

# L2 LEARNERS' SPEECH AFTER FRENCH PHONETICS TEACHING

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## ABSTRACT

In this study, 32 adult learners of French completed a 15-week listening and speaking course prioritizing connected speech processes. Learners also wrote journal entries to elicit measures of language awareness. A read-aloud pre- and post-test task showed a significant improvement solely in learners' segmental production. Learners' performance on several pronunciation measures was significantly correlated to the nature of their language awareness, as shown in journal entries.

**Keywords:** L2 French, pronunciation instruction, connected speech processes, language awareness.

## 1. INTRODUCTION

In 2012, Saito [7] published a review of research studies which explored the effects of second language (L2) pronunciation instruction. From 1990 until 2012, Saito identified only 15 quasi-experimental studies investigating the teaching and learning of L2 pronunciation, with 9 of those studies focusing on L2 English learners.

Multiple textbooks target French phonology and pronunciation (e.g., [1]). However, little research has been published on the effects of pronunciation instruction for L2 French, so teachers and learners rely on intuition, course materials, and past experience to guide their teaching and learning activities. It is hoped the current study will contribute to the knowledge base about the effects of pronunciation instruction for L2 learners of French.

### 1.1 Research on L2 French pronunciation

Studies on the pronunciation of L2 French learners have typically used one-time measurements of learners' speech, focusing on learners' proficiency level [3] or different contexts of learning/use [8].

To date, the few longitudinal studies on the learning of L2 French pronunciation have been set in university contexts. [5] tracked the use of *liaison* over one year by second-year learners in a weekly

three-hour French language and literature course at a Korean university. Learners showed significant increases in their production of obligatory and optional *liaison* in word pairs over 12 months. The authors did not describe the instruction received by the second-year learners.

The effects of training aimed specifically at the pronunciation of L2 French learners was explored by [4] at a university in Ontario, Canada. Students in a beginner-level French as a second language (FSL) course completed an hour of listening and pronunciation exercises for 12 weeks, presented on cassette tapes in a language laboratory. The exercises targeted French intonation, rhythm, and segments. Learners did active listening tasks such as discriminating between sounds, rhythmic groups, and intonation patterns. They also repeated or transformed model utterances. A comparison group of learners at the same level completed listening comprehension exercises.

Before and after the training period, learners did an elicited imitation task with sentences containing various intonation contours and rhythmic patterns. The learners' recordings were rated by native French speakers on four five-point scales for segments, intonation, rhythm, and global impression. The scores of trained learners and comparison group learners were not significantly different on any pre-test ratings. However, the post-test ratings of the trained learners were significantly more nativelike on all four scales than the same learners' pre-test ratings. For the comparison group, only their ratings for segments significantly improved pre- to post-test.

In another university study, [6] investigated how the pronunciation of beginner-level learners of French developed with two instructional approaches. Students were taught four sets of French vowels in four 15-minute lessons, with two lessons taught using one instructional approach and two lessons using the other. In the International Phonetic Alphabet (IPA) approach, learners were presented with IPA transcription of the vowels as well as basic articulatory explanations. In the

keyword approach, learners were presented only with the orthographic transcription of common words containing the vowel sounds.

No pre-test was completed, but at the end of the course all students read-aloud a list of 40 unfamiliar words targeting the instructed vowel sounds. The vowel production of each word was rated as accurate or inaccurate. No statistically significant differences between words learned with either instructional approach were found.

## 1.2 Motivation for current study

Few studies have explored the effects of instruction on the pronunciation of L2 French learners. Of those studies, only one includes both a description of the instruction and pre- and post-test measurements, and no study has investigated how learners' understanding of French pronunciation is related to their production. Teachers wishing to draw on research-based findings in order to enhance the effectiveness of their pronunciation instruction have little information to go on.

In the current study, two research questions were investigated regarding effects of pronunciation instruction.

Research question 1: How does the pronunciation of French second language learners develop after instruction which highlights connected speech processes?

Research question 2: How is French second language learners' pronunciation before and after instruction related to the nature of learners' language awareness?

Presented below, the study findings provide teachers of L2 French an additional source of information about the effects of pronunciation instruction.

## 2. METHOD

### 2.1. Participants

Participants were thirty-two adult learners of French as a second language (FSL) who were taking an intermediate-level listening and speaking course at a French-medium university in Québec, Canada. All learners were enrolled in at least two FSL courses, and none had received elementary or secondary schooling in French. Learners spoke a total of eight first languages. The learners' mean age was 35.8 years (27-52) and they had resided in

Québec for a mean of 3.2 years (0.25-10). On average, learners rated their French ability at 4.1 on a 9-point scale (1=very poor, 9=excellent) at the beginning of the course.

### 2.2. Instruction

The 15-week listening and speaking course met once a week for three hours, with one of the three hours spent in a multimedia lab. The main aim of the course was to improve learners' oral production and listening skills in French. The instructor was the second author, a native speaker of Quebec French with a graduate degree in applied linguistics and 10 years of FSL teaching experience. Both segmental and suprasegmental aspects of spoken French were targeted, including intonation. However, the main focus of the course was on connected speech processes, such as *enchaînement* (e.g., *il a* becomes *i-la*)

Each topic was covered in one class meeting and reviewed in the next class meeting. The meetings typically started with a discovery activity, then the instructor's explanation of that particular aspect or process, followed by restricted practice. Learners then practiced using more communicative activities, such as roleplay, and fluency practice (e.g., shadowing). The multimedia materials used in the laboratory were audio models of short sentences exemplifying particular aspects. Learners used these materials to complete dictation or production tasks.

### 2.3. Method and measures

The study used a pre- and post-test design. For the pre-tests, learners completed a set of speaking and listening tasks in the multimedia lab during Week 3 of the course. The focus of investigation in the current study is a read-aloud task. In this task, learners recorded themselves in the multimedia laboratory reading aloud a short text of 163 words. 90% of the vocabulary fell within the 1000-word frequency band. Learners had one opportunity to record the read-aloud in 150 seconds. The post-test was done during Week 15; the same text was read aloud and recorded similarly to the pre-test.

Learners' language awareness was elicited through weekly dialogue journal entries. Learners were paired and in Week 3 they began writing entries to their partners. Learners were asked to reflect on their learning and to respond to their

partner's entries. The partners virtually exchanged their entries through a course website for 12 weeks, with a mean number of nine entries per learner and 174 words per entry. Journal entries were not read by the instructor or by other researchers until the course grades had been submitted.

#### 2.4. Data analysis

Learners' recordings of the pre- and post-test read-aloud tasks were analyzed for the realization of various aspects of speech; these aspects were coded and tallied by a native speaker of French. Because learners read the same text, the tallies are raw numbers and are not corrected for length. They are outlined below:

1. Inaccurate production of segments
2. Phrasal stress – inaccurate and accurate placement
3. Inaccurate realization of intonation patterns
4. *Enchaînement* – no use and accurate use (optional context)
5. *Liaison* – no use and accurate use (obligatory context)
6. Mean length of run (between pauses of 400 ms or more)

The measure for learners' language awareness was derived from [2], who categorized language learners' conceptions of learning as quantitative or qualitative. This framework was applied to learners' awareness of the sound system in French and of how pronunciation can be taught and learned. Journal entries could include passages showing quantitative awareness and those showing qualitative awareness. Quantitative awareness was shown when learners described language as a set of items to be memorized, or when learners portrayed learning as a process of assimilating items or rules through effort, practice, and time. Qualitative awareness was shown when learners depicted language as an environment for learning, and when learning was expressed as a way of extracting meaning from a given context. The first author, who had experience using this framework, trained the second author in coding the dialogue journal entries. The two authors then coded five journal entries separately and found 100% agreement for both qualitative and quantitative comments. The second author then coded the remainder of journal entries. In order to control for different lengths of

entries, the number of quantitative or qualitative comments made by each learner was divided by their total number of comments. This resulted in ratios of quantitative and qualitative comments, respectively.

To investigate the first research question, the tallies of different aspects of speech at the pre- and post-tests were entered into paired samples t-tests, with Bonferroni corrections made for multiple comparisons. The second research question was explored by running Spearman correlations between tallies for learners' speech at the pre- and post-tests and ratios of learners' quantitative and qualitative awareness comments over 12 weeks.

### 3. RESULTS

#### 3.1. Research question 1

The first research question was: How does the pronunciation of French second language learners develop after instruction which highlights connected speech processes?

Results from the paired samples t-tests with corrections for multiple comparisons showed a significant difference for the number of inaccurate productions of segments at the pre-test ( $M = 42.0$ ,  $SD = 13.5$ ) and post-test ( $M = 37.2$ ,  $SD = 13.9$ );  $t(29) = 4.21$ ,  $p = .01$ . There were no significant differences for any other aspects of speech from the pre-test to the post-test.

#### 3.2. Research question 2

The second research question was: How is FSL learners' pronunciation before and after instruction related to the nature of learners' language awareness (primarily quantitative or qualitative)?

**Table 1:** Significant Spearman correlations - awareness and pronunciation

		Quantitative	Qualitative
Inaccurate phrasal stress - pre	Correlation	.55	-.55
	Sig. (1-tailed)	.001	.001
	N	30	30
Inaccurate intonation - pre	Correlation	.55	-.55
	Sig. (1-tailed)	.001	.001
	N	30	30
Accurate <i>enchaînement</i> - pre	Correlation	-.44	.44
	Sig. (1-tailed)	.007	.007
	N	30	30
Accurate <i>enchaînement</i> - post	Correlation	-.41	.41
	Sig. (1-tailed)	.01	.01
	N	30	30

Generally, only a few aspects of speech showed significant and moderate correlations to the nature of learners' language awareness (see Table 1). These correlations appeared mostly at the pre-test.

The more errors in phrasal stress placement and intonation patterns learners made in the pre-test, the more quantitative awareness comments the learners made in their dialogue journals ( $r = .55$ ,  $p = .001$ ). The reverse relationship held for learners making qualitative awareness comments. However, in the post-test there was no significant relationship between awareness and phrasal stress errors or intonation patterns. A more persistent significant relationship was found between the accurate use of *enchaînement* and learners' language awareness. For both the pre- and post-tests, the more accurately learners used *enchaînement*, the more qualitative awareness comments were made by those learners ( $r_s = .41-.44$ ,  $p_s = .01-.007$ ). The reverse was true for learners making quantitative awareness comments.

#### 4. DISCUSSION

At first, the findings for learners' pronunciation at the post-test seem somewhat discouraging. The only significant improvement was for the pronunciation of segments, which was not prioritized in the instruction. No significant improvement was found for the two connected speech processes which were measured, although connected speech processes were an important focus of instruction.

These findings may demonstrate the length of time it takes for learners to move from accurate understanding or perception of an aspect of pronunciation to the accurate *production* of that same aspect. Although this study did not include a control group, the learners' mean length of residence in a French environment (3.2 years) suggests that any changes seen over 15 weeks were likely due to the instruction. In [9], the same learners showed significantly improvement in their ability to *decode* spoken sentences containing multiple connected speech processes. The effects of instruction may thus be more immediately obvious in learners' listening ability than in their pronunciation. In addition, the use of a read-aloud task may have implicated learners' ability to decode written text and not simply their pronunciation. Results from learners' spontaneous speech are currently being analyzed.

In terms of learners' language awareness, the degree to which learners demonstrated quantitative awareness was consistently linked to greater inaccuracy in various aspects of pronunciation. However, this relationship existed primarily for pre-test scores. This could be interpreted to mean learners' pronunciation became less linked to the nature of their language awareness over time. However, the pre- and post-test link between more accurate *enchaînement* and more 'qualitative' learners suggests that language awareness did play a role for some aspects of pronunciation. Learners who were oriented towards language learning as a way to uncover meaning seem also to be better at producing at least one connected speech process.

#### 5. CONCLUSION

The instruction described above was linked to a significant improvement in learners' production of segments in a read-aloud task. Instructional effects for L2 French learners' spontaneous speech, as compared to a control group, are currently under investigation. As more research on L2 French pronunciation instruction is available, teachers and learners will be able to make more informed choices about teaching and learning pronunciation.

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