne! Alors je vais vous faire sentir
« Nuits bleues » et « Allure ». Dites-moi, lequel préférez-vous?

B: Ah non celui-là, je n'aime pas du tout!

A: Ah bon? Si c'est pour votre amie, il faut que ça vous plaise à vous aussi!

B: Et puis, entre celui-ci et celui-là, franchement, je ne sais pas trop.

A: À mon avis, « Allure » serait très bien. En général, ce parfum est très apprécié.

B: Bon, de toute façon, je n'y connais rien. **Ça coûte combien?**

A: En parfum, en eau de parfum ou en eau de toilette?

B: Pardon?! C'est quoi, la différence? Je n'en ai aucune idée!

A: Vous savez, monsieur, je vous conseille le parfum, c'est un beau cadeau. Le petit modèle est à
75 dollars et le grand modèle 95 dollars.

B: Eh bien, je vais prendre le petit.

A: Je vous fais un paquet-cadeau?

B: Oui, s'il vous plaît.

Façon de parler

- Quelle est la différence entre ...et...= C'est quoi la différence? (两者)之间的区别是什么?
- Lequel préférez-vous? 您喜欢哪一个?
- Je ne sais pas quoi choisir...我不知道选什么
- Je n'en ai aucune idée. 我一点儿也不知道
- Je ne sais pas trop... 我不是特别懂
- Je ne connais rien à ce sujet. 这个我不懂
- Ça fait combien?/ Il est à combien? 这个多少钱?

Situation II. Dans une boutique de vêtement

A: Madame, je peux vous aider?

B: Non, merci, je regarde...

(Un instant plus tard...)

B: **Je voudrais essayer le pantalon noir.**

A: Bien sûr, madame. **Quelle taille faites-vous?**

B: Du 38.

(Quelques minutes plus tard.)

A: Alors, ça va? C'est assez large?

B: Non, ça ne va pas, il est trop serré pour moi.

A: Vous voulez essayer le même modèle, une taille au-dessus?

B: D'accord.

A: Alors?

B: Ça va mieux, mais ça ne me plaît pas tellement.

A: Vous voulez peut-être essayer aussi ce modèle-là. Vous voyez, c'est un peu différent, mais je pense que ça vous ira mieux.

B: Oui, en effet, celui-ci est plus branché, non?

A: Vous savez, il est aussi facile à porter que l'autre. Moi, je trouve qu'il vous va mieux. Le premier vous va moins bien que celui-ci.

B: **Ça coûte combien?**

A: En fait, il est un peu moins cher que le premier, 51 dollars.

Façon de parler

- Non, merci, je regarde...不用了谢谢, 我就随便看看.....
- Je voudrais essayer...我想试一试.....
- Quelle taille faites-vous? 您穿多大号?
- Il est trop serré pour moi. 我穿太紧了。
- Vous voulez essayer le même modèle, une taille au-dessus? 您想试一试这件大一号的么?
- Ça ne me plaît pas tellement. 我不是那么喜欢这一件。
- Je pense que ça vous ira mieux. 我觉得这件您穿更好看。

Leçon III Téléphoner

Objectifs: Apprendre à téléphoner pour prendre un rendez-vous

Apprendre à téléphoner pour obtenir un soutien technique

Situation I: Prendre un rendez-vous avec un médecin

A: Allô, cabinet du docteur Vannier, j'écoute!

B: Bonjour, madame, je voudrais un rendez-vous avec le docteur, s'il vous plaît.

A: Oui, monsieur. Si vous voulez un rendez-vous, ça peut être jeudi matin, sinon, vous pouvez venir directement au cabinet les jours de consultation, lundi, mardi et vendredi.

B: Non, je préfère un rendez-vous, ce n'est pas urgent.

A: Donc, jeudi. À quelle heure voulez-vous venir?

B: Ça m'est égal, à n'importe quelle heure.

A: Jeudi à 10 heures, **ça vous convient?**

B: C'est parfait, merci!

A: Est-ce que vous êtes déjà venu? **Vous avez un dossier chez nous?**

B: Oui, je suis un patient du docteur Vannier. Je suis monsieur Sébastien.

Façon de parler

- Je voudrais un rendez-vous avec... Je voudrais prendre rendez-vous avec....我想和……预约一下
- Est-ce que je peux avoir un rendez-vous avec...我能和……预约一下吗?
- Quel jour vous convient? Quand voulez-vous venir? Mardi, ça vous convient? 哪天对您合适? 您愿意什么时候来? 周二对您合适吗?
- Ça m'est égal ; n'importe quel jour ; à n'importe quelle heure. 我无所谓; 哪天都行; 什么时间都行。
- C'est très urgent. 很紧急。

Situation II: Appeler le service à la clientèle

A: « Bonjour, vous êtes en communication avec notre service à la clientèle. Pour parler à un conseiller technique, tapez 1. (...) Veuillez patienter, nous allons répondre à votre appel... » Bonjour, je peux vous aider?

B: Bonjour monsieur, il y a un problème avec le wifi chez moi. Je n'arrive pas à connecter le wifi à mon téléphone portable.

A: Vous avez bien mis le mot de passe?

B: Oui, mais ça ne marche toujours pas. J'ai essayé dix fois mais le system me dit toujours que le mot de passe était incorrect.

A: Vous pouvez connecter le wifi à votre ordinateur?

B: Oui.

A: Alors, vous allez changer le nom de wifi et le mot de passe aussi. Je vais vous dire comment le faire. Écoutez bien: D'abord, vous entrez l'adresse URL suivante: 191.63.152. Et puis vous allez voir la page de wifi setting.

B: Oui je suis maintenant sur la page...

A: Très bien. Vous cliquez sur 'changer le wifi' et vous allez voir le nom de votre wifi et le mot de passe. N'oubliez pas de noter votre nouveau mot de passe.

B: Attendez... Oui je les vois tous les deux.

A: D'accord. Et puis vous pouvez changer le nom ou le mot de passe comme vous voulez et cliquer sur 'soumettre' qui est au bas de la page.

B: Ça y est! J'ai changé le nom et aussi le mot de passe.

A: Et maintenant votre ordinateur doit être déconnecté. Vous pouvez chercher le nouveau wifi et entrez le nouveau mot de passe.

B: Et pour mon portable?

A: La même chose, vous cherchez le nom de wifi et entrez le mot de passe. C'est bien?

B: Oui il est enfin connecté! **Merci beaucoup pour votre information!**

A: Parfait. Je peux vous aider pour autre chose?

B: Non c'est bon pour le moment. Merci monsieur, bonne journée!

A: De rien. Bonne journée!

Façon de parler

- Veuillez patienter... 请耐心等待一下.....
- Exprimer le problème: Il y a un problème avec le wifi chez nous. 我家无线网出了点儿问题。Je n'arrive pas à connecter le wifi à mon téléphone portable. 我的手机连不上无线网。
- Ça ne marche toujours pas. 总是不好使。
- Vous cliquez sur... Vous entrez.... 您点击..... 您输入.....
- N'oubliez pas de... 别忘了.....
- Ça y est! 好了!

Leçon IV Entre amis

Objectifs: Apprendre à inviter des amis, à accepter/décliner une invitation ; Apprendre à rendre visite à un/une ami(e) et comment accueillir des amis

Situation I: Invitation

Dialogue1

-Je fais une petite soirée, samedi. **Ça te dirait de venir chez nous, Romain?**

-Oui, avec plaisir! Ça me ferait très plaisir de vous voir!

Dialogue2

-Allô Margot? C'est Flo. Dis-moi, si on dînait ensemble, jeudi soir?

-Ah oui, je veux bien, c'est une bonne idée!

Dialogue3

-Félix, qu'est-ce que vous faites, samedi? Vous ne voulez pas venir dîner, Marie et toi?

-Non, c'est dommage, samedi, on ne peut pas, on n'est pas là.

Dialogue4

-Charlotte, j'aimerais bien vous inviter à dîner, Vincent et toi. **Quand est-ce que vous seriez libres?**

-Attends, ce mois-ci, ça me paraît difficile, nous sommes très pris. Mais le mois prochain, nous n'avons rien de prévu. Qu'est-ce que tu proposes?

-Samedi 18? Je pense que je vais inviter Thomas, s'il est disponible.

Dialogue 5

-Paul, tu es libre, samedi 18 au soir? Nous faisons une petite soirée à la maison.

-Oh non, je voudrais bien, mais je ne peux pas, samedi, je suis déjà pris.

Façon de parler

- Tu es libre? Tu serais libre? Vous seriez disponibles? 你有空吗? 你可能有空吧? 你们抽得出空吗?
- Vous avez quelque chose de prévu? Vous n'avez rien de prévu? 您已经有什么安排了么? 您还没有安排什么事儿吧?
- Ça te dirait de venir? (fam.) Ça vous dirait de dîner à la maison? 您愿意来吗? (俗语) 您愿意来家里吃饭吗?
- **Accepter une invitation:** Oui, volontiers! 是的, 我愿意! Oui avec plaisir. 是的, 很乐意! Oui, ça me ferait très plaisir. 是的, 这会让我很高兴! Oui je veux bien! 是的我很愿意! Oui, super! Génial! (fam.) 是, 太好了! 妙极了! Samedi, ça devrait aller. 周六应该可以的。
- **Décliner une invitation:** Désolé(e), je suis pris(e). 抱歉, 我有事。C'est dommage, je ne suis pas libre. 很遗憾, 我没空。J'aimerais bien, mais je ne peux pas! 我很愿意, 但是我不能去! Cette semaine, ça me paraît difficile. 这周有点儿难。

Situation II: Accueillir des amis

Dialogue 1

A: Tenez, voilà pour vous les fleurs ; le champagne, c'est pour nous tous!

B: Oh, il ne fallait pas! Merci beaucoup, c'est vraiment gentil, ça me fait très plaisir. J'adore les fleurs.

Dialogue2

A: Tiens, je t'ai apporté un petit quelque chose. J'espère que tu aimes le chocolat!

B: Que c'est gentil! Bien sûr, j'adore le chocolat! Merci beaucoup!

A: Tu sais, c'est juste une bricole...

Dialogue 3

A: Vous voulez une bière?

B: Non, merci, je prendrai juste un peu d'eau.

A: Et toi, Bertrand, tu veux une bière?

B: Oui, avec plaisir!

Façon de parler

- **Offrir un cadeau:** Voilà un petit quelque chose pour vous (toi), c'est juste une bricole!
这是给您（你）的一个礼物，只是个小东西 Voilà pour vous, pour toi! 这是给您（你）的！ Tiens, je t'apporte... 来，我给你带了……
- **Pour exprimer la gratitude:** Merci beaucoup, c'est vraiment gentil! 十分感谢！ 这太客气了！ Que c'est gentil! 太好了！ Ça me fait très plaisir! 我十分高兴！ Oh il ne fallait pas! 真没必要这么客气！
- **Servir les invités:** Qu'est-ce que je t'offre? Qu'est-ce que je vous offre? 我给你/您拿点儿什么？ Qu'est-ce que tu veux boire? 你想喝点儿什么？ Qu'est-ce que je peux vous offrir? 我能给您拿点儿什么？