A Niuean variant of New Zealand English?

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Abstract

This paper provides an acoustic analysis of the vowels of five Niuean speakers of New Zealand English (NZE). The speakers are second-generation New Zealanders raised in a bilingual English/Niuean environment. Analysis reveals differences between the vowel space of the Niuean New Zealanders and speakers of general NZE. Of particular note is the use of monophthongal variants of the HAY and HOE vowels. The paper ends with a discussion of whether these variants serve as ethnic identity markers in the New Zealand Niuean community.

Index Terms: New Zealand English, ethnolects

1. Summary of Study

This paper presents the results of a preliminary study on a variety of English spoken by the New Zealand Niuean community, the fourth largest Pasifika community in New Zealand, and the largest Niuean community world-wide. At present, the population of the New Zealand Niuean community is about 22,500. This is in stark contrast to the population on the island of Niue, numbering only 1625 in the latest census [1]. The majority of Niueans born in New Zealand claim to be monolingual in English, a characteristic of many of the New Zealand born Pasifika communities [2]. The loss of one’s mother tongue often results in the need to express one’s identity in other ways. In an impressionistic study of 14 adult Niuean speakers of NZE (both male and female) Starks, Thompson and Christie [3] identified differences between general NZE and the NZE of Niuean speakers. Of particular note were the near-monophthongal diphthong variants of HAY and HOE (all vowels in this paper are given in key words as either an HV or HVD frame). This study seeks to investigate this further with an acoustic analysis of the vowels from 5 Niuean speakers of New Zealand English (NZE).

The speakers were 5 boys aged between 11 and 13 years. They are all second-generation New Zealanders and were in a bilingual English/Niuean environment at school. The boys read a simple, 475-word passage. The speech files were converted to .wav format and the acoustic analysis was performed using the speech database software Emu (http://emu.sourceforge.net). The formants were checked and hand corrected, and the vowel targets were marked according to well established criteria (see, for example, [4]).

Overall, the children's vowel spaces were very similar to the NZE vowel space observed in other studies (such as [4]): essentially, they speak NZE. However, there were some subtle differences; markers which were also found in the adults. The Niuean children's vowel space is illustrated in Fig. 1: it is the expected NZE vowel triangle, with HEED, HOARD and HARD as point vowels. The monophthongs, compared with NZE, show that HARD is further back, and HOD and HUD are considerably higher.

Figure 1: Centroids of monophthongs (grey) and diphthongs (black lines) for 5 Niuean speakers of NZE.

The more striking differences were found in the diphthongs. While there is clearly diphthongal movement, in three cases this movement is very small when compared with NZE (see [4]). HAIR displays very little movement in F1, and has a considerably raised and fronted second target. The first target for HAY for these speakers is much lower and fronter. Whilst these findings are consistent with impressionistic observations [3] that the two latter diphthongs are different from those of standard NZE, it is clear that these vowels are still diphthongs.

These findings suggest that there may be a Niuean variant of NZE arising, with the markers being in HOD, HUD, HAY and HOE. However these findings need to be further investigated with more speakers of both genders, and be coupled with some perception studies. Understanding of the Niuean language itself is also required, in order to be able to identify whether the markers reflect Niuean substrate influences or are a result of some other factor.

2. References