



**University
of Victoria**

Graduate Studies

Notice of the Final Oral Examination
for the Degree of Master of Arts

of

SILAS ROMIG

BA (University of Alaska Anchorage, 2013)

**“The Production and Perception of English Vowels by Native Speakers
of Brazilian Portuguese Living in Victoria, Canada”**

Department of Applied Linguistics

August 18, 2017
10:00 A.M.
Clearihue Building
Room B007

Supervisory Committee:

Dr. Hua Lin, Department of Linguistics, University of Victoria (Co-Supervisor)
Dr. John Archibald, Department of Linguistics, UVic (Co-Supervisor)
Dr. Li-Shih Huang, Department of Linguistics, UVic (Member)

External Examiner:

Dr. Jennifer Cabrelli Amaro, Hispanic and Italian Studies, University of Illinois at Chicago

Chair of Oral Examination:

Dr. Gregory Blue, Department of History, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies

Abstract

This thesis focuses on the production and perception of ten English vowels (/i, ɪ, e, ɛ, æ, ʌ, ɑ, o, ʊ, u/) by native speakers of Brazilian Portuguese (BP) living in Victoria, British Columbia, Canada. The participants consisted of 14 native speakers of BP (divided into intermediate and advanced second language (L2) English proficiency groups), plus six native speakers of Canadian English (CE) as control participants. Four experiments were carried out: two pertaining to production and two pertaining to perception. The production tasks consisted of CE and BP wordlist reading tasks in order to measure the duration and first two formants of the participants' vowels, while the perception tasks consisted of an identification task and an oddity-discrimination task. With regards to production, this thesis investigates how the participants' productions of the L2 vowels differ between the experimental and control groups with respect to their formant frequencies and the Euclidean distances (EDs) between various English vowel pairs. Similarly, the participants' perceptual abilities, as measured by their performance on the perception tests, are examined. Finally, the connection between perception and production is investigated. The findings indicate (a) a positive effect of proficiency, as the advanced participants showed a greater ability to both produce and perceive the L2 vowels, but that (b) participants of both proficiency levels have difficulty in contrasting certain English vowel pairs in a native-like fashion. Furthermore, the findings provide evidence of a connection between perception and production, and show that perception outperforms production, as predicted by the Speech Learning Model (Flege, 1995, 2005). Finally, the findings indicate a possible positive effect of environment (i.e., an Englishspeaking country) when compared to previous studies (Bion et al., 2006, Rauber, 2006). Pedagogical implications of these findings are also discussed.