Abstract[*]

Title: Aspects of Phonetic and Phonological Structure of the Miyako-Tarama variety of Southern Ryukyuan

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The aim of this thesis is twofold: first, to holistically and systematically describe the phonetic and phonological structure of Tarama Ryukyuan (henceforth, Tarama), one of the varieties of Miyako Ryukyuan; and second, to discuss unsolved theoretical issues of Miyako Ryukyuan phonetics and phonology.

Tarama is one of the major varieties of Miyako Ryukyuan, which is a member of the Southern Ryukyuan group of languages (Shimoji 2010, Pellard 2015). The Ryukyuan languages are composed of the following five languages: Amami and Okinawa (the Northern Ryukyuan group), and Miyako, Yaeyama, and Yonaguni (the Southern Ryukyuan group). Since these five languages are endangered languages, to provide a reference grammar of these languages is an urgent task in the field of Ryukyuan linguistics. This thesis is therefore of value as it provides a linguistic documentation of the phonological system of these endangered languages, which has not yet been sufficiently described. The phonological and phonetic description and theoretical discussion in this thesis will influence the description of other Ryukyuan languages, especially the other variations of Miyako Ryukyuan and the Yaeyama Ryukyuan varieties, which share common phonetic and phonological features with Miyako.

Through the description of the aspects of the phonetic and phonological structure of Tarama, I respectively discuss the following unsolved issues of Miyako Ryukyuan phonetics and phonology: a laminal vowel, syllabic consonants, initial geminates, and a three-patterned accent system. They cover different areas, segments, syllables, and prosody. Previous studies have focused on these areas separately and have not dealt with them comprehensively. In this thesis, I describe the broad aspects of phonetics and phonology from segments to syllable structures and accent systems, and attempt to systematically comprehend the phonetic and phonological structure of Tarama.

Previous studies have only focused on describing the features of Tarama as one variation of Miyako Ryukyuan. No study has yet attempted to theoretically investigate its phonetics and phonology. However, the abovementioned issues are interesting topics for general linguistic theory. Therefore, a theoretical discussion of the phonetic and phonological issues of Miyako contributes well not only to Ryukyuan linguistics but also to general linguistics.

The main data used in this thesis were collected by my field research on Tarama Island from 2009 to 2016. In this thesis, I show some instrumental phonetic data (acoustic analysis and static palatograms) of Tarama, which have largely been absent in previous studies. These data will provide us with new knowledge about Miyako Ryukyuan phonetics and phonology.

This thesis comprises six chapters. The first chapter presents a basic outline of Tarama, as well as the background, approach, significance, transcription, and organization of the study.

Chapter 2 holistically describes the phonological aspects of Tarama, from its vowel and consonant system to syllable inventories and accent system. It also presents the important theoretical issues in Miyako Ryukyuan phonetics and phonology and reviews the topics that I discuss in chapters 3 to 5. The following are the issues that I mention here: the position of a laminal vowel in the vowel system, an interpretation of syllabic consonants and initial geminates, and a description of the realization rule of the three-pattern nominal accent.

Chapter 3 focuses on the phonetic details and position in the vowel system of a laminal vowel, which is one of the phonetic and phonological features of Miyako Ryukyuan. In my previous study (Aoi 2012c), I described the articulatory and acoustic details of a laminal vowel in Tarama based on instrumental phonetic analysis, and posited new views about the phonetic interpretation of it, i.e., the double articulation of alveolar (laminal) and velar (dorsal).

It is cross-linguistically rare that the vowel has a laminal articulation. In addition, compared to similar vowels in other languages, a laminal vowel in Miyako Ryukyuan is unique because it is in opposition to other vowels, i.e., whereas the former are allophones, the latter is a phoneme. Hence, it is important to describe not only the phonetic details of a laminal vowel but also how it is in opposition to

other vowels in the system. In chapter 3, I indicate the two phonetic properties, sibilant noise and laminal articulation, that distinguish a laminal vowel from other vowels in Tarama, and suggest two features, [± sibilant] and [± laminal], for describing the contrast between a laminal vowel and other vowels.

In chapter 4, I discuss two issues regarding the description of the syllable structure of Tarama. The first issue is the interpretation of syllabic consonants. In Miyako Ryukyuan, nasals (e.g., [m̩ta] 'soil', [n̩da] 'where') and fricatives (e.g., [f̩mu] 'cloud', [s̩ma] 'island') appear in a nucleus position. Previous literature has indicated two ways of interpreting syllabic consonants. The first way is to interpret it as a CV syllable (i.e., [m̩] = /mɨ/, [f̩] = /fu/), and the other is to interpret it as a consonant filling a nucleus slot (i.e., [m̩] = /m/, [f̩] = /f/). I compare these two ways of interpretation and adopt the former for syllable consonants in Tarama.

An initial geminate is the other issue that I discuss in chapter 4. In Tarama, a geminate appears in a word initial position like [ffa] 'child' or [ssam] 'louse'. As for an initial geminate, previous studies have discussed whether the two ways of interpretation, /fufa/ /sɨsam/ or /ffa/ /ssam/, are valid like a syllabic consonant. However, these two do not capture the phonological patterns of an initial geminate in Tarama. Therefore, I propose another way of interpretation of an initial geminate: two onset slots filled by one phoneme.

Chapter 5 describes the realization rule of nominal accents in Tarama and reviews the matter that is discussed later. In Tarama, there are three distinctive accent patterns, F(alling) 1, F(alling) 2, and L(evel). Distinctions between them neutralize depending on the environment. For instance, when nouns are followed by the 2-mora clitic =*mai* 'also' in utterance-final position, the distinction between F2 and L are neutralized (F1 vs. F2~L). In chapter 5, I focus on the realization of nominal accent with clitic(s) followed by a predicate, such as *juda=mai neen*. 'There is no branch, too.' The main topic in chapter 5 is to describe and explain the realization of the nominal accent distinction/neutralization in Tarama.

Chapter 6 summarizes the discussions in the previous chapters and suggests a further direction of this study, which is intra-generic typological investigation.