

国立国語研究所学術情報リポジトリ

Research Report on Miyako Ryukyuan : General Study for Research and Conservation of Endangered Dialects in Japan

メタデータ	言語: English 出版者: 公開日: 2019-11-29 キーワード (Ja): キーワード (En): 作成者: KIBE, Nobuko, PELLARD, Thomas, HAYASHI, Yuka, IGARASHI, Yosuke, KARIMATA, Shigehisa, MATSUURA, Toshio, NAKAJIMA, Yumi, TOKUNAGA, Akiko, MOROOKA, Daigo メールアドレス: 所属:
URL	https://doi.org/10.15084/00002519



General Study for Research and Conservation of Endangered Dialects in Japan Research Report on Miyako Ryukyuan

Edited by

KIBE Nobuko

August 2012

Preface

The ‘General Research for the Study and Conservation of Endangered Dialects in Japan’ project was started in October 2009 as a core collaborative research project of the National Institute for Japanese Language and Linguistics. Since 2010, we have been conducting yearly joint surveys, in which collaborating researchers and young researchers gather in one location to carry out a survey together. We have conducted the following two such surveys thus far.

First joint survey: survey on the Kikaijima dialects
 (Kagoshima Prefecture, September 2010)

Second joint survey: survey on the Miyako dialects (Okinawa Prefecture, September 2011)
The present volume constitutes the research report resulting from the second joint survey, the survey on the Miyako dialects.

We had the help of many people in conducting this survey. Firstly, we are very grateful to our informants, who were willing to make time and defy the heat to come to the community center to kindly share the language of Miyako with us. It is thanks to them that we have been able to produce this report. From the preparation and execution of the survey to the cultural symposium, we also received much help from the people of the Lifelong Learning Advancement Division of the Lifelong Learning Department of the Miyako City Board of Education, including the director of the Board, Mr. Tetsuya Kawakami. We are particularly indebted to the head of the Cultural Property Section of the Lifelong Learning Advancement Division, Mr. Munefumi Shinjo, who introduced us to participants and helped us with scheduling. I would like to take this opportunity to express our deep gratitude.

When considering the entirety of the language of Miyako, it is clear that the contents of this report represent but a small fragment of it, but we would be delighted if it were found to be a useful resource for the study, documentation, and conservation of this language. The reader is invited to also have a look at the PDF version of this volume, which has been made available on the ‘General Research for the Study and Conservation of Endangered Dialects in Japan’ page of the National Institute for Japanese Language and Linguistics website.

August 1, 2012

Nobuko KIBE

National Institute for Japanese Language and Linguistics

***General Study for Research and Conservation of
Endangered Dialects in Japan
Research Report on Miyako Ryukyuan***

Contents

1. Project Overview	1
2. Research Overview	6
3. Overview of Miyako Ryūkyūan	
The Phonology of the Miyako Dialects: Phonological Systems and Comparisons (Thomas Pellard and Yuka Hayashi)	13
The Nominal Accent System of the Yonaha Dialect of the Southern Ryukyuan Language of Miyako: A Preliminary Report (Yosuke Igarashi)	56
Verb Conjugation in the Miyako Language: Perfective, Negative, Past, and Continuative Forms (Shigehisa Karimata)	76
4. Features of Miyako Ryūkyūan	
Phonetic Realizations in the Miyako Dialects: A Preliminary Investigation (Toshio Matsuura)	141
The State of Dialect Speech Perception in the Younger Generation of the Miyako Islands (Yumi Nakajima, Akiko Tokunaga, and Daigo Morooka)	159
5. Research Data	
Regarding Notation and Transcription (Nobuko Kibe)	185
Basic Vocabulary	198
Grammar	284

1 Project Overview

Nobuko KIBE (National Institute for Japanese Language and Linguistics)

1 Purposes of the project

The ‘General Research for the Study and Conservation of Endangered Dialects in Japan’ project was started in 2009 as a core collaborative research project of the National Institute for Japanese Language and Linguistics. The purposes of the project are as follows.

As globalization proceeds, minority languages around the world have become endangered. Among Japanese dialects, almost all of the dialects of Okinawa Prefecture, the Amami dialects of Kagoshima Prefecture, and the dialect of the island of Hachijōjima, part of Tokyo Metropolis, are classified as ‘endangered’ in a UNESCO report published in February 2009. Many of these endangered dialects retain features from Old Japanese that have already been lost in other dialects and have linguistic systems different from theirs. These dialects are therefore not only valuable for the dialectology of a particular area, but also for historical and general linguistics. Moreover, these dialects often differ from village to village, so the question of how this variation arose is also of interest.

In this project, a group of researchers from throughout Japan with a track record in fieldwork was brought together to study these endangered dialects and elucidate their characteristics, as well as to shed light on linguistic diversification processes and general properties of language. In addition, the endangered dialects are recorded, preserved, and promoted by recording and preserving video and audio data of them and making these available to the general public.

(from the National Institute for Japanese Language and Linguistics website)

2 Research methods

Endangered dialect research is an urgent matter. It is therefore necessary to organize researchers from both inside and outside Japan with a track record in field research, in order to move their research forward efficiently. Additionally, in order to obtain high-quality data, dialect (or language) survey and description methodologies need to be made consistent, which they have not always been. Furthermore, it is necessary to train young researchers to be able to undertake future dialect (or language) research. In light of the above, this project is being carried out based on the following two kinds of research:

- (1) field research conducted by each of the collaborating researchers at their respective research sites, and
- (2) joint research conducted by the collaborating researchers in concert.

In the case of the former, each of the collaborating researchers conducts field research at their respective research sites and presents the results of this research at the project's collaborative research workshops, which provides them with an opportunity to develop their research further. Additionally, young researchers who are not part of the group of collaborating researchers are sometimes invited to give presentations, in order to support their research.

In the case of the latter, a survey site is decided upon and its dialects described comprehensively in terms of, among other things, their phonetics, accent, grammar, and basic vocabulary, as well as discourse. Not only the group of collaborating researchers, but also young researchers such as postdoctoral fellows, research fellows of the Japan Society for the Promotion of Science, and graduate students participate in this research; the participants carry out the survey, organize the data, and produce a report collaboratively. Two surveys, on the Kikaijima dialects of Kagoshima Prefecture (September 2010) and on the Miyako dialects of Okinawa Prefecture (September 2011), have been conducted thus far.

3 Collaborative research workshops

In addition to field research, collaborative research workshops open to the public are held two or three times per year, at which researchers can exchange views. The following workshops were held in the academic year 2011–2012:

- First session, jointly with the ‘Phonological Characteristics of the Japanese Lexicon’ project

Date and time: Saturday, May 21 and Sunday, May 22, 2011

Location: Kobe University

Saturday, May 21: public symposium

‘Principles and Emergence of N-Pattern Accent Systems’

1. Zendo UWANO

(professor emeritus at the University of Tokyo; invited professor at NINJAL)

‘What are N-Pattern Accent Systems?’

2. Nobuko KIBE

(professor at the Department of Language Change and Variation at NINJAL)

‘The Character of Kyushu Two-Pattern Accent Systems’

3. Haruo KUBOZONO

(professor at the Department of Linguistic Theory and Structure at NINJAL)

‘Accent Rules of the Koshikijima Dialect of Kagoshima Prefecture’

4. Akiko MATSUMORI

(professor at Japan Women’s University; invited professor at NINJAL)

‘Reinterpretation of the Three-Pattern Accent System of Okinoshima’

5. Tetsuo NITTA (professor at Kanazawa University; collaborating researcher at NINJAL)

‘The N-Pattern Accent System of the Fukui City Area’

Discussion

Chair: Wayne LAWRENCE

(University of Auckland, New Zealand; collaborating researcher at NINJAL)

Sunday, May 22: collaborative research workshop

1. Hirotake MATSUMOTO (‘Endangered Languages’ project collaborating researcher)

‘Outline of the -Ari/-Ri-System of the Kikaijima Dialects of Amami’

2. Yasunori TAKAHASHI (research fellow of the Japan Society for the Promotion of Science at the Tokyo University of Foreign Studies)

‘The Pitch Drop Phenomenon in Shanghainese Tone Sandhi’

• Second session, jointly with the ‘Phonological Characteristics of the Japanese Lexicon’ project

Date and time: Saturday, July 16 and Sunday, July 17, 2011

Location: National Institute for Japanese Language and Linguistics

Saturday, July 16

1. Hayato AOI (research fellow of the Japan Society for the Promotion of Science at the Tokyo University of Foreign Studies)

‘Phonetic Description of Vowels with Tongue Blade Stricture: A Case Study of the Tarama Dialect of Miyako’

2. Satomi MATAYOSHI (Shigakukan University)

‘Sentence-Final Particles in the Tsukenjima Dialect of Okinawa’

Sunday, July 17

3. Yuto NIINAGA (research fellow of the Japan Society for the Promotion of Science at the University of Tokyo), Shinji OGAWA (NINJAL)

‘The Accent System of the Northern Ryukyuan Yuwan Dialect of Amami’

4. Yosuke IGARASHI (Hiroshima University), Yukinori TAKUBO (Kyoto University; invited professor at NINJAL), Yuka HAYASHI (part-time lecturer at Kyoto University), Tomoyuki KUBO (Kyushu University)

‘The Three-Pattern Accent System of the Ikema Dialect of the Ryukyuan Language of Miyako’

- Third session, titled ‘Dialectology and Text—Present and Future’

Date and time: Saturday, February 18 and Sunday, February 19, 2012

Location: National Institute for Japanese Language and Linguistics

Saturday, February 18

1. Mizuho HIDAKA (Kansai University)

‘“Narration Patterns” in Fairy Tales and Their Regional Differences’

2. Tetsuo NITTA (Kanazawa University)

‘Dialect Texts as Historical Language Materials of Japanese’

3. Chie TAKAGI (Osaka University)

‘Decline and Retention of -*U*-Conjugation Forms of -*W*-Stem Quintigrade Verbs in Kansai Dialect Natural Discourse’

Sunday, February 19

Panel discussion

1. Tomoyo OTSUKI (senior undergraduate student at the University of Tokyo)

‘Usage of the Inferential Form *Byon* in the Tsugaru Dialect’

2. Reiko ASO (research fellow of the Japan Society for the Promotion of Science at the Tokyo University of Foreign Studies)

‘Analyzing Verb Inflection and Derivation in the Hateruma Dialect of Yaeyama through Texts’

3. Rihito SHIRATA (graduate student at Kyoto University)

‘The Dialects of Kikaijima—Problems of Verb Morphology as Seen through Texts’

Plenary discussion

Commentators: Toshihide NAKAYAMA (Tokyo University of Foreign Studies)

Shinjiro KAZAMA (Tokyo University of Foreign Studies)

Nobuko KIBE (NINJAL)

4 Collaborating researchers

As of April 1, 2012, this project is being carried out by the following collaborating researchers (in alphabetical order):

Chris DAVIS (University of the Ryukyus), Akihiro KANEDA (Chiba University), Shigehisa KARIMATA (University of the Ryukyus; invited professor at NINJAL), Tomoyuki KUBO (Kyushu University), Haruo KUBOZONO (NINJAL), Wayne LAWRENCE (University of Auckland), Daniel LONG (Tokyo Metropolitan University), Hiromitsu MACHI (Hiroshima University), Satomi MATAYOSHI (Okayama University), Akiko MATSUMORI (Japan Women's University; invited professor at NINJAL), Hirotake MATSUMOTO (Beppu University), Harumi MITSUI (NINJAL), Jo NAKAHARA (University of the Ryukyus), Yumi NAKAJIMA (Hitotsubashi University), Satoshi NISHIOKA (Okinawa International University), Tetsuo NITTA (Kanazawa University), Takuichiro ONISHI (NINJAL), Thomas PELLARD (French National Center for Scientific Research), Kayoko SHIMOJI (Okinawa International University), Michinori SHIMOJI (Kyushu University; invited associate professor at NINJAL), Koko TAKEDA (part-time project research fellow at NINJAL), Yukinori TAKUBO (Kyoto University; invited professor at NINJAL), Zendo UWANO (invited professor at NINJAL).

2 Survey Overview

Nobuko KIBE (National Institute for Japanese Language and Linguistics)

1 Overview of the Miyako Islands

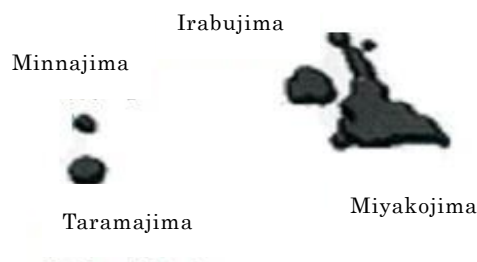
Located 300 km to the south of Okinawa Island, the Miyako Islands consist of the islands of Miyakojima, Ikemajima, Ōgamijima, Irabujima, Shimojijima, Kurimajima, Taramajima, and Minnajima (see Maps 1 and 2). As of October 1, 2005, the five former municipalities of Hirara City, Irabu Town, Ueno Village, Gusukube Town, and Shimoji Town (the latter four formerly constituting Miyako District) have merged, forming Miyakojima City; Miyakojima, Ikemajima, Ōgamijima, Irabujima, Shimojijima, and Kurimajima therefore presently constitute Miyakojima City, while Taramajima and Minnajima together constitute Tarama Village, Miyako District.

Miyakojima City has a surface area of 204.59 km² (Miyakojima: 159.26 km²; Ikemajima: 2.83 km²; Ōgamijima 0.24 km²; Irabujima: 29.08 km²; Kurimajima: 2.84 km²) and a population of 55,036 (as of December 2010—Hirara area: 36,138; Gusukube area: 6,780; Shimoji area: 3,065; Ueno area: 3,128; Irabu area: 5,925), and among its main industries are the cultivation of sugar cane, mango, and the like, tourism, and distilling (figures according to *23-Nendoban Tōkei Miyakojima* [2011 *Statistics on Miyakojima*] on the Miyakojima City website).

Tarama Village comprises Taramajima, with a surface area 19.75 km² and a population of 1,273, and Minnajima, with a surface area of 2.153 km² and a population of 6 (as of June 2012, according to the Tarama Village website).



Map 1. Location of the Miyako Islands.



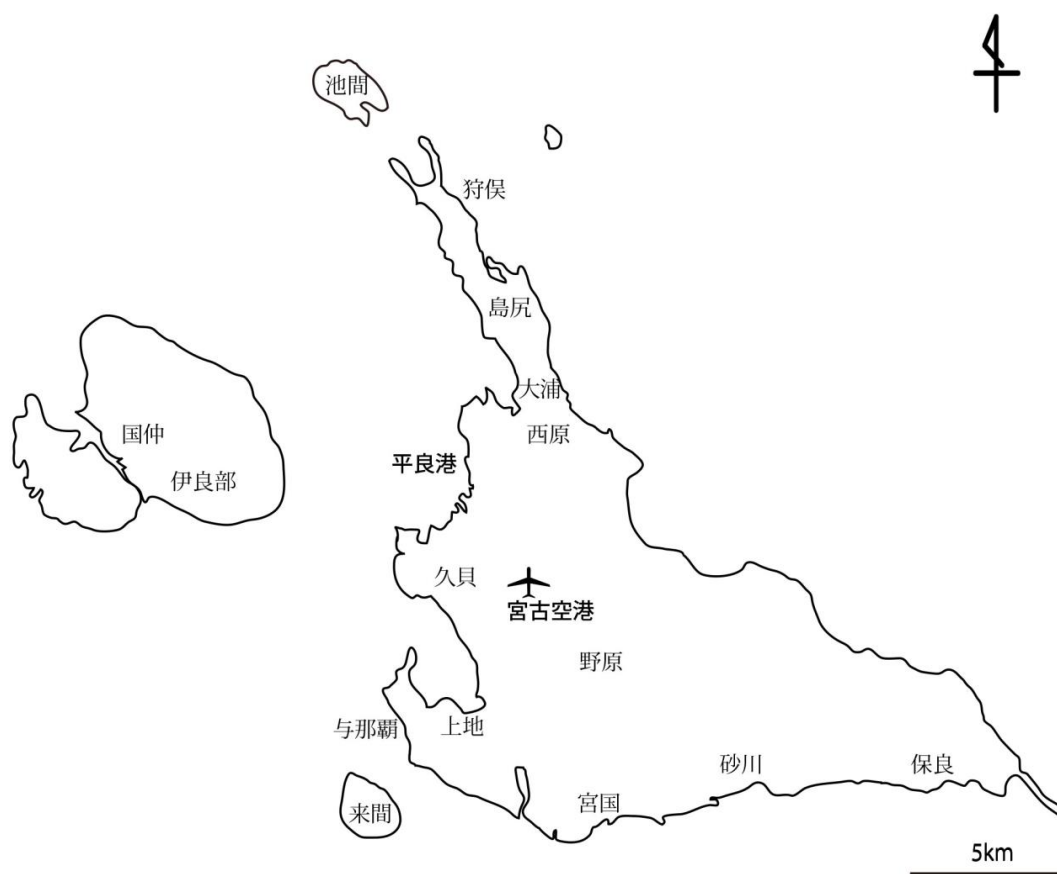
Map 2. The Miyako Islands.

2 Survey overview

The September 2011 dialect survey was conducted on Miyakojima, Ikemajima, Irabujima, Shimojijima, and Kurimajima, all part of Miyako City. The following is an overview of the survey.

2.1 Survey sites

The fifteen survey sites were Ikema, Karimata, Simajiri, Ōura, Nishihara, Kugai (Hirara area), Yonaha, Uechi, Kurima (Shimoji area), Nobaru, Miyaguni (Ueno area), Uruka, Bora (Gusukube area), Irabu, and Kuninaka (Irabu area) (see Map 3).



Map 3. Miyako dialect survey sites.

2.2 Schedule, modules, and researchers

The survey was conducted between September 4 and September 7, 2011. Survey sites, modules, and researchers were as follows.

Miyako dialect survey sites, modules, and researchers

Date/time	Site	Module	Researchers	Speakers
September 4 13:00–	Ikema	Basic vocabulary <i>a</i>	Lawrence, Ogino, Hirako, Aoi	Akiko Katsuren
		Basic vocabulary <i>b</i>	Nitta, Hirayama, Matsuura, Kawase	Yoshiko Nakahara
		Grammar (first)	Nohara, Nakahara, Davis, Utsumi	Masako Hamakawa
		Grammar (last)	Matayoshi, Yamada, Shirata, Toyama	Teruko Hamamoto
September 5 14:00–	Karimata	Basic vocabulary <i>a</i>	Lawrence, Nakazawa	Masaaki Nema
		Basic vocabulary <i>b</i>	Nakajima, Takeda	Hide Hanashiro
		Grammar (first)	Nakahara, Matsumoto	Masayuki Uehara
		Grammar (middle)	K. Nakama, Davis, Utsumi	Masaki Karimata
	Ōura	Basic vocabulary <i>a</i>	Hayashi, Takemura	Hatsuko Shimoji
		Basic vocabulary <i>b</i>	Hirako, Kubozono	Masayuki Ozato
	Uechi	Basic vocabulary <i>a</i>	Nitta, Inoue, Kawase	Kiyokatsu Uechi
		Accent	Uwano, Matsuura, Aoi	Shigeo Uechi
		Discourse	Takubo, Ogino, Yamada, Shirata	Tomi Nakahara, Fumi Shimoji
	Nobaru	Basic vocabulary <i>b</i>	Nohara, Tokunaga, Matayoshi, Hirayama	Shige Kugai
	Bora	Grammar (last)	Karimata, Kaneda, Yamada, Morooka	Yoshiko Shimoji
	Nishihara	Accent	Igarashi, H. Nakama, Takubo	Kimie Nakahara
September 6 14:00– 19:30–	Uruka	Basic vocabulary <i>a</i>	Karimata, Kibe, Hirayama, Takemura	Toshio Sunagawa
		Grammar (first)	K. Nakama, Inoue, Ogino	Hisao Miyazato
		Grammar (middle)	Nishioka, Utsumi, Davis	Wataru Sunagawa
	Kugai	Basic vocabulary <i>a</i>	Lawrence, Nakahara, Kawase, Kubozono	Kinkichi Yonaha
		Grammar (first)	Nohara, Hayashi, H. Nakama, Matsumoto	Yoshihiko Yonaha
	Miyaguni	Grammar (first)	Kaneda, Takeda	Kiku Miyaguni
		Grammar (middle)	Takubo, Nakajima	Hideko Matsuoka
	Bora	Basic vocabulary <i>a</i>	Shirata, Tokunaga, Pellard	Harumi Sunagawa
		Basic vocabulary <i>b</i>	Nitta, Hirako, Nakazawa	Meiko Hirara
		Accent	Igarashi, Uwano, Matsuura, Aoi	Hiromori Shimoji
		Grammar (first)	Karimata, Toyama	Tatsuo Sunagawa
		Grammar (middle)	Shimoji, Morooka	Yoshio Hirara

September 7 14:00–	Kurima	Basic vocabulary <i>a</i>	Lawrence, Hirako	Kiku Kawamitsu, Chiyo Tamashiro
		Grammar (first)	Karimata, Utsumi, Davis	Ume Sunagawa
		Grammar (middle)	Kaneda, Inoue, Takeda	Haru Sunagawa
	Kuninaka	Basic vocabulary <i>a</i>	Nitta, Nakazawa	Genshin Nakasone
		Basic vocabulary <i>b</i>	Morooka, Tokunaga	Chiyoko Nakasone
		Grammar (last)	Nakajima	Yoshiko Yoshihama
	Irabu	Basic vocabulary <i>a</i>	Pellard, Takemura	Yoshihiro Kawamitsu
		Basic vocabulary <i>b</i>	Kibe, H. Nakama, Toyama	Katayuki Shimoji, Gensuke Hirara
	Yonaha	Basic vocabulary <i>a</i>	Shirata, Ogawa	Noriyoshi Kochi
		Accent	Igarashi, Uwano, Aoi, Matsuura	Toyosuke Ikemura
		Grammar (first)	Shimoji	Shigeo Yonaha
		Grammar (middle)	Hayashi	Takeichi Kakinohana
	Shimajiri	Basic vocabulary <i>a</i>	Shirata, Pellard	Toyokazu Hentona
		Basic vocabulary <i>b</i>	Shimoji, Hayashi	Sadao Ikema
19:30–				

2.3 Survey content and methods

The survey consisted of four modules: ‘Basic vocabulary *a*’, ‘Basic vocabulary *b*’, ‘Accent’, and ‘Grammar’. ‘Basic vocabulary *a*’ and ‘Basic vocabulary *b*’ comprised basic vocabulary items in frequent daily use, such as items referring to body parts, family members, animals, plants, natural phenomena, time, space, tools, and numbers. The difference between groups *a* and *b* lies in the fact that those in group *a* refer to things common to different languages and dialects, while those in group *b* have specific cultural connotations. ‘Basic vocabulary *a*’ contained 189 items, while ‘Basic vocabulary *b*’ contained 149. The method used was that of translation questions, where the researcher utters a Standard Japanese vocabulary item and the speaker replies by uttering the corresponding vocabulary item of their dialect; for example, the researcher asks, ‘How do you say (...) in your dialect?’ and the speaker replies by translating the vocabulary item to their dialect.

As regards ‘Accent’, a list was made of 71 two-, three-, and four-mora nouns, which were recorded uttered in isolation as well as inserted into carrier sentences of the type ‘There is no (...)’, after which they were analyzed. The accent survey data have not been included in this report in their entirety. For an overview, the reader is referred Yosuke Igarashi’s chapter, ‘The Nominal Accent System of the Yonaha Dialect of the Southern Ryukyuan Language of Miyako: A Preliminary Report’.

Verb conjugation formed the core of the ‘Grammar’ module, which consisted of sentences designed to elicit the assertive (affirmative), negative, past, *shite*-continuative, and *ari*-continuative forms and the like of 38 verbs, such as those corresponding to Standard Japanese *tobu* ‘to fly; to

jump’ and *kogu* ‘to row’. This resulted in a total of 190 items. It is impossible, however, to elicit all 190 items in one two-hour session, so they were divided into three subsets, each group thus being tasked with eliciting about a third (around sixty) of the items. In the table above, ‘Grammar (first)’, ‘Grammar (middle)’, and ‘Grammar (last)’ refer to the first, middle, and last subset of grammar items, respectively. Consequently, researchers and speakers differ for each of the subsets at each site. Although it is desirable, if possible, to have a single speaker utter all of the items when dealing with a systematic phenomenon such as verb conjugation, time constraints forced us to use this method. As with ‘Basic vocabulary’, the elicitation method we used was that of translation questions.

In addition to the above, discourse material was recorded in Uechi. As analysis of this material is still underway, it has not been included in this report.

2.4 Participating researchers

The following 39 researchers participated in the survey. In addition to the leader and two research fellows of this project, the group consisted of fourteen collaborating researchers, nine university or institute staff members who were not collaborating researchers, nine graduate students, and four JSPS PD research fellows.

Nobuko KIBE (NINJAL; project leader), Shinji OGAWA (NINJAL; PD research fellow of this project), Sichao SHENG (NINJAL; research fellow of this project)—continues in alphabetic order; collaborating researchers at the time of the survey are marked with ‘*’—Hayato AOI (doctoral student at the Tokyo University of Foreign Studies; JSPS research fellow), Chris DAVIS (JSPS PD research fellow at Kyoto University), Yuka HAYASHI (part-time lecturer at Kyoto University), Manami HIRAYAMA (Ritsumeikan University), Tatsuya HIRAKO (doctoral student at Kyoto University; JSPS research fellow), Yosuke IGARASHI (Hiroshima University), Fumiko INOUE (NINJAL), *Akihiro KANEDA (Chiba University), *Shigehisa KARIMATA (University of the Ryukyus), Suguru KAWASE (doctoral student at Kyushu University), Ai KUBOZONO (doctoral student at Kyushu University; JSPS research fellow), *Wayne LAWRENCE (University of Auckland), *Satomi MATAYOSHI (Shigakuan University), *Hirotake MATSUMOTO (Beppu University), Toshio MATSUURA (Hokusei Gakuen University), Daigo MOROOKA (MA student at Hitotsubashi University), *Jo NAKAHARA (part-time lecturer at the University of the Ryukyus), *Yumi NAKAJIMA (Hitotsubashi University), Hiroyuki NAKAMA (adviser at the Public Relations Office of the Kake Educational Institution; former principal of Miyako High School), Keiko NAKAMA (part-time lecturer at the University of the Ryukyus), Kohei NAKAZAWA (MA student at the University of Tokyo), *Satoshi NISHIOKA (Okinawa International

University), *Tetsuo NITTA (Kanazawa University), Yuichi NOHARA (part-time lecturer at the University of the Ryukyus), Chisako OGINO (Oita University), Thomas PELLARD (JSPS PD research fellow at Kyoto University), *Kayoko SHIMOJI (Okinawa International University), Rihito SHIRATA (MA student at Kyoto University), *Koko TAKEDA (project research fellow at NINJAL), Akiko TAKEMURA (PD project research fellow at NINJAL), *Yukinori TAKUBO (Kyoto University), Akiko TOKUNAGA (MA student at Hitotsubashi University), Nana TOYAMA (MA student at the University of the Ryukyus), Atsuko UTSUMI (Meisei University), *Zendo UWANO (invited professor at NINJAL), Masahiro YAMADA (JSPS PD research fellow at Kyoto University).

2.5 Speakers

The details of the speakers are as follows.

Ikema	Ms. Teruko HAMAMOTO (86), Ms. Akiko KATSUREN (83), Ms. Yoshiko NAKAHARA, Ms. Masako HAMAKAWA (90)
Karimata	Mr. Masaki KARIMATA (88), Mr. Masaaki NEMA (78), Ms. Hide HANASHIRO (84), Mr. Masayuki UEHARA (68)
Ōura	Ms. Hatsuko SHIMOJI (87), Mr. Masayuki OZATO (80)
Uechi	Mr. Shigeo UECHI (84), Ms. Tomi NAKAHARA (89), Ms. Fumi SHIMOJI (90), Mr. Kiyokatsu UECHI (79)
Nobaru	Ms. Shige KUGAI (86)
Uruka	Mr. Toshio SUNAGAWA (83), Mr. Wataru SUNAGAWA (75), Mr. Hisao MIYAZATO (84)
Kugai	Mr. Yoshihiko YONAHARA (69), Mr. Kinkichi YONAHARA (84)
Miyaguni	Ms. Kiku MIYAGUNI, Ms. Hideko MATSUOKA
Bora	Ms. Yoshiko SHIMOJI (82), Mr. Tatsuo SUNAGAWA (55), Mr. Yoshio HIRARA (77), Mr. Hiromori SHIMOJI (61), Ms. Meiko HIRARA (79); Ms. Harumi SUNAGAWA (59) from Aragusuku
Nishihara	Ms. Kimie NAKAHARA (63)
Kurima	Ms. Haru SUNAGAWA (86), Ms. Ume SUNAGAWA (83), Ms. Kiku KAWAMITSU (90), Ms. Chiyo TAMASHIRO (81)
Kuninaka	Ms. Chiyoko NAKASONE (83), Ms. Yoshiko YOSHIHAMA (84), Mr. Genshin NAKASONE (86)
Irabu	Mr. Yoshihiro KAWAMITSU (87), Mr. Katayuki SHIMOJI (69), Mr. Gensuke HIRARA (81)
Yonaha	Mr. Takeichi KAKINOHANA (76), Mr. Noriyoshi KOCHI (75), Mr. Shigeo YONAHARA (77), Mr. Toyosuke IKEMURA (75)
Shimajiri	Mr. Toyokazu HENTONA (72), Mr. Sadao IKEMA (73)

I would like to take this opportunity to express our gratitude to the above speakers for taking the time to participate in the survey.

3. Overview of Miyako Ryūkyūan

The Phonology of the Miyako Dialects: Phonological Systems and Comparisons

Thomas PELLARD & Yuka HAYASHI

1 Introduction

The Miyako dialects are a group Southern Ryukyuan dialects spoken in Miyakojima City and Tarama Village in Okinawa Prefecture. They are considered to comprise between thirty and forty dialects, differing from hamlet to hamlet, albeit to different degrees. Surveys were conducted in Uechi, Yonaha, Kugai, Irabu, Bora, Kuninaka, Ōura, Shimajiri, Kurima, Ikema, Karimata, Uruka, and Nobaru in September 2011; in this chapter, we will use the data obtained at these thirteen sites to organize and outline the phonology of the Miyako dialects based on historical-linguistic sound correspondences. While it is customary to consider sound correspondences with (Old) Japanese, we will mostly look at correspondences with the Proto-Miyako stage for the purpose of interdialectal comparison, rather than going back all the way to Proto-Japonic (unless noted otherwise, the proto-form marker ‘*’ indicates a Proto-Miyako form)¹.

Examples of existing research on the phonology of the Miyako dialects are the works of Hirayama, Oshima & Nakamoto (1967); Nakamoto (1976), Hirayama (ed., 1983), and Nakama (1992), who have described the phonemes and phonological characteristics of each site. More recently, Nakamoto (2000), Nakahara (2001), K. Shimoji (2003), Karimata (2005), M. Shimoji (2008, 2011), Pellard (2009, 2010), and Hayashi (2010), among others, have conducted surveys and research on the phonological systems of individual dialects, as well; the phonologies of each site are thus becoming better understood, but different researchers have interpreted the phonology of the Miyako dialects very differently. In the Miyako dialects, there are a vowel with a free variant involving consonantal noises and syllables in which it is difficult to phonetically and phonologically confirm the existence of a specific vowel, for example; there has been much debate regarding their sound values and phonological interpretation. This debate centers on a phoneme that incorporates consonantal as well as vocal elements, which is called a central or apical vowel by some and analyzed as a syllabic consonant with the sound value [s~z] by others. In addition, sounds such as ‘v’ and ‘r’ ([ɹ]) can become moraic, and in terms of phonetic characteristics, even open vowels can be devoiced; syllable nuclei are thus frequently occupied by (at least phonetically) consonantal elements, which is why the Miyako dialects are considered to be ‘strongly consonantal’ (Sawaki

¹ Reconstructed Proto-Miyako forms are based on those of Pellard (2009) and reconstructed Proto-Ryukyuan forms on those of Thorpe (1983).

2000). Although this is among the issues regarding phonological interpretation discussed by, for example, Kitamura (1960), Karimata (1986, 1987), Kajiku (1989), and Sawaki (2000), there are still many unresolved questions. Many of these questions can be considered to involve differences in opinion resulting from the use of different frameworks of analysis to deal with the large differences in the respective roles of consonants and vowels between these dialects and Japanese. Although we can discuss only a small subset of these questions, we hope to be able to elucidate part of the phonological characteristics of the Miyako dialects by discussing a number of morphophonological phenomena that have not previously been discussed in much detail.

In this chapter, in addition to discussing the issues mentioned above, we will outline aspects the Miyako dialects all share as well as differences between them by looking at how each of the phonemes posited for Proto-Miyako is realized at each of the sites. We use a simplified phonetic notation, and the data in the tables are presented as they were transcribed by each of the researchers in the survey². As we will only discuss segments in this chapter and not consider pitch accent, we have not included any notation regarding the latter that was present in the data³.

2 Vowels

2.1 Vowel types and properties

In this section, we will give the sound values of each of the vowel phonemes of the Miyako dialects and examples of words containing them, obtained at each of the survey sites. In cases where there has been a local sound change at a single site or where there is an exceptional sound correspondence, we will give additional examples for these.

The six vowel types of the Miyako dialects encountered in the survey data that we will discuss in this chapter are /a, e, i, o, u, ɿ/. A distinction is made between short and long vowels, although, with the exception of their use in loan words, /e, o/ are typically only used as long vowels, as they derive historically from vowel sequences. Although it is not among the dialects considered in this chapter, /ë:, ü:/ are additionally recognized for the Tarama dialect (K. Shimoji 2003)⁴. Among the dialects examined in the survey, there are dialects

² Because they are phonetic transcriptions of utterances mostly obtained from a single speaker in a single survey, the data also include seeming mistranscriptions. As regards their interpretation, we have made corrections where our knowledge allowed us to; we have indicated where this is the case.

³ There have been recent advances in research on pitch accent, Igarashi et al. (2012) having shown that the Ikema dialect has a three-pattern rather than a two-pattern accent system, for example.

⁴ Furthermore, the Ōgami dialect has /ɯ/, which derives from *ɿ but is not accompanied by a friction sound; its vowel system differs from those of the other dialects, consisting of /a, ɛ, i, u, ɯ/ (Pellard 2009).

that have the four vowels /a, i, u, ɿ/, dialects that have the five vowels /a, i, o, u, ɿ/, and dialects that have the six vowels /a, e, i, o, u, ɿ/. The phoneme /ɿ/ is a vowel that is accompanied by a friction noise; it can be considered a ‘fricative vowel’ of the kind that is encountered in, for example, Chinese and the Bantu languages (Ladefoged & Maddieson 1996). Although we will treat it as a vowel, there are also researchers who interpret it as a consonant.

2.1.1 Open vowel

/a/ (unrounded open vowel) [a] ~ [ɑ] < Miyako *a

This sound corresponds to Proto-Miyako *a and surfaces as [a] ~ [ɑ] in all of the dialects⁵.

Table 1. The unrounded open vowel.

	A-187 ‘there (distal)’	A-062 ‘mosquito’	A-174 ‘sand’	B-060 ‘feather; wing’	B-002 ‘tooth’
Uechi	kama	gaɟam	ɱnagu		pa:
Yonaha	k ^h ama	gaɟam	nnago:		
Kugai	k ^h ama	gaɟam	m ^h nagu		
Irabu	k ^h ama	gaɟam	mnagu	pani	pa:
Bora	k ^h ama	ga ^d zam	nnago:	p ^h ani	p ^h a:
Kuninaka	kama	kadam	ɱnagu		
Ōura	k ^h ama	ga ^d zaŋ	nnagu	pani	pa:
Shimajiri	kama	gadaŋ	nnagu	p ^h aŋi	p ^h a:
Kurima	kama	gaɟam	m:nagu		
Ikema	kama	kaɟaŋ	nnagu	hani	ha:
Karimata	kama	ga ^d zaŋ	nnagu	pani	pa
Uruka	k ^h a _ɕ ma:	gaɟam	ɱnagu		
Nobaru				pani	pa:

⁵ As we will discuss later, in some dialects there are cases where /u/ corresponds to this sound, but this is not the result of a systematic sound change.

2.1.2 Close vowels

/i/ (unrounded close front vowel) [i] ~ [ɪ] < Miyako *i

This sound corresponds to Proto-Miyako *i and surfaces as [i] ~ [ɪ] in all of the dialects. In Karimata, there are words in which /ɿ/ corresponds to *i. In Ikema, *ɿ has merged with /i/, except after /ts/, /z/, and /s/ (see the section on /ɿ/ for details). In addition, there are words in Irabu in which the sound corresponding to Proto-Miyako *(C)ja has changed into ‘ii’.

Table 2. The unrounded close front vowel.

	A-170	A-059	A-129	B-093	A-110
	‘sea’	‘woman’	‘wind’	‘spatula’	‘tree’
Uechi	iṃ	midum	kaɖzi		ki:
Yonaha	im	midomu	kʰaɖzi		ki:
Kugai	im	midum	kʰaɖzi		ki·
Irabu	im	midum	kʰaɖzi	pira	kʰi:
Bora	im	midom	kʰa ^d zi	pʰira	kʰi:
Kuninaka	iṃ	miduṃ	kaɖzi		ki·
Ōura	iŋ	miduŋ	kʰaɖzi	pira	kʰi:
Shimajiri	iŋ	miduŋ	kʰaɖzi	pira	ki:
Kurima	im	midumu	kʰaɖzi		ki:
Ikema	iŋ	miduŋ	kʰadi	hira	ki:
Karimata	iŋ	miduŋ	kʰaɖzi	pira	ki:
Uruka		miduṃ	kaɖzi		ki: ~ ki̯:
Nobaru				pira	

Table 3. ‘ɿ’ partly corresponding to ‘i’ in Karimata.

	A-016	A-103
	‘beard; mustache/hair’	‘garlic’
Uechi	p ^e igi	p ^h il
Yonaha	p ^z ɿgi	p ^h i ^z ɿ
Kugai	psgi	p ^h iz
Irabu	p ^s ɿgi / fɯtsɿp ^s ɿgi	p ^h iɿ
Bora	p ^s ɿgi	p ^h i ^z ɿ
Kuninaka	p ^h igi	p ^h il

Ōura	p ^s ɭgi ~ pɭgi	p ^h iɭ
Shimajiri	b ^z ɭgi	p ^h i ^z ɭ
Kurima	psgi	piz
Ikema	higi	hi:
Karimata	bzgu ~ bzgĩ ~ bĩgĩ	p ^s i:
Uruka	psgi ~ p ^s ɭgi	piz̥ ~ pi _{ɔ̃} z̥
Nobaru		

Table 4. *(C)ja > ii in Irabu.

	A-165 'a long time ago'	A-189 'to be absent; to be nonexistent'	B-029 'one (person)'
Uechi	ɲkja:ɲ		
Yonaha	ɲk ^j a:ɲ		tɔuk ^j a:
Kugai	ɲkja:ɲ	n ^j a:ɲ	tɔfke:
Irabu	mki:ɲ	ni:ɲ	tauki:
Bora	ɲk ^j a:ɲ	n ^j a:ɲ	tauk ^j a:
Kuninaka	ɲkja:ɲ		ta ^v k ^j a:
Ōura	ɲk ^j a:ɲ		tavk ^j a:
Shimajiri	ɲkja:ɲ		t ^h afkja:
Kurima	ɲkja:ɲ	n ^j a:ɲ	
Ikema	ɲk ^j a:ɲ	n ^j a:ɲ	tauka:
Karimata	ikja:ɲ	n ^j a:ɲ	taɸk ^j a:
Uruka	ɲkja:ɲ		tavk ^j a:
Nobaru			taukja:

/u/ (rounded close back (lax) vowel) [u] ~ [ʊ] < Miyako *u

This sound corresponds to Proto-Miyako *u and surfaces as [u] ~ [ʊ] in all of the dialects. Words in which 'a' corresponds to this sound are also encountered occasionally at all of the sites, but this is not a regular correspondence.

Table 5. The rounded close back vowel.

	A-028 ‘bone’	A-030 ‘heart/liver’	A-060 ‘person; human being’	A-071 ‘horse’	B-069 ‘ear (of a cereal plant)’
Uechi	puni	kçimu ~ kimu	p̥isu	nu:ma	
Yonaha	puni	k̥imu	p̥i ^h tu	no:ma	
Kugai	p ^h uni	k ^{sz} imu	pstu	nu:ma	
Irabu	p ^h uni	tsimu	pstu	nu:ma	pu:
Bora	p ^h uni ~ poni	k̥imu	pstu	no:ma	p ^h u:
Kuninaka	puni	tsimu	p̥i ^h tu	ny:ma	
Ōura	p ^h uni	k̥imu	pstu	numa	p ^h u:
Shimajiri	p ^h uni	k̥imu	ttu	nu:ma	pu:
Kurima	p ^h uni	tsimu	pstu	nu:ma	
Ikema	huni	tsimu	p̥i ^h tu ~ çtu ~ çto	nu:ma	hu:
Karimata	p ^h uni	k̥imu	pstu	nu:ma	pu:
Uruka	p̥uni ~ p ^h uni	k̥imu ~ k̥imu	p̥st̥u ~ p̥st̥u	nu:m̥a	
Nobaru					pu:

Table 6. Examples of ‘a’ corresponding to ‘u’.

	A-132 ‘cloud’	A-032 ‘knee’	A-079 ‘egg’	A-115 ‘common garcinia (tree)’
Uechi	kumu	tsigusi	tunaka	p̥ukukugi
Yonaha	fom	tsɽgusɽ	t ^h onaka	p ^h ukugi:
Kugai	fumu	tsigusi	tunak ^h a	p ^h ukaɖgi:
Irabu	fumu	tsɽgusɽ	(k ^h u:ga)	kuputsɽgi
Bora	fomu	tsɽgusɽ	t ^h onaka	f̥ukokɽgi:
Kuninaka	fumu	tsigusi	tunuka	p̥ukutsigi
Ōura	k ^h umu	sugasɽ	t ^h unaka	p ^h ukagi
Shimajiri	fuma	tugusɽ ~ tugasɽ	t ^h unaka	k ^h upag ^z ɽgi:
Kurima	fumu	tsigusi	t ^h unuka	pukutsigi:
Ikema	m̥mu	s̥igusi	tunuka	kutsigi
Karimata	fumu	tsigasi	tunuga	p ^h ukagagi:
Uruka	ɸumu	tsɽgusɽ ~ tsɽgusɽ	t̥unaka	p̥uk̥ukuki: ~ p̥ukukugi
Nobaru				

2.1.3 Close-mid vowels and diphthongs

The close-mid vowels of the Miyako dialects mostly derive from sequences of vowels that have fused together. /e/ derives from *ai and *Cja, while /o/ derives from *au and *ua. There are many exceptions, however; apart from *au > o:, these sound changes are not observed in all instances of these environments in most of the dialects.

/e/ (unrounded close-mid front vowel) [e]

/e/ derives from the following two sequences:

- *ai : this is observed only in some vocabulary items.
- *Cja : this is observed most often in the topic forms of words ending in ‘-i.’

/e/ deriving from these sequences through fusion is not encountered in most of the dialects. Also, there was an instance of mistranscription as /i/ [ɪ] in the data given below.

Table 7. /e/ deriving from *ai in some vocabulary items in Yonaha, Kugai, and Kurima (vocabulary items in which the change *ai > e has not occurred are included for reference.)

	A-131 ‘earthquake’	A-146 ‘the south’	A-157 ‘night’	A-004 ‘forehead’	‘too; also’ (particle)	allative marker
Uechi	nai	p ^h ai				
Yonaha	nai	pai	junai		mai / me:	ŋkai / ŋke:
Kugai	nai	p ^h ai	jun ^h a:ŋ / june:	ftai	mai	ŋkai
Irabu	nai	p ^h ai	ju ^h ŋna ^h	fɯtai	mai	
Bora	nai	p ^h ai	junai	fɯtai	mai	ŋkai
Kuninaka	nai	paɪbara	jɯnai	fɯtai	mai	ŋkai
Ōura	nai	p ^h ai		fɯtai ~ ftai		
Shimajiri	nai	p ^h ai				
Kurima	nai	p ^h ai	june:	fte ^h	me:	ŋke:
Ikema	nai	haɪbara		ftai	mai	ŋkai
Karimata	nau	p ^h ai		ftai	mai	ŋgai
Uruka	nai	p ^h ai	junai		mai	ŋkai
Nobaru						ŋkai

Table 8. /e/ deriving from *Cja only in some vocabulary items in Kugai.

	A-165 'a long time ago'	A-189 'to be absent; to be nonexistent'	B-029 'one (person)'	-i + topic marker
Uechi	ɲkja:ɲ			
Yonaha	ɲk ^j a:ɲ		tɔvk ^j a:	ja:
Kugai	ɲkja:ɲ	n ^j a:ɲ	tɔfke:	e:
Irabu	mki:ɲ	ni:ɲ	tauki:	
Bora	ɲk ^j a:ɲ	n ^j a:ɲ	tauk ^j a:	ja:
Kuninaka	ɲkja:ɲ		ta ^v k ^j a:	ja:
Ōura	ɲk ^j a:ɲ		tavk ^j a:	
Shimajiri	ɲkja:ɲ		t ^h afkja:	
Kurima	ɲkja:ɲ	n ^j a:ɲ		ja:
Ikema	ɲk ^j a:ɲ	n ^j a:ɲ	tauka:	(j)a:
Karimata	ikja:ɲ	n ^j a:ɲ	taɸk ^j a:	ja:
Uruka	ɲkja:ɲ		tavk ^j a:	ja:
Nobaru			taukja:	

/o/ (rounded close-mid back vowel) [o]

/o/ derives from the following two sequences.

- *au : this is observed especially often in the accusative forms of words ending in ‘-a’.
- *ua : this can apparently only be observed in the topic forms of words ending in ‘-u’.

In most of the dialects /o/ is consistently used as the sound corresponding to *au, but there are also dialects in which there is variation among vocabulary items (Bora, Kurima), as was the case with the examples above. Also, there was an instance of mistranscription as /u/ [ʊ] in the data given below.

Table 9. /o/ deriving from *au in Uechi, Yonaha, Kugai, Bora, Ōura, Kurima, and Karimata; /o/ deriving from *ua in Kugai, Kuninaka, Kurima, Karimata, and Uruka.

	A-027	A-093	A-130	A-136	A-183		-a + accusative marker	-u + topic marker
	‘to be itchy’	‘to eat’	‘whirlwind; tornado’	‘to be blue; to be azure’	‘gate’			
Uechi		fo:	amainoũ	o:	ɕoʔ			
Yonaha		fo:	amaino:	o:nu	ɕo:		o:	a:
Kugai	k ^h o:munu	fo:	ama.ino:	o:	ɕo:		o:	o:
Irabu	k ^h o:munu	fo:	amaino:	o:	ɕo:vtsɿ			
Bora	k ^h aʊkau	fau	amaino:	aʊaʊ	ɕo: (Bora) / ɕaʊ (Aragusuku)		au	a:
Kuninaka	kaʊmunu	fau	amainau	aũ	daʊ		ao	u: / o:
Ōura		fo:	amaino:	o:o:	ɕo:futsɿ			
Shimajiri		fau	amaino:	aukaŋ	dau			
Kurima	koʔoko:		ama.ino:	au	ɕo:		a: / o: / au	o: / ua
Ikema	kaumunu		amaunau	aumunu	ɕau		au	u:
Karimata	ko:gaŋ		ino:	o:	ɕo:		au / o:	o:
Uruka		fau ~ fau	amainau	au ~ aʊ	ɕau		au	o:
Nobaru								

2.1.4 Special vowel /ɿ/

This sound corresponds to Proto-Miyako *ɿ, and in addition to its vocal quality as a somewhat fronted close central vowel [ɨ] ~ unrounded close back vowel [ɯ], it is accompanied by an alveolar friction noise; it is a so-called ‘fricative vowel’^{6,7}. The friction noise is voiceless [s] when it is preceded by a voiceless onset consonant (e.g. Uechi p^hɿgi ‘beard; mustache’) and voiced [z] when it is preceded by a voiced onset consonant or no onset

⁶ For many years, there has been debate regarding what kind of vowel the sound corresponding to *ɿ is on the basis of its articulatory properties (see Karimata 1986 for details). Ever since Nevsky’s survey of Miyako, it had generally been considered a central vowel, but Sakiyama (1963, 1965), Uemura (1997), and Karimata (1996, 2005), among others, have argued that in terms of articulatory phonetics, it is an apical vowel. In recent years, it has been confirmed experimentally through instrumental analysis that in some of the dialects, it has both the characteristics of a central and of an apical vowel: while it has a vocal quality like that of a central vowel (Ono et al. 2000, Aoi 2010), it is articulated in a position close to s ~ z (Aoi 2010). This parallels reports of fricative vowels in other languages having a dual articulatory character consisting of both vocal and consonantal elements.

⁷ As was mentioned in Footnote 4, the vowel deriving from *ɿ in the Ōgami dialect is /ɯ/, which is not devoiced even when preceded by a voiceless onset consonant (e.g. Ōgami [kɯ:] ‘character; letter’) (Pellard 2009).

consonant (e.g. Yonaha $p^hag^z\eta$ ‘leg’). When it is surrounded by voiceless consonants, in particular, the vowel itself is almost always completely devoiced (e.g. Bora $pska\eta$ ‘light’). Conversely, an allophone with a weakened friction noise, closer to an approximant or vowel, surfaces particularly when it is not preceded by an onset consonant or when it is word-final and preceded by a voiced onset consonant (e.g. Uechi $pagi$ ‘leg’). In addition to expected differences in the degree of stricture among the dialects, there is also variation among speakers and fluctuation in the pronunciation of individual words in individual speakers (e.g. Ōura $p^hag\eta \sim p^hag^z\eta$ ‘leg’). Depending on the dialect, there are also cases where it sounds like a lateral (e.g. Uechi $mak^{\chi}al$ ‘(wooden) bowl’).

In comparison to other vowels, only a limited number of onset consonants can precede this vowel; which they are depends on the dialect, but the largest set of possible onset consonants consists of /p, b, k, g, ts, s, z, f, m/. They are especially few in number in Ikema, where it has changed into /i/ in all environments except after /ts/, /s/, and /z/. It must also be mentioned that in many of the dialects, it has changed into a diphthong [iɰ] after sounds such as /m/.

As /ɰ/ sometimes surfaces as [z] or [s], there are also researchers who interpret it as a moraic consonant. [pstu] ‘person; human being’ provides an example of the diversity encountered in the phonetic transcriptions of this sound: it is variously transcribed as $p\dot{i}tu \sim p\eta tu \sim p\dot{z}tu$ ⁸. Although there is thus a variety of phonological interpretations, the researchers that consider it a vowel still agree that it is accompanied by a friction noise, and those that consider it a consonant still recognize its vowel-like ability to occupy a syllable nucleus. On either view, it is considered a phoneme that has both a consonantal and a vocal quality⁹.

Table 10. The special vowel.

	A-016	A-025	A-100	A-087	A-081	A-033	B-062
	‘beard; mustache/hair’	‘blood’	‘(wooden) bowl’	‘meat (of sea urchins and the like)’	‘fish’	‘leg’	‘fly (insect)’
Uechi	p^eigi	$a\chi_{\text{tsi}} \sim ak_{\text{tsi}}$	$mak^{\chi}al$	$mi:$	izzu	$pagi$	
Yonaha	$p^z\eta gi$	$ak^h_{\text{ts}\eta}$	$mak^haz\eta$	$m^z\eta:$	$zzu \sim \eta zu$	$p^hag^z\eta$	
Kugai	$psgi$	$akatsi$	$mak^haz\dot{i}$	$kadz\dot{a}^t sanumiz$	zzu	$p^hadz\dot{i}$	

⁸ Karimata (2005) also discusses the possibility of interpreting this sound as an allophone of the onset consonants ‘s’ and ‘z’.

⁹ Although we consider this sound a vowel in this chapter, we use the phonetic symbol /ɰ/ rather than /i/ in order to express the fricativity that is an important property of this phoneme.

Irabu	p ^s ɿgi	axətsɿ ~ ahatsɿ	maxaɿ ~ mahaɿ	miɿ	ɿzu	p ^h adɿ	paz
Bora	p ^s ɿgi	ak ^h ətsɿ	makaɿ	m ^ɿ :	zzu ~ ɿzu	p ^h adɿ ~ p ^h agɿ	paz ~ paiz
Kuninaka	p ^h igi	ak ^x ətsi	makaɿ	tsimu (sea urchin)	(i)zzu:	pazi	
Ōura	p ^s ɿgi ~ pɿgi	ha:tsɿ	makaɿ	miɿ	ɿzu	p ^h agɿ ~ p ^h agɿ	paɿ
Shimajiri	bɿgi	aχatsɿ	maχaɿ ~ maχaɿ	miɿ	zzu	p ^h agɿ ~ p ^h agɿ	paz ~ paɿ
Kurima	psgi	A: akatsi / B: a ^k xatsi	A: makaɿ / B: makaz	mī:	zzu	p ^h adɿ	
Ikema	higi	akatsi	makai	mi:	zzu ~ ɿzu	hadɿ	hai
Karimata	bzgu ~ bzgi ~ biḡi	ha:tsi	ma:u	mī:	izu	p ^h agu	pai / pau
Uruka	psgi ~ p ^s ɿgi	akətsɿ	makaz	mɿ:	zzu	pagɿ	
Nobaru						pagɿ	paɿ

There has long been debate on (phonetic) issues related to the articulatory properties of this vowel, but we will not discuss these in detail in this chapter (see, however, Footnote 6). We will instead consider some morphophonological issues highly relevant to a discussion of this vowel and discuss a problem of phonological interpretation in regard to the Miyako dialects.

Is there a vowel or not?

In the Miyako dialects, syllables in which it is debatable whether there is a vowel are frequently encountered; they are mostly cases of this special vowel preceded by an onset fricative or affricate. For example, some interpret [usi] ‘cattle (i.e. cow or bull)’ as ‘usi’ or ‘usɿ’, in which ‘s’ is followed by a vowel, while others interpret it as ‘uʃ’, in which ‘s’ is a syllabic consonant. Although the second syllable of this word does not always surface phonetically unvoiced¹⁰, it appears to be interpreted this way due to a number of morphophonological phenomena.

The questions of whether there is a phoneme or not and whether this phoneme is a consonant or a vowel have to be answered by considering the phonological systems of each of the dialects in their entirety. There is not much research, however, that examines the relevant phonological phenomena comprehensively. Although it is not possible to resolve the issue in its entirety for each of the dialects in this chapter, we will introduce one morphophonological phenomenon that is often cited in discussions on the presence of a vowel and discuss some matters that are essential to the resolution of this issue. Furthermore, as this issue is as yet unresolved, we have in this chapter

¹⁰ As there are also cases in which a vowel is inserted phonetically, this in itself does not prove that there is a vowel phonologically.

chosen the interpretations and transcriptions closest to the Proto-Miyako forms and supplemented forms in which it is unclear if a consonant is moraic with vowels.

Nominal morphophonology

The phenomenon that would seem to be most relevant to the interpretation of the syllables in question is the following nominal-morphophonological phenomenon. In the Miyako dialects, the topic and accusative forms of nouns take different shapes depending on the properties of their stem-final sounds, as shown below; Table 11 gives examples from Karimata.

Table 11. Types of stem-final syllables and their topic and accusative forms¹¹ ('--' indicates forms for which no data is available).

Type of stem-final syllable		Topic form	Accusative form
C	‘sea’ im	imma	immu
	‘dog’ in	inna	innu
	‘snake’ pav	pavva	pavvu
(C)V[+ fricative]	‘cattle (i.e. cow or bull)’ usɿ	ussa	ussu
	‘wife’ tuzɿ ¹²	tuttsa	tuttsu
	‘road; path; way’ ntsɿ	nttsa	nttsu
	‘tofu’ toofu	tooffa	tooffu
	-pɿ	--	--
	‘paper’ kabɿ	kabzza	kabzzu
	‘the moon’ tsɿkɿ ¹³	tsɿkssa	tsɿkssu
	‘leg’ pagɿ	pagzza	pagzzu
	‘rice’ maɿ	mazza	mazzu
CV	‘umbrella; parasol’ sana	sanaa	sanau
	‘sake; alcoholic beverage (in general)’ saki	sakjaa	sakjuu
	‘octopus’ taku	takoo	takuu

¹¹ In Table 11, data from the NINJAL survey has been supplemented with our own data. We have modified the transcriptions.

¹² It appears to have surfaced as an unvoiced sound here due to restrictions on which sounds can be used as geminates.

¹³ In the data from the NINJAL survey, this word is transcribed as 'tskssu', but this form is also encountered.

(C)VV	‘tree’ kii	kiija	kiiju
	‘voice’ kui	kuija	kuiju
	‘character; letter’ zɿ	zɿja	zɿju
	‘(to break) wind’ pɿ	--	--
CC	‘sweet potato’ mm	mma	mmu

Table 11 shows that consonant doubling occurs when the stem ends in C or (C)V[+fricative] (‘ɿ’ or a fricativized ‘u’). Before considering how to interpret this synchronically, let us first briefly look at how this phenomenon arose historically.

As is also indicated by, among others, Karimata (1996, 2007), there has been a historical sound change in which the semivowels ‘w’ and ‘j’ and the liquid ‘r’ have changed into the fricatives ‘s’ and ‘z’ when they follow the special vowel ‘ɿ’¹⁴. The examples in (1) are taken from Karimata (2007); we have modified the transcriptions.

- (1) tsɿkssu < *tsɿkɿju ‘the moon’ (corresponds to Japanese *tsukuyo* ‘moonlit night’)
 zzu < *ɿwu ‘fish’ (corresponds to Japanese *iwo*)
 ssu < *sɿru ‘white’ (corresponds to Japanese *shiro*)

*ja and *ju are thought to have been the forms of the topic and accusative marker, respectively, in Proto-Miyako, and when they were attached to stems ending in *ɿ, the same change must have occurred.

- (2) kabɿ + ju > kabɿ = zu [kabzzu] ‘head.hair-ACCUSATIVE’ (from Table 11)

In the case of stems ending in consonants, too, the ‘j’ of the attached marker has assimilated to these consonants, as can be seen in Table 11 (the accusative form of im ‘sea’: im = mu). We will not discuss the process through which this change occurred in detail, but it seems that the case of stems ending in ‘ɿ’ can be understood as similarly involving the assimilation of the ‘j’ following it due to the consonantal aspect of this vowel¹⁵.

¹⁴ Fricative vowels have also been observed to influence the consonants following them in some of the Bantu languages (Ladefoged & Maddieson 1996).

¹⁵ In addition to Karimata (1996, 2007) discussing the causes of this change from the perspective of aerodynamics, Aoi (2012) uses an autosegmental-phonological analysis to explain the process through which this change occurred as the fricativization of semivowels and liquids due to the extension of the apicality of /ɿ/.

Among the stems in Table 11 ending in (C)V[+fricative], however, there are broadly speaking two possible interpretations regarding those ending in ‘sɿ’, ‘zɿ’, ‘tsɿ’, or ‘fu’¹⁶. One of these assumes ‘ɿ’ (a fricativized ‘u’ in the case of ‘f’) to be a syllable nucleus, similarly to ‘bɿ’, (‘pɿ’), ‘kɿ’, ‘gɿ’, and ‘mɿ’, and posits a rule according to which this vowel has changed ‘j’ into a fricative¹⁷; the other considers this vowel to have been elided and ‘j’ to have assimilated directly to the resulting moraic consonants ‘s’, ‘z’, ‘ts’, and ‘f’, similarly to what happened in the case of ‘m’, ‘n’, and ‘v’.

The above also applies to the question of how to analyze the data synchronically¹⁸. The words in Table 11 that have consonant doubling in their topic and accusative forms, with stems ending in C or (C)V[+fricative], can be divided into two groups: a group with consonants, ‘p’, ‘b’, ‘k’, ‘g’, and ‘m’, that are accompanied by an additional syllable nucleus (‘ɿ’), which we will call ‘group A’, and a group with consonants, ‘m’, ‘n’, and ‘v’, that can be considered moraic, which we will call ‘group B’¹⁹. The biggest interpretational question is then whether to put the words with ‘s’, ‘z’, ‘ts’, and ‘f’ into group A or into group B. This is because it is directly connected to the question of whether ‘s’, ‘z’, ‘ts’, and ‘f’ have to be recognized as syllabic consonants—a question of phonotactics, syllable structure, and phoneme classification, and thus a major issue regarding the phonological system of the language. Putting ‘s’, ‘z’, ‘ts’, and ‘f’ into the group of syllabic consonants means the example of ‘cattle (i.e. cow or bull)’ given earlier will be interpreted as ‘usɿ’, in which the second

¹⁶ ‘fu’ derives from Proto-Ryukyuan *pu and *ku. According to Karimata (2007:44), who interprets this mora as ‘f’, *u first changed into ‘v’, after which *p and *k fused with ‘v’ to become ‘f’ due to a reciprocal assimilation in which ‘v’ changed the place (labiodental) and manner (fricative) of articulation of the preceding consonants *p and *k, and, conversely, *p and *k caused the devoicing of the following ‘v’. It is also possible, however, to maintain ‘v’ as an allophone of ‘u’, interpreting this mora as /fu/ [fv], and to view this allophone as a fricative vowel like the special vowel ‘ɿ’ whose labiodental friction caused the assimilation of ‘j’.

There are also many other examples of words in which a consonant has assimilated to a preceding ‘fu’ (or ‘f’), resulting in a geminate.

E.g. ffu < furu ‘black’ (corresponds to Japanese *kuro*)

maffa < mafura ‘pillow’ (corresponds to Japanese *makura*)

¹⁷ When *ju is attached to C*ɿ (where C is an affricate), a further assimilation occurs; for example, when *ju is attached to *tsɿ, this results in tsɿ + ju > tsɿsu > ttsu. (An example of a historical change: Irabu tsɿkɿju > tsɿtsɿju > tsɿttsu ‘the moon’.)

¹⁸ Although we do not take a specific position below, a synchronic analysis need not assume that the accusative marker is ‘ju’, identical to the proto-form; it would seem possible to analyse it as ‘u’, as well, although it is also possible that it differs depending on the dialect.

¹⁹ In, for example, Kuninaka, /r/ [ɽ] is an additional syllable nucleus.

syllable does not have a vowel. Broadly speaking, the phonological phenomena illustrated in Table 11 can be interpreted most economically in the following two ways²⁰.

1. Like the consonants in group A, ‘s’, ‘z’, ‘ts’, and ‘f’ are accompanied by an additional syllable nucleus (‘ɿ’ and the like). (They are not recognized as syllabic consonants.)
2. Like the consonants in group B, ‘s’, ‘z’, ‘ts’, and ‘f’ can be used as syllabic consonants and thus do not require an additional syllable nucleus.

Irrespective of whether this morphophonological issue is considered, interpretations like 1. that maintain the *ɿ (and ‘u’) of the proto-forms have up to now been the standard. On the other hand, Karimata (2005), M. Shimoji (2008, 2011), and Pellard (2009, 2010), for example, adopt interpretation 2. For each dialect, the question of which is the more appropriate explanation cannot be resolved without looking at the entire phonological system (phoneme system, phonotactics, syllable structure, and morphophonology), but in the following, we will describe a benefit of choosing interpretation 2. as well as a problem with the traditional account.

For the Ōgami dialect, which is unusual even among the Miyako dialects²¹, there is further evidence outside of the nominal morphology illustrated in Table 11 that /m, n, f, s, v/ are used as syllabic consonants, unaccompanied by an additional syllable nucleus (vowel). For example, Ōgami has the contrasting pair of ‘sta’, meaning ‘down; below; under; bottom’, and ‘suta’, meaning ‘tongue’, and there is nothing to necessitate the positing of a fricative vowel like those in the other dialects in addition to ‘u’, which is not accompanied by friction in the Ōgami dialect. The ‘s’ in ‘sta’ can therefore be considered a syllable without a vowel. ‘s’ and ‘f’ can thus be used as syllabic consonants in addition to nasals and approximants, but the liquid ‘r’ can only be used as an onset consonant and does not function as a syllable nucleus. This forms an exception to the theory that liquids can typologically more easily be used syllabically than fricatives (Zec 2007), but this can be seen as showing that the main quality supporting the syllable in this dialect is ‘continuance’ rather than ‘sonority’²². It is possible

²⁰ According to a third interpretation, it is sufficient to view the phenomena illustrated in Table 11 as a strictly historical change and assume a simple nominal paradigm synchronically. In essence, this interpretation does not regard these phenomena as objects of synchronic explanation; depending on one’s perspective on grammar, this can be a perfectly valid interpretation. If this view is taken, consistency in the phoneme system, phonotactics, and syllable structure, as well as the phonetic reality, must be taken into account in interpreting the sound corresponding to /ɿ/, without considering these morphophonological phenomena.

²¹ It has no contrast between voiced and voiceless and no affricates, for example.

²² The difference between the sounds that can and the sounds that cannot be used as syllable nuclei appears to lie in whether they are sustainable sounds or instantaneous sounds; this approximates the feature ‘continuant/interrupted’ of Jakobson, Fant & Halle (1952).

that this applies to all of the Miyako dialects, in which case interpretation 2. can be seen as more accurately reflecting their linguistic character²³.

Although they do not show that there is no vowel, M. Shimoji (2008) presents data for the Nagahama dialect showing that ‘s’, ‘z’, ‘ts’, and ‘f’ are different from the consonants of group A (‘p’, ‘b’, ‘k’, ‘g’, and ‘m’), which require an additional syllable nucleus.

- (3) a. Nagahama sīī²⁴ ‘nest’; accusative form sīī=u
(corresponds to ‘sɪɪ’ according to the interpretation/transcription of this chapter)
- b. Nagahama pžž ‘the sun; sunlight; day’; topic form pžž=ža
(corresponds to ‘pɪɪ’ according to the interpretation/transcription of this chapter)
(taken from M. Shimoji 2008)

The words in (3ab) have both been interpreted as having a long special vowel, but in their topic forms, a difference arises. Although this suggests that ‘s’, ‘z’, ‘ts’, and ‘f’ cannot be treated in exactly the same way as the consonants of group A, the behavior seen in (3a) also differs from that of the syllabic consonants of group B, which can be lengthened. An example of the lengthening of the syllabic consonants of group B is the consonant doubling that occurs in their topic forms: **mm**=ma ‘sweet.potato-TOPIC’. Even if it is possible to treat them identically to either group A or group B depending on to which of these they appears more similar after examining a variety of other phonological phenomena, it also seems possible that rules different both from those of group A and from those group B will have to be posited.

In the above, we have briefly considered the morphophonological reasons for interpreting the word for ‘cattle (i.e. cow or bull)’ as ‘uʃ’, without a vowel in the second syllable, through a discussion of the nominal morphology of the Miyako language. These issues must be investigated for each of the dialects; the situation is very different for a dialect such as that of Ikema, in which the consonants of group A, ‘p’, ‘b’, ‘k’, ‘g’, and ‘m’, are never used as onset consonants in combination with the special vowel.

As we have seen, there has been a historical change in which the semivowels ‘w’ and ‘j’ and the liquid ‘r’ of Proto-Miyako have assimilated to preceding consonants and fricativized close vowels;

²³ It is possible that there is a connection between the fact that ‘syllable nuclei are (...) frequently occupied by (at least phonetically) consonantal elements’, stated in Section 1, and this quality, as well.

²⁴ M. Shimoji (2008) also treats the sounds corresponding to ‘s’, ‘z’, ‘ts’, and ‘f’ as syllabic consonants underlyingly; he analyzes this ‘ī’ as an inserted vowel.

not only have many consonant sequences resulted from this, it has also given rise to synchronic stem-final consonant doubling in the verbal morphology.

- (4) ssam < sɿram ‘louse’ (< Proto-Japonic *sirami)
tsɿf- ‘to make (stem)’; tsɿf-fan ‘to.make-NEGATIVE’ (< Proto-Japonic *tsukur-)

Also taking phenomena like these into account, the question of whether or not a vowel is present must be answered for each of the dialects within a system in which the morphology of that dialect can most adequately be explained in its entirety.

In the above, we have briefly discussed the question of whether or not a vowel is present in certain syllables by considering how to explain the nominal morphology of the Miyako dialects. We have not been able to consider all relevant factors in this section; we hope to be able to discuss these in more detail in the future.

2.2 Vowel systems

In the above, we have looked at each of the vowel phonemes of the Miyako dialects; the different vowel systems can be summarized as follows.

- Four-vowel system: /a, i, u, ɿ/
Ikema
- Five-vowel system: /a, i, u, o, ɿ/
Shimajiri, Irabu, Uruka, Bora, Nobaru
- Six-vowel system: /a, i, e, u, o, ɿ/
Kurima, Kugai, Karimata, Ōura, Yonaha

3 Consonants

3.1 Consonant types and properties

In this section, we will give the sound values of each of the consonant phonemes of the Miyako dialects and examples of words containing them, obtained at each of the survey sites. In cases where there has been a local sound change at a single site or where there is an exceptional sound correspondence, we will give additional examples for these.

The consonant types of the Miyako dialects encountered in the survey data that we will discuss in this chapter are /p, b, t, d, k, g, ts, s, z, f, v, χ, ɸ, h, ʃ, m, n, ŋ, r, j, w/. Among these, /v, m, n, r/ can be used as syllable nuclei; there are also cases in which they form a word by themselves, as long consonants²⁵. Generally speaking, there is a contrast between voiced and voiceless consonants²⁶.

3.1.1 Plosives

In phonetic terms, a property of the voiceless consonants is that they are aspirated word-initially.

/p/ (voiceless bilabial plosive)

This sound corresponds to Proto-Miyako *p; in some of the dialects, it has undergone the following changes.

- Ikema: p > h/[h~ç~ϕ]
- Karimata, Shimajiri, and Ōura: p > b / #__1C[+voiced] (only in some vocabulary items)

Table 12. The voiceless bilabial plosive.

	A-146 'the south'	A-139 'light'	A-016 'beard; mustache/ hair'	A-148 '(the) left (side)'	A-033 'leg'	B-002 'tooth'	B-007 'face'
Uechi	p ^h ai	pçkal	p ^ɕ igi	pidal ~ pida	pagi	pa:	
Yonaha	pai	p ^ɕ ka ^ɕ ɿ	p ^ɕ ɿgi	p ^ɕ da ^ɕ ɿ	p ^h ag ^ɕ ɿ		

²⁵ Some researchers additionally analyze the voiceless fricatives /s, f/ and affricates /ts, z/ as syllabic consonants. See Section 2.1.4 for details.

²⁶ As was also indicated in Footnote 21, Ōgami is the only dialect without a contrast between voiced and voiceless consonants.

Kugai	p ^h ai	pskaz	psgi	pzdaz	p ^h aɕi		
Irabu	p ^h ai	p ^s kaɭ	p ^s ɭgi	p ^h idiɭ	p ^h aɕɭ	pa:	mipana ~ miɸana
Bora	p ^h ai	pskaɭ	p ^s ɭgi	p ^s ɭdaɭ ~ p ^s ɭdaʒɭ	p ^h a ^d zɭ ~ p ^h agʒɭ	p ^h a:	mip ^h ana
Kuninaka	paɪbara	pɪkaɭ	p ^h iɭgi	p ^s idaɭ	pazi		
Ōura	p ^h ai	pskaɭ	p ^s ɭgi ~ pɭgi	bʒɭdaɭ	p ^h agɭ ~ p ^h agʒɭ	pa:	nipana
Shimajiri	p ^h ai	pskaʒɭ	bʒɭgi	bʒɭdaʒɭ	p ^h agɭ ~ p ^h agʒɭ	p ^h a:	mipana
Kurima	p ^h ai	pskaɭ	psgi	A: p ^h iɕaɭ / B: psdaz	p ^h aɕi		
Ikema	haɪbara	ɕɪkai	higi	ɕidai	haɕi	ha:	mihana
Karimata	p ^h ai	pskau	bzɣu ~ bzɣi ~ biɣi	bɪdaw ~ bzdaw	p ^h agɣ	pa	mipana
Uruka	p ^h ai	pʂkazɕ	psgi ~ p ^s ɭgi	pʂdaz ~ pʂdaɭ	pagʒ		
Nobaru					pagɭ	pa:	mipana

/b/ (voiced bilabial plosive)

This sound corresponds to Proto-Miyako *b; it is consistently encountered as /b/ at all of the sites.

Table 13. The voiced bilabial plosive.

	A-007	A-051	A-055	A-091	A-156	A-029
	‘lip’	‘husband’	‘child; minor’	‘sugar cane’	‘evening’	‘belly’
Uechi	siba	bikidum ~ bikiɕum	jarabi	bu:gi	jusarabi	
Yonaha	sʒba	but ^h u		bu:gʒɭ		
Kugai	sɪba	but ^h u	jarabi [new]	bu:gʒi	jusarabi	bat ^h a
Irabu	sɭba	butu	jarabi	bu:ɕɭ	jusarabi	bata
Bora	sɭba	bʊt ^h u	jarabi	bu:gʒɭ ~ bu:ɕɭ	jusarabi	bʊata
Kuninaka	sibaya	bʊtu	jarabi	bʊ:ɕi		bata
Ōura	NR	butu	jarabi	bu:gɭ ~ bu:gʒɭ		
Shimajiri	ʒɭba	butu		bu:gɭ ~ bu:gʒɭ		
Kurima	sɪba	bikidumu	jarabi	bu:ɕi	jusarabi	bata
Ikema	fʊtsi	butu	jarabi	bu:ɕi	jusarabi	bata
Karimata	sɪba	budu	jarabi	bu:gi	jusarabi	bada
Uruka	sɸa ~ spa	but ^h u	jarabi	bu:gʒ		
Nobaru						

/t/ (voiceless alveolar plosive)

This sound corresponds to Proto-Miyako *t; in some of the dialects, it has undergone the following changes.

- Shimajiri and Kuninaka: t > tɕ / __i
- Karimata: t > d / C[+voiced]V__

Table 14. The voiceless alveolar plosive.

	A-077 ‘bird’	A-154 ‘morning’	A-177 ‘earth’	A-018 ‘strength’	B-029 ‘one (person)’
Uechi	tou	situmuti	mta ~ mta̠	taja	
Yonaha	tuʒɿ	sɿtʰomoti	mtʰa	tʰaja	tɔvkʲa:
Kugai	tʰuz	ʃtumuti	mta	tʰaja	tɔfke:
Irabu	tʰuʒɿ ~ tʰuɿ	stumuti	mta	tʰaja	tauki:
Bora	tʰuɿ	sʰtomoti	mta	tʰaja	tavkʲa:
Kuninaka	tɯɿ	sɿ̠tumutɕi	nta	taja	taʷkʲa:
Ōura	tʰuɿ	stumuti	nta	tʰaja	tavkʲa:
Shimajiri	tʰuʒɿ	stumatɕi	nta	tʰaja	tʰafkja:
Kurima	tʰuz	stumuti	mta	taja	
Ikema	tui	ɕitumuti	nta ~ mta	taja	tauka:
Karimata	tuw	stumuti	nta	taja	taɸkʲa:
Uruka	tuzɿ	stumutɿ̠ ~ stumuti	mta	taja	tavkʲa:
Nobaru					taukja:

Table 15. Examples of t > d / C[+voiced]V__ in Karimata.

	A-029 ‘belly’	A-051 ‘husband’
Uechi		bikidum ~ bikiɖum
Yonaha		butʰu
Kugai	batʰa	butʰu / bikiʳʲa [old]
Irabu	bata	butu
Bora	ɸata	ɸotʰu
Kuninaka	bata	bɯtu
Ōura		butu

Shimajiri		butu
Kurima	bata	bikidumu
Ikema	bata	butu
Karimata	bada	budu
Uruka		but ^h u
Nobaru		

/d/ (voiced alveolar plosive)

This sound corresponds to Proto-Miyako *d. In Shimajiri, the change d > dʒ / __i has occurred.

Table 16. The voiced alveolar plosive.

	A-005	A-037	A-059	A-111	A-182	A-017
	‘tear(drop)’	‘body’	‘woman; female’	‘branch’	‘door’	‘arm’
Uechi			midum ~ mi ^d ðum	juda		udi
Yonaha			midumu	juda		k ^h aina
Kugai	nada / mi:nada	du:	midum	juda	jadu	udi / k ^h aina (‘shoulder ache’)
Irabu	nada	up ^h udu:	midum	ida	jadu	k ^h aina
Bora	nada	du:	midom	juda	jadu	odi
Kuninaka	nada	dɯ:	midum	juda		udi
Ōura	nada		miduŋ	ida		udi
Shimajiri			miduŋ	juda		uɕi
Kurima	nada	du:	midumu	ida	jadu	ude
Ikema	nada	du:	miduŋ	juda	jadu	ti: / kaina ‘wrist’
Karimata	nada	du:	miduŋ	ida	jadu	kaina
Uruka			midum	juda		kaina
Nobaru						

/k/ (voiceless velar plosive)

This sound corresponds to Proto-Miyako *k; it has undergone a variety of changes at the different sites.

- Karimata: $k > g / C[+voiced]V_^{27}$
- Irabu, Kuninaka, Kurima, and Ikema: $k > ts / _ _ _$
- ‘k’-lenition:
 Irabu: $k > h \sim x / a_ _ a$
 Shimajiri: $k > \chi / a_ _ a$
 Ōura: $\#aka > \#ha:$
 Karimata: $\#aka > \#ha:$, $Caka > Ca:$

Table 17. The voiceless velar plosive.

	A-126 ‘ash’	A-129 ‘wind’	A-139 ‘light’	A-164 ‘last year’	A-110 ‘tree’
Uechi	$karap^ha\lambda \sim karap^ha^z$	$kad\zeta i$	$p\zeta kal$	$ku\zeta u$	$ki:$
Yonaha	$k^harapa^z\lambda$	$k^had\zeta i$	$p^s\lambda ka^z\lambda$	$k^hu\zeta u$	$ki:$
Kugai	k^harap^haz	$k^had\zeta i$	$pskaz$	$ku\zeta u$	ki^{\cdot}
Irabu	$k^hara pa\lambda$	$k^had\zeta i$	$p^ska\lambda$	k^hudu	$k^hi:$
Bora	$k^harapa\lambda \sim k^harapa^z\lambda$	$k^ha^d\zeta i$	$pska\lambda$	$k^hu\zeta u$	$k^hi:$
Kuninaka	$karapa\lambda$	$kad\zeta i$	$p\lambda ka\lambda$	$ku\zeta u$	ki^{\cdot}
Ōura	$k^harapa\lambda$	$k^had\zeta i$	$pska\lambda$	$k^hu^d\zeta u$	$k^hi:$
Shimajiri	$karapa^z\lambda$	$k^had\zeta i$	$pska^z\lambda$	k^hudu	$ki:$
Kurima	A: $karaba\lambda$ / B: $karabaz$	$k^had\zeta i$	$pska\lambda$	$k^hu\zeta u$	$ki:$
Ikema	$karahai$	k^hadi	$\zeta\lambda kai$	$ku\zeta u$	$ki:$
Karimata	$karapaw$	$k^had\zeta i$	$pskaw$	$ku\zeta u$	$ki:$
Uruka	$karapaz$	$kad\zeta i$	$p\zeta kaz$	$ku^d\zeta u$	$ki: \sim ki:$
Nobaru					

Table 18. Examples of $k > g / C[+voiced]V_ _$ in Karimata.

	A-072 ‘buck’	A-079 ‘egg’
Uechi		$tunaka$
Yonaha		t^hunaka
Kugai	$bikip^hind\zeta a$	$tunak^ha$
Irabu	$bikipind\zeta a$	$k^hu:ga$

²⁷ Shimajiri t^hunaka ‘egg’, given in Table 18, seems to have undergone this change, as well, before the occurrence of the change $k > \chi / a_ _ a$ in Shimajiri.

Bora	ḃikipindza	t ^h onaka
Kuninaka	bikipinda	tunuka
Ōura		t ^h unaka
Shimajiri		t ^h unaxa
Kurima	bikip ^h indza	t ^h unuka
Ikema	bikihindza	tunuka
Karimata	bigipindza	tunuga
Uruka		tunaka
Nobaru		

Table 19. Examples of k > ts / __ ɲ in Irabu, Kuninaka, Kurima, and Ikema.

	A-121	A-163	A-030	A-142
	‘clothing; kimono’	‘yesterday’	‘heart/liver’	‘the moon/month’
Uechi	kiŋ	k ^s inu	kçimu ~ kimu	tsᵚikiju
Yonaha	k ^s ɲ	k ^s ɲu	k ^s ɲmu	tsɲk ^s ɲ / tsɲk ^s ɲuɔ:
Kugai	k ^s iŋ	ksinu	k ^{sz} imu	tskssu
Irabu	t ^s ɲ	tsɲu:	tsɲmu	ttsu ~ tsstsu (?)
Bora	k ^s ɲ	k ^s ɲu:	k ^s ɲmu	tskɲ
Kuninaka	tsiŋ	tsinu	tsimu	tsᵚittu
Ōura	k ^s ɲ	k ^s ɲu	k ^s ɲmu	tskɲ
Shimajiri	k ^s ɲ	k ^s ɲu	k ^s ɲmu	tskɲ ~ tsk ^s ɲ
Kurima	tsiŋ	tsino	tsimu	A: tsitsi / B: tsitsinuɔ:
Ikema	tsiŋ	nnu	tsimu	tsitsi
Karimata	k ^s iŋ	ksnu	k ^s imu	tskssu
Uruka	kɕn	kɕnu:	ksmu ~ k ^s ɲmu	tskɕ
Nobaru				

Table 20. Examples of ‘k’-lenition.

Irabu: k > h ~ x / a__a

Shimajiri: k > χ / a__a

Ōura: #aka > #ha:

Karimata: #aka > #ha:, Caka > Ca:

	A-100 ‘(wooden) bowl’	A-025 ‘blood’	A-186 ‘grave; tomb’	A-066 ‘ant’	A-178 ‘yard; garden’
Uechi	mak ^ʰ al	aχ ^ə atsi ~ ak ^ə atsi	p ^ə aka	ak ^ʰ ɑ:l	
Yonaha	mak ^h aʔ	ak ^h ətsɿ	p ^h aka	aka:ʔ	
Kugai	mak ^h azi	akatsi	p ^h aka	aka:ʔ	minaka
Irabu	maxaɿ ~ mahaɿ	ax ^ə atsɿ ~ ahatsɿ	p ^h a: ~ p ^h ɑ:	aha:	minaha
Bora	makaʔ	ak ^h ətsɿ	p ^h aka	aʔɿgara (Bora) / ak ^h a: (Aragusuku)	minaka
Kuninaka	makaɿ	ak ^ʰ ətsi	p ^ə aka	aka:	
Ōura	makaɿ	ha:tsɿ	p ^h aka	ha:ɿ ~ xa:ɿ	
Shimajiri	maχaɿ ~ maχaʔ	aχatsɿ	p ^ə χa	aχaʔ	
Kurima	A: makaɿ / B: makaz	A: akatsi / B: a ^k xatsi	p ^ə aka	A: akaɿ / B: akaz	minaka
Ikema	makai	akatsi	haka	akai	minaka
Karimata	ma:u	ha:tsi	p ^ə aka	ha:u	a:ra / mina:
Uruka	makaz	ak ^ə atsɿ	p ^ə aka	azgara	
Nobaru					

/g/ (voiced velar plosive)

This sound corresponds to Proto-Miyako *g; it has undergone a variety of changes at the different sites.

- Irabu, Kuninaka, Kurima, and Ikema: g > dz / __ɿ
- Shimajiri: g > ɸ / a__a
- Irabu: g > ɸ / a__a

Table 21. The voiced velar plosive.

	A-016 'beard; mustache/hair'	A-140 'shade'	A-174 'sand'	A-032 'knee'	A-062 'mosquito'
Uechi	p ^h igi	kagi	m ^h nagu	tsigusi	gaɖam
Yonaha	p ^h igi	k ^h agi	nnago:	tsɿgusɿ	gaɖam
Kugai	psgi	k ^h agi	m ^h nagu	tsigusi	gaɖam
Irabu	p ^h igi / fɯtsɿp ^h igi	k ^h a:gi	mnagu	tsɿgusɿ	gaɖam
Bora	p ^h igi	k ^h ag	nnago:	tsɿgusɿ	ga ^d zam
Kuninaka	p ^h igi	ka:gi	m ^h nagu	tsigusi	kadam
Ōura	p ^h igi ~ pɿgi	k ^h ag	nnagu	sugasɿ	ga ^d zan
Shimajiri	b ^h igi	k ^h agi	nnagu	tugusɿ ~ tugasɿ	gadan
Kurima	psg	kagi	m:nagu	tsigusi	gaɖam
Ikema	higi	kagi	nnagu	sigusi	kaɖan
Karimata	bzgu ~ bzgi ~ biḡi	kag	nnagu	tsigasi	ga ^d zan
Uruka	psg ~ p ^h igi	kagi ~ kag	n ^h nagu	tsusɿ ~ tsɿgusɿ	gaɖam
Nobaru					

Table 22. Examples of other changes of *g.

Irabu, Kuninaka, Kurima, and Ikema: g > dz / __ ɿ

Shimajiri: g > ɸ / a__a

Irabu: g > ʃ / a__a

	A-033 'leg'	A-091 'sugar cane'	A-124 'mirror'	A-143 'the east'
Uechi	pagi	bu:gi	kagam	aɣal
Yonaha	p ^h ag ^h ɿ	bu:g ^h ɿ	k ^h agam	aga ^h ɿ
Kugai	p ^h aɖi	bu:g ^h i	k ^h agam	aḡaz
Irabu	p ^h aɖɿ	bu:ɖɿ	k ^h aɸam	aɸaɿ
Bora	p ^h a ^d zɿ ~ p ^h ag ^h ɿ	bu:g ^h ɿ ~ bu:ɖɿ	k ^h agam	agaɿ
Kuninaka	pazi	bɯ:ɖi	kagam	agaɿ
Ōura	p ^h agɿ ~ p ^h ag ^h ɿ	bu:ḡɿ ~ bu:g ^h ɿ	k ^h agan	(agaɿ ~) a:ɿ
Shimajiri	p ^h agɿ ~ p ^h ag ^h ɿ	bu:ḡɿ ~ bu:g ^h ɿ	k ^h aɸan	aɸaɿ
Kurima	p ^h aɖi	bu:ɖi	kagam	A: agaɿ / B: agaz
Ikema	haɖi	bu:ɖi	kagan	agai
Karimata	p ^h agu	bu:ḡi	k ^h agan	a:u
Uruka	pagz	bu:gz	kagam	agaz
Nobaru	pagɿ			

3.1.2 Affricate

/ts/ (voiceless alveolar affricate)

This sound corresponds to Proto-Miyako *ts; it is almost always followed by /ɭ/. Depending on the dialect, there are words where /t/ is encountered instead before other vowels (e.g. Shimajiri ata ‘tomorrow’).

In addition, Proto-Miyako *kɭ has changed into /tsɭ/ in Irabu, Kuninaka, Bora, and Ikema.

Table 23. The unvoiced alveolar affricate.

	A-031 ‘mother’s milk; breast’	A-025 ‘blood’	A-142 ‘the moon/month’	A-160 ‘tomorrow’	A-101 ‘tea bowl; rice bowl’
Uechi	tsi	aχ̥atsi ~ ak̥atsi	ts̥ikiju	aça / at̥	
Yonaha	tsɭ:	ak ^h ̥atsɭ	tsɭk ^s ɭ / tsɭk ^s ɭnoju:	atsa	
Kugai	tsī	akatsī	tskssu	attsa	t̥ ^h aban̩
Irabu	tsɭ:	ax̥atsɭ ~ ahatsɭ	ttsu ~ t̥ttsu (?)	atsa	t̥aban̩
Bora	tssɭ	ak ^h ̥atsɭ	tskɭ	atsa	t̥aban̩
Kuninaka	tsi	ak ^ʰ ̥atsi	ts̥ittu	ata	
Ōura	tsɭ	ha:tsɭ	tskɭ	atsa	
Shimajiri	tssɭ	aχ̥atsɭ	tskɭ ~ ts̥k ^s ɭ	ata	
Kurima	A: ts̥ī / B: tss̥ī	A: akatsī / B: a ^k ̥xatsī	A: ts̥its̥ī / B: ts̥its̥inuju:	at̥ça	t̥aban̩
Ikema	ts̥ī:	akatsī	ts̥its̥ī	at̥ça	t̥aban̩
Karimata	tzī:	ha:ts̥ī	tskssu	atsa	t̥aban̩
Uruka	tsɭ:	ak̥atsɭ	tsk̥	ats̥̥	
Nobaru					

Table 24. tsɭ < *kɭ in Irabu, Kuninaka, Bora, and Ikema.

	A-030 ‘heart/liver’	A-121 ‘clothing; kimono’	A-009 ‘breath’
Uechi	k̥imu ~ kimu	kiɳ	
Yonaha	k ^s ɭ̥mu	k ^s ɭɳ	
Kugai	k ^{sz} ̥imu	k ^s iɳ	ik ^s ī
Irabu	tsɭmu ‘liver’	t̥ɳɳ	itsɭ
Bora	k ^s ɭ̥mu	k ^s ɭɳ	ik ^s ɭ
Kuninaka	tsimu	tsiɳ	itsi
Ōura	k ^s ɭ̥mu	k ^s ɭɳ	ikɭ

Shimajiri	k ^s ɿmu	k ^s ɿŋ	
Kurima	tsĩmu	tsĩŋ	A: i ^t sĩ / B: itsĩ
Ikema	tsĩmu	tsĩŋ	iki
Karimata	k ^s ĩmu	k ^s ĩŋ	ikuu
Uruka	ksmu ~ k ^s ɿmu	kʂn	
Nobaru			

3.1.3 Fricatives

/s/

[s] (voiceless alveolar fricative)

[ç] (voiceless alveopalatal fricative) / __ i

This sound corresponds to Proto-Miyako *s; when followed by ‘i’, its place of articulation moves closer to the palate.

In Ōura and at other sites, the following changes have occurred.

- Ōura and Shimajiri: *sɿ > ɿ / __ C[+voiced]
- Yonaha, Bora, and Ōura: *s > ts / N __

Additionally, in Ōura and Shimajiri, for example, ‘ssV’ deriving from *fusV is encountered.

Table 25. The voiceless alveolar/alveopalatal fricative.

	A-156	A-173	A-032	A-113	A-098	A-007	A-008
	‘evening’	‘coral reef’	‘knee’	‘grass’	‘miso; fermented soybean paste’	‘lip’	‘tongue’
Uechi	jusarabi	pçĩ ~ pçi	tsĩgusi	fũsa	ɱsu	sĩba	sĩda
Yonaha		çi: / p ^h ĩçi	tsĩgusɿ	fsa	mtsu	s ^z ɿba	s ^z ɿda
Kugai	jusarabi	pççi	tsĩgusi	fsa	msu	sĩba	sĩda
Irabu	jusarabi	pççi	tsĩgusɿ	fũsa	msu	sɿba	sta
Bora	jusarabi	pççi ~ piçi	tsĩgusɿ	fũsa	mtsu	sɿba	sɿda
Kuninaka		piçi	tsĩgusi	f̥sa	ɳsɯ	sĩbaya	sĩta / sta
Ōura		pççi	sugasɿ	ssa	ntsu	NR	ɿda ~ ^z ɿda
Shimajiri		piçi	tugusɿ ~ tugasɿ	ssa	nsu	^z ɿba	^z ɿda
Kurima	jusarabi	pçi	tsĩgusi	fsa	A: m:su / B: m:so	sĩba	sĩda
Ikema	jusarabi	piçi	sĩgusi	fũsa (= [f ^w sa])	nsu	fũtsĩ	çta
Karimata	jusarabi	pççi	tsĩgasĩ	fũsa	nsu	sĩba	sta

Uruka	pi̯çi	tsɯɯɟɟ ~ tsɟɟɯɟɟ	f̥sa	ɱsu ~ ɱsɯ	sɟ̥a ~ sɟ̥a	sɟ̥da ~ sɟ̥da / ʃda
Nobaru						

/z/

[z] ~ [dz] (voiced alveolar fricative/affricate)

[ʒ] ~ [dʒ] (voiced alveopalatal fricative/affricate) / __ i

This sound corresponds to Proto-Miyako *z; when preceded by ‘i’, its place of articulation moves closer to the palate. There is free variation between the fricatives and the affricates.

In addition, it has the following properties in the different dialects.

- Uechi and Kurima: except when followed by ‘ɟ’, it surfaces as [ʒ] ~ [dʒ].
- Ikema: dʒa²⁸, di, dʒu, dʒɟ
- Shimajiri and Kuninaka: except when followed by ‘i’ or ‘ɟ’, /d/ is used instead.
- In Irabu, Kuninaka, Kurima, and Ikema, *ɟɟ has changed into /dʒɟ/.

Table 26. The voiced alveolar/alveopalatal fricative/affricate.

	A-023 ‘elbow’	A-164 ‘last year’	A-062 ‘mosquito’	A-183 ‘gate’	A-129 ‘wind’
Uechi	pi̯dʒi	kuɟɟu	gaɟam	ɟɟo	kaɟi
Yonaha	p ^h i̯dʒɟ	k ^h uɟɟu	gaɟam	ɟɟo:	k ^h adʒi
Kugai	p ^h i̯dʒi	kuɟɟu	gaɟam	ɟɟo:	k ^h adʒi
Irabu	p ^h i̯dʒɟ	k ^h udu	gaɟam	ɟɟo:vtsɟ	k ^h adʒi
Bora	p ^h i̯dʒɟ	k ^h uɟɟu	ga ^d zam	ɟɟo: (Bora) / ɟɟau (Aragusuku)	k ^h a ^d ʒi
Kuninaka	p ^h i̯dʒi	kuɟɟu	kadam	dau	kaɟi
Ōura	p ^h i̯dʒɟ	k ^h u ^d zu	ga ^d zan	ɟɟo:futsɟ ‘entrance’	k ^h adʒi
Shimajiri	pi̯dʒɟ	k ^h udu	gadaɟ	dau	k ^h adʒi
Kurima	pi̯dʒi	k ^h uɟɟu	gaɟam	ɟɟo:	k ^h adʒi
Ikema	hi̯dʒi	kuɟɟu	kaɟan	ɟɟau	k ^h adi
Karimata	pi̯dʒi	kuɟɟu	ga ^d zan	ɟɟo:	k ^h adʒi
Uruka	pi̯dʒɟ ~ pi̯dʒɟ	ku ^ɟ ɟu	gaɟam	ɟɟau	kaɟi
Nobaru					

²⁸ According to the data in Table 26, the Ikema form for ‘gate’ is ‘dzau’, but in a survey of our own we have recorded ‘dʒau’.

Table 27. $g > dz / _ _ _$ in Irabu, Kuninaka, Kurima, and Ikema.

	A-033 'leg'	A-091 'sugar cane'	A-118 'nail; spike; peg'
Uechi	pagi	bu:gi	fugi
Yonaha	p ^h agʷ	bu:gʷ	fugʷ
Kugai	p ^h adzi	bu:gʷi	k ^h anifugz / fugz
Irabu	p ^h adʒ	bu:ɕ	fudʒ
Bora	p ^h a ^d ʒ ~ p ^h agʷ	bu:gʷ ~ bu:ɕ	fugʷ
Kuninaka	pazi	bu:ɕi	kanifudzi
Ōura	p ^h ag ~ p ^h agʷ	bu:g ~ bu:gʷ	k ^h anifug
Shimajiri	p ^h ag ~ p ^h agʷ	bu:g ~ bu:gʷ	fugʷ
Kurima	p ^h adzi	bu:ɕi	fudzi / k ^h anfudzi
Ikema	hadzi	bu:ɕi	kanifudzi
Karimata	p ^h agw	bu:gi	fugi ~ fugw
Uruka	pagz	bu:gʒ	fgʒ
Nobaru	pag		

/f/ (voiceless labiodental fricative)

This sound corresponds to Proto-Miyako *f; it generally has the sound value [f], but in rare cases it can also surface as a voiceless bilabial fricative [ɸ]. The 'k' in the word for 'cloud' in the data given below seems to have been used under the influence of Standard Japanese.

In Ōura, for example, *fusV has changed into 'ssV'.

Table 28. The voiceless labiodental fricative.

	A-094 'food'	A-172 'boat; ship'	A-132 'cloud'	A-004 'forehead'	A-006 'mouth'
Uechi	fa'munu	fun'i	kumu		futsi
Yonaha	fo:munu	funi	fom		futs
Kugai	fo:munu	funi	fumu	ftai	fts
Irabu	faɸmunu	funi	fumu	fɸtai	futs
Bora	faumunu	funi	fomu	fɸtai	futs
Kuninaka	faɸmunu	funi	fumu	fɸtai	futsi
Ōura	fo:munu	funi	k ^h umu	fɸtai ~ ftai	futs
Shimajiri	faumunu	funi	fuma		fts

Kurima	fɔːmunu	funi	fumu	fteː	ftsɪ
Ikema	faimunu	funi	ᵐmu	ftai	futsɪ
Karimata	faumunu	funi	fumu	ftai	futsɪ
Uruka	faumunu	ɸunʲi	ɸumu		fɪs ~ fɪsɭ
Nobaru					

Table 29. *fusV > ssV in Ōura and Shimajiri.

	A-113	A-003
	‘grass’	‘comb’
Uechi	fɯsa	fu
Yonaha	fsa	fʷɭ
Kugai	fsa	fsɪ
Irabu	fɯsa	fɯsɭ
Bora	fɯsa	fɯsɭ
Kuninaka	fɪsa	fsu
Ōura	ssa	sɪ ~ sɭ
Shimajiri	ssa	ssɭ
Kurima	fsa	futsɪ
Ikema	fɯsa (= [fʷsa])	fɯɕi
Karimata	fɯsa	futsɪ = fʷsɪ
Uruka	fɪsa	fɪs ~ fɪsɭ ~ fɯsɭ
Nobaru		

/v/

[v] (voiced labiodental fricative)

[ʋ] (voiced labiodental approximant)

This sound corresponds to Proto-Miyako *v; it is used not only as an onset consonant, but also as a syllable nucleus (with the exception of Ikema). In either environment, there is variation between the fricative and the approximant; its degree of stricture is high in some dialects and low in others. There are also dialects in which it assimilates to ‘u’ when preceded by ‘u’ (see ‘rice porridge’ in the table below). Furthermore, variation between /f/ ~ /v/ is observed among dialects for some vocabulary items.

Table 30. The voiced labiodental fricative/approximant.

	A-035 'calf (of the leg)'	A-043 'you'	A-095 'oil'	A-096 'rice porridge'
Uechi		vva		juv
Yonaha	k ^h ʊ:va	ʊva		jʊ:
Kugai	kuvva	vva	avva	juv
Irabu	k ^h uvva	ja:	avva	ɕu:ɕa
Bora	kʊvva	vva ~ ʊva	avva ~ aʊva	jʊv ~ jʊʊ
Kuninaka	kʊʊva	ʊva	aʊva	jʊʊʊ
Ōura	NR	ʊva		juv
Shimajiri	kuvva ~ kuʊva	vva		juv
Kurima	kuvva	vva	avva	juv
Ikema	kuvva	vva	avva	ju:
Karimata	kuʊva	ʊva	aʊva	N/R
Uruka	kʊʏva ~ kʊʊva	vva		juʏ
Nobaru				

Table 31. Variation among dialects between /f/ ~ /v/ (examples in which /f/ in Uechi, Kugai, and Shimajiri corresponds to /v/ in the other dialects).

	B-029 'one (person)'	A-184/A-149 'front'
Uechi		maf ^h kja:
Yonaha	tʊk ^h ja:	mau ^h k ^h ja:
Kugai	tɕfke:	maf ^h k ^h ja ~ maf ^h ɕk ^h ja
Irabu	tavki:	mau ^h kja:
Bora	tavk ^h ja:	mau ^h k ^h ja:
Kuninaka	ta ^v k ^h ja:	mau ^h kja:
Ōura	tavk ^h ja:	
Shimajiri	t ^h afkja:	maf ^h kja:
Kurima		mo:t ^h u ²⁹
Ikema	tauka:	mau ^h kja:
Karimata	taɸk ^h ja:	mau ^h kja: / maf ^h k ^h ja
Uruka	tavk ^h ja:	mau ^h kja: ~ maf ^h k ^h ja:
Nobaru	tavkja:	

²⁹ This word has a derivation different from those given for the other dialects.

/h/

[h] (voiceless glottal fricative) /__a

[ç] (voiceless palatal fricative) /__i

[ɸ] (voiceless bilabial fricative) /__u

This sound has the following two derivations.

- From *p: only in Ikema, /p/ has changed into /h/.
- From *k: only when adjacent to ‘a’; in Irabu and Karimata, for example.

See Table 12 for examples.

/χ/ (voiceless uvular fricative) [χ]

This sound is only encountered in Shimajiri; it is the result of *k in *aka undergoing a sound change. See Table 20 for examples. This sound occurs nowhere else in the Japanese archipelago.

/ʁ/ (voiced uvular fricative) [ʁ]

This sound is only encountered in Shimajiri; it is the result of *g in *aga undergoing a sound change. See Table 22 for examples. This sound occurs nowhere else in the Japanese archipelago.

/ʕ/ (voiced pharyngeal fricative) [ʕ]

This sound is only encountered in Irabu; it is the result of *g in *aga undergoing a sound change³⁰. See Table 22 for examples. This sound occurs nowhere else in the Japanese archipelago.

3.1.4 Nasals

/m/ (voiced bilabial nasal)

This sound corresponds to Proto-Miyako *m. It is a bilabial nasal when used as a syllable onset, but there are also dialects (Ōura, Shimajiri, Ikema, and Karimata) in which it loses its place of articulation and merges with /n/, becoming the equivalent of the Japanese moraic nasal, when used moraically (as a syllable nucleus or as a coda consonant).

³⁰ This sound has previously been described as a glottal stop.

Table 32. The voiced bilabial nasal.

	A-030	A-071	A-127	A-130	A-187
	‘heart/liver’	‘horse’	‘water’	‘whirlwind; tornado’	‘there (distal)’
Uechi	kçimu ~ kimu	nu:ma	midzi	amainoũ	kama
Yonaha	k ^s ɿmu	nu:ma	mi ^d zɿ	amaino:	k ^h ama
Kugai	k ^{szi} imu	nu:ma	midzi	ama.ino:	k ^h ama
Irabu	tsɿmu	nu:ma	mi ^d zɿ	amaino:	k ^h ama ~ k ^h ama:
Bora	k ^s ɿmu	nu:ma	mi ^d zɿ	amaino:	k ^h ama
Kuninaka	tsimu	nɯ:ma	midzi	amainau	kama
Ōura	k ^s ɿmu	numa	midzɿ	amaino:	k ^h ama
Shimajiri	k ^s ɿmu	nu:ma	midzɿ	amaino:	kama
Kurima	tsimu	nu:ma	midzi	ama.ino:	kama
Ikema	tsimu	nu:ma	midzi	amaunau	kama
Karimata	k ^s imu	nu:ma	mi ^(d) zi	ino:	kama
Uruka	ksmu ~ k ^s ɿmu	nu:ma _ɔ	midzɿ	amainau	k ^h ama:
Nobaru					

Table 33. When it is used moraically (as a syllable nucleus or as a coda consonant).

	A-170	A-062	A-059	A-098	A-177
	‘sea’	‘mosquito’	‘woman; female’	‘miso; fermented soybean paste’	‘earth’
Uechi	im	gaɖam	midum ~ mi ^d ðum	msu	mta ~ mta _ɔ
Yonaha	im	gaɖam	midumu	mtsu	mt ^h a
Kugai	im	gaɖam	midum	msu	mta
Irabu	im	gaɖam	midum	msu	mta
Bora	im	ga ^d zam	midum	mtsu	mta
Kuninaka	im	kadam	midum	nsu	nta
Ōura	iŋ	ga ^d zaŋ	miduŋ	ntsu	nta
Shimajiri	iŋ	gadaŋ	miduŋ	nsu	nta
Kurima	im	gaɖam	midumu	A: m:su / B: m:so	mta
Ikema	iŋ	kaɖaŋ	miduŋ	nsu	nta ~ mta
Karimata	iŋ	ga ^d zaŋ	miduŋ	nsu	nta
Uruka	im	gaɖam	midum	msu ~ msu _ɔ	mta
Nobaru					

/n/

[n] (voiced alveolar nasal)

[ŋ] (voiced velar nasal) / __#

This sound corresponds to Proto-Miyako *n. It is an alveolar nasal when used as a syllable onset; when used moraically (as a syllable nucleus or as a coda consonant), its place of articulation assimilates to that of the following phoneme, it becoming the equivalent of the Japanese moraic nasal.

Table 34. The voiced alveolar nasal.

	A-172 ‘boat; ship’	B-054 ‘flower’	A-131 ‘earthquake’	A-079 ‘egg’	A-028 ‘bone’
Uechi	funʲi		nai	tunaka	puni
Yonaha	funi		nai	tʰunaka	puni
Kugai	funi		nai	tunakʰa	pʰuni
Irabu	funi	pana	nai	kʰu:ga	pʰuni
Bora	funi	pʰana	nai	tʰunaka	pʰuni ~ puni
Kuninaka	funi		nai	tunuka	puni
Ōura	funi	pana	nai	tʰunaka	pʰuni
Shimajiri	funi	pʰana	nai	tʰunaka	pʰuni
Kurima	funi		nai	tʰunuka	pʰuni
Ikema	funi	hana	nai	tunuka	huni
Karimata	funi	pana	naw	tunuga	pʰuni
Uruka	ɸunʲi		nai	tunaka	puni ~ pʰuni
Nobaru		pana			

Table 35. The voiced velar nasal (word-final).

	A-101 ‘tea bowl; rice bowl’	A-121 ‘clothing; kimono’
Uechi		kiŋ
Yonaha		kʰŋ / kʰŋmonu
Kugai	tʰabaŋ	kʰiŋ
Irabu	tʰabaŋ	tʰŋ
Bora	tʰabaŋ	kʰŋ
Kuninaka		tsiŋ

Ōura		k ^s ɿŋ
Shimajiri		k ^s ɿŋ
Kurima	tɕabaŋ	ts̺iŋ
Ikema	tɕabaŋ	ts̺iŋ
Karimata	tɕabaŋ	k ^s iŋ
Uruka		kɕn
Nobaru		

/ŋ/

[ŋ] (voiceless alveolar nasal)

[ɱ] (voiceless bilabial nasal) / __C [+labial]

This sound is only encountered in Ikema. The two allophones have arisen through the sound changes *tsɿNV > ŋNV and *fumV > ɱmV, respectively. This sound occurs nowhere else in the Japanese archipelago. (‘nnu’ given below as the Ikema form for ‘horn (of an animal)’ and ‘yesterday’ appears to be a mistranscription for ‘ŋnu’ in both cases.)

Table 36. The voiceless alveolar/bilabial nasal.

	A-132 ‘cloud’	A-073 ‘horn (of an animal)’	A-163 ‘yesterday’
Uechi	kumu	tsinu	k ^s inu
Yonaha	fum	tsɿno	k ^s ɿno
Kugai	fumu	ts̺inu	ks̺inu
Irabu	fumu	tsɿnu ~ tsɿno	tsɿnu:
Bora	fumo	tsɿno	k ^s ɿno:
Kuninaka	fumu	tsinu	tsinu
Ōura	k ^h umu	tsɿnu	k ^s ɿnu
Shimajiri	fuma	tsɿnu	k ^s ɿnu
Kurima	fumu	ts̺inu	ts̺ino
Ikema	ɱmu	nnu	nnu
Karimata	fumu	tsɱu	ksɱu
Uruka	ɸumu	tsnu ~ tsɿnu	kɕnu:
Nobaru			

3.1.5 Liquid

/r/ (voiced alveolar tap)

This sound corresponds to Proto-Miyako *r. It is consistently encountered as [r] at all of the sites when used as a syllable onset. In one dialect, that of Kuninaka, it can be used moraically, in which case it surfaces as an alveolar lateral approximant [ɭ]³¹.

Table 37. The voiced alveolar tap.

	A-055 ‘child; minor’	A-092 ‘sickle; scythe’	A-156 ‘evening’
Uechi	jarabi	ⁱ zzara	jusarabi
Yonaha		zzara	
Kugai	jarabi [new]	zzara	jusarabi
Irabu	jarabi	ɭzara	jusarabi
Bora	jarabi	zzara	jusarabi
Kuninaka	jarabi	ⁱ zzara	
Ōura	jarabi	^ɰ zara	
Shimajiri		zzara	
Kurima	jarabi	zzara	jusarabi
Ikema	jarabi	zzara ~ ^d zara	jusarabi
Karimata	jarabi	izara	jusarabi
Uruka	jarabi	zzara	
Nobaru			

Table 38. Moraic /r/ in Kuninaka.

	A-077 ‘bird’	A-155 ‘daytime’	A-126 ‘ash’	A-139 ‘light’	A-143 ‘the east’
Uechi	tou	p ^s ima	karap ^h aɭ ~ karap ^h az	pçkal	aɣal
Yonaha	tu ^ɰ ɭ	p ^s ɭma	k ^h arapa ^ɰ ɭ	p ^s ɭka ^ɰ ɭ	aga ^ɰ ɭ
Kugai	t ^h uz	psima	k ^h arap ^h az / p ^h az(i)	pskaz	aḡaz
Irabu	t ^h u ^ɰ ɭ ~ t ^h uɭ	p ^s ɭ:ma	k ^h ara paɭ	p ^s kaɭ	aɬaɭ
Bora	t ^h uɭ	p ^s ɭ:ma	k ^h arapaɭ ~ k ^h arapa ^ɰ ɭ	pskaɭ	agaɭ
Kuninaka	tɭɭ	p ^h ɭ:ma	karapaɭ	pɭkaɭ	agaɭ

³¹ Moraic /r/ derives from *ɭ. The Uechi and Kurima forms in Table 10 also contain laterals, but these correspond phonologically to /ɭ/.

Ōura	t ^h uɿ	p ^s ɿma	k ^h arapaɿ	pskaɿ	(agaɿ ~) a:ɿ
Shimajiri	t ^h u ^z ɿ	p ^s ɿnaɣa / p ^s ɿma	karapa ^z ɿ	pska ^z ɿ	aɣaɿ
Kurima	t ^h uz	pssima	A: karabaɿ / B: karabaz	pskaɿ	A: agaɿ / B: agaz
Ikema	tui	hi:ma	karahai	ɕik ^h ai	agai
Karimata	tuw	psm ^h a	karapaw	pskaw	a:w
Uruka	tuz	p ^s ɿ:ma	karapaz	pɕkaz ^h	agaz
Nobaru					

3.1.6 Approximants

/j/ (voiced palatal approximant)

This sound corresponds to Proto-Miyako *j.

Table 39. The voiced palatal approximant.

	A-055 'child; minor'	A-111 'branch'	A-165 'a long time ago'	A-179 'house'	A-182 'door'
Uechi	jarabi	juda	ɲkja:ɲ		
Yonaha		juda	ɲk ^j a:ɲ		
Kugai	jarabi [new]	juda	ɲkja:ɲ	ja:	jadu
Irabu	jarabi	ida	mki:ɲ	ja:	jadu
Bora	jarabi	juda	ɲk ^j a:ɲ	ja:	jadu
Kuninaka	jarabi	juda	ɲkja:ɲ		
Ōura	jarabi	ida	ɲk ^j a:ɲ	ja:	
Shimajiri		juda	ɲkja:ɲ		
Kurima	jarabi	ida	ɲkja:ɲ	ja:	jadu
Ikema	jarabi	juda	ɲk ^j a:ɲ	ja:	jadu
Karimata	jarabi	ida	ikja:ɲ	ja:	jadu
Uruka	jarabi	juda	ɲkja:ɲ		
Nobaru					

/w/ (voiced labiovelar approximant)

As Proto-Japonic *w changed into Proto-Miyako *b, there are only a few examples of this sound; it is only used before the vowel /a/. As it appears in only a limited number of words, such as that for 'pig', and is in a complementary distribution with 'v', it may be an allophone of 'v'. In fact, in many dialects (Yonaha, Kugai, Bora, Shimajiri, and Uruka) it surfaces

as the approximant [ʋ], close to [v], rather than as [w]. In the other dialects, it appears to have become ‘v’ when used as a geminate, coda consonant, or syllable nucleus, and ‘w’ when used as a single onset consonant³².

Table 40. The voiced labiovelar approximant.

	A-075
	‘pig’
Uechi	wa:
Yonaha	va:
Kugai	va:
Irabu	wa:
Bora	va: ~ wa:
Kuninaka	wa:
Ōura	wa:
Shimajiri	va:
Kurima	wa:
Ikema	wa:
Karimata	wa:
Uruka	va:
Nobaru	

3.1.7 On whether there are glottalized sounds

According to, for example, Hirayama (ed., 1983), some of the dialects have the glottalized sounds /tʔ, tsʔ, kʔ/. Sounds that are phonetically close to the glottalized sounds widely encountered in the Northern Ryukyus are indeed observed, but they only appear word-initially, and together with the accompanying vowel, they have a length of two morae (e.g. Shimajiri ttu ‘person; human being’)³³. Their distinctive feature is therefore their length; it seems they should be interpreted phonologically as geminates, laryngeal tension occurring phonetically because they are stops³⁴. Furthermore, they differ from the glottalized sounds

³² For this reason, Pellard (2009:336) reconstructs the proto-form as *v.

³³ In the Miyako dialects, the minimum word length is two morae.

³⁴ Nakama (1984) takes his view, as well. Furthermore, differently from the glottalized sounds of Yonaguni and the like, they are the result of lexical rather than regular changes and therefore few in number; they are encountered only in some words in some of the dialects.

of the Northern Ryukyus in that they have all arisen through vowel elision (e.g. Shimajiri *ttu* < Proto-Miyako **pɿtu* ‘person; human being’). The following sounds are observed.

[tʔ] ~ [tt]: Ikema ‘(tobacco) pipe’, Shimajiri ‘person; human being’

[kʔ] ~ [kk]: Ikema ‘nine (things)’ (although it appears as ‘*kukunutsi*’ in the reported data, the variant ‘*kkunutsi*’ is also encountered)

[tsʔ] ~ [tts]: Ikema ‘sago palm’, Irabu ‘(tobacco) pipe’

Table 41. Words containing sounds phonetically close to glottalized sounds.

	A-060	B-113	B-027	B-076
	‘person; human being’	‘(tobacco) pipe’	‘nine (things)’	‘sago palm’
Uechi	pɿsu			
Yonaha	pʰɿtʰu			
Kugai	pstu			
Irabu	pstu	ttɕ(ɿ)z	kukunutsɿ	sɕitsɿ
Bora	pstu	kʰiɕi:lʔ	kukunutsi	ɕukʰatsɿ
Kuninaka	pʰɿtu		kɕkɕonɕtsi	sɕotetsi
Ōura	pstu	kiɕiʔɿ	kukunutsɿ	
Shimajiri	ttu	kiɕiɿ	kɕkukunutsɿ	
Kurima	pstu			
Ikema	pʰɿtu ~ ɕtu ~ ɕto	tʰi: tti:ʔ	kɕkukunutsɿ	ttɕu:tsɿ
Karimata	pstu	kʰisiu	kɕkukunutsu	stɿtsu / sɿsɕɕu / ssɕɕu
Uruka	pstɕ ~ pstɕ			
Nobaru		kiɕiʔɿ	kɕkukunutsɿ	sotetsɿ

3.2 Consonant systems

In the above, we have looked at each of the consonant phonemes of the Miyako dialects; the different consonant systems can be summarized as follows.

- The phonemes common to all the dialects:
/p, b, t, d, k, g, ts, s, z, f, v, h, m, n, ɾ, j, w/
- Phonemes that are encountered only in some of the dialects:
 - /χ/: Shimajiri
 - /ɸ/: Shimajiri
 - /ʎ/: Irabu
 - /ŋ/: Ikema

4 Syllables

At present, there has not yet been any research in which the syllable is discussed as a principal unit of articulatory rules in the Miyako dialects. We use the term ‘syllable’ to refer to a descriptive unit of, mainly, morphophonology and phonotactics³⁵.

There are many possible interpretations of the syllable structure of the Miyako dialects, depending on to what degree the syllabic consonants discussed in section 2.1.4 are recognized and on whether the glottalized sounds discussed in the previous section are recognized. We take the view that only /v, m, n, r/ can be syllabic consonants, recognizing geminates for other consonants, as was discussed in section 3.1. The syllable structure is then as in (5).

- (5) (i) (C₁)(C₂)(j)V(V)(C₃)
 (ii) (C₄)C₅(C₆)

Of these, (i) applies to syllables with a vowel as the nucleus, while (ii) applies to those with a consonant as the nucleus.

³⁵ As a result, it also has properties that are not wholly compatible with general syllable theory, such as the fact that the first ‘C’ in ‘CCV’ has a length of one mora.

- Cases in which both C_1 and C_2 are occupied involve either a geminate³⁶, of a fricative or a resonant /s, z, f, v, m, n, r/, or a partial geminate with /v, m/ as C_1 . Furthermore, in Ikema, Shimajiri, and Irabu, for example, geminates of plosives and affricates such as ‘t’, ‘k’, and ‘ts’ can also occupy C_1 and C_2 .

E.g. ssan ‘louse’, ffa ‘child’, nta ‘earth’, ttu ‘person; human being’

- C_3 can be occupied by /v, m, n, r/ (‘r’ only in Kuninaka; also, ‘v’ cannot occupy this position in Ikema).
- VV can be occupied by either a long vowel or a sequence of two different vowels. We have not, however, been able to discuss questions such as what kinds of vowel sequences are (or are not) possible in each of the dialects in this chapter.
- C_6 can be occupied by a consonant identical to C_5 (resulting in a long consonant). C_5 can be occupied by /v, m, n, r/ (‘v’ cannot occupy this position in Ikema). Also, C_4 can only be filled before /r/ (in Kuninaka); it can only be occupied by labials (‘p’, ‘b’, and ‘m’).

E.g. vv ‘to sell’, mm ‘sweet potato’, mrrna ([m]:na~mi[:na]) ‘garlic chive’

Bibliography

- Aoi, Hayato. 2010. ‘Minami-Ryūkyū Hōgen ni Okeru “Shitasakiteki-Boin” no Chōonteki-Tokuchō: Miyako Tarama Hōgen o Taishō to Shita Paratogurafī Chōsa no Shoki Hōkoku’. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 14(2):16–24.
- Aoi, Hayato. 2012. ‘Minami-Ryūkyū Miyako Hōgen no On’in Kōzō’. In: Makoto Minegishi, Osamu Hieda, Emiko Hayatsu, Yuji Kawaguchi (eds.), *Kōpasu ni Motozuku Gengogaku Kyōiku Kenkyū Hōkoku*, 8:99–113.
- Hayashi, Yuka. 2010. ‘Ikema (Ikema Ryukyuan)’. In: Michinori Shimoji & Thomas Pellard (eds.), *An Introduction to Ryukyuan Languages*, 167–88. Tokyo: Research Institute for Languages and Cultures of Asia and Africa.
- Hirayama, Teruo. 1964. ‘Ryūkyū Miyako Hōgen no Kenkyū’. *Kokugogaku (Studies in the Japanese Language)*, 56:61–73.

³⁶ We have discussed in section 2.1.4 how the geminates in ‘ssam’ (‘louse’) and ‘ffa’ (‘child’) have arisen as the result of the fricativization of a close vowel and the assimilation of a following liquid or semivowel. Although this fricativized vowel is maintained in the nominal-morphological interpretation that posits the same sound change, we view words like these as containing a geminate without a vowel. This is because they are the result of a sound change that has already been completed and therefore do not require the kind of synchronic analysis that is required in nominal morphology, and because the CCV syllable type that we assume for words such as ‘ssam’ (‘louse’) is independently needed for word-initial stop geminates such as that in Shimajiri ‘ttu’ (‘person; human being’).

- Hirayama, Teruo, Ichiro Oshima & Masachie Nakamoto. 1967. *Ryūkyū Sakishima Hōgen no Sōgōteki-Kenkyū*. Tokyo: Meiji Shoin.
- Hirayama, Teruo (ed.). 1983. *Ryūkyū Miyako Shotō Hōgen Kiso Goin no Sōgōteki-Kenkyū*. Tokyo: Ohfu.
- Igarashi, Yosuke, Yukinori Takubo, Yuka Hayashi, Thomas Pellard & Tomoyuki Kubo. 2012. 'Ryūkyū Miyakogo Ikema Hōgen no Akusento Taikēi wa San-Kei de Atte Ni-Kei de wa Nai'. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 16(1):134–48.
- Jakobson, Roman, Gunnar Fant & Morris Halle. 1952. *Preliminaries to Speech Analysis*. Cambridge, MA: MIT Press.
- Kajiku, Shin-ichi. 1989. 'Miyako Hōgen On'inron no Mondaiten'. *Okinawa Bunka: Okinawa Bunka Kyōkai Sōsetsu 40-Shūnen Kinenshi*, 421–39.
- Karimata, Shigehisa. 1986. 'Miyako Hōgen no "Nakajita Boin" o Megutte'. *Okinawa Bunka*, 22(2):54–64.
- Karimata, Shigehisa. 1987. 'Miyako Hōgen no Seisetsuteki na Shiin o Megutte'. In: Ryūkyū Hōgen Kenkyū Kurabu 30-Shūnen Kinenkai (ed.), *Ryūkyū Hōgen Ronsō*, 419–29.
- Karimata, Shigehisa. 1996. 'Miyako Hōgen no On'in Henka ni Tsuite no Oboegaki: Kūki-Rikigakuteki na Kanten kara Mite'. *Gengogakurin*, 1996–1997:709–22.
- Karimata, Shigehisa. 2005. 'Okinawa-Ken Miyakojima Hirara Hōgen no Fonēmu'. *Nihon Tōyō Bunka Ronshū*, 11:67–113.
- Karimata, Shigehisa. 2007. 'Ryūkyūgo On'in Henka no Kenkyū'. Kyoto University special lecture materials.
- Kitamura, Samuel H. 1960. 'Miyako Hōgen On'inron no Ichi-Kōsatsu'. *Kokugogaku (Studies in the Japanese Language)*, 41:94–105.
- Ladefoged, Peter & Ian Maddieson. 1996. *The Sounds of the World's Languages*. Oxford: Blackwell.
- Nakahara, Jo. 2001. 'Okinawa Miyakojima Bora Hōgen no On'in'. *Ryūkyū no Hōgen*, 26:105–23.
- Nakama, Mitsunari. 1984. 'Miyako no Kotoba'. *Shin-Okinawa Bungaku*, 61:121–7. The Okinawa Times.
- Nakama, Mitsunari. 1992. *Ryūkyū Hōgen no Kosō*. Tokyo: Daiichi Shobo.
- Ono, Makio, Makoto Kuno, Takao Sugimura & Mariko Kuno. 2000. 'Minami-Ryūkyū Hōgen no Nakajita Boin no Onsei Jisshitsu'. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 4(1):28–35.
- Pellard, Thomas. 2009. *Ōgami: Éléments de Description d'un Parler du Sud des Ryūkyū*. Doctoral dissertation, École des Hautes Études en Sciences Sociales.

- Pellard, Thomas. 2010. 'Ōgami (Miyako Ryukyuan)'. In: Michinori Shimoji & Thomas Pellard (eds.), *An Introduction to Ryukyuan Languages*, 113–66. Tokyo: Research Institute for Languages and Cultures of Asia and Africa.
- Sakiyama, Osamu. 1963. 'Ryūkyū Miyako Hōgen no Zessen Boin o Megutte'. *Onsei Gakkai Kaihō* (*Bulletin of the Phonetic Society of Japan*), 112(2):18–9.
- Sakiyama, Osamu. 1965. 'Hirayama Teruo–Shi–Ron Hihan: Ryūkyū Miyako Hōgen no Zessen Boin o Megutte'. *Kokugogaku* (*Studies in the Japanese Language*), 60:85–6.
- Sawaki, Motoei. 2000. 'Miyako Hōgen no Mondaiten'. *Onsei Kenkyū* (*Journal of the Phonetic Society of Japan*), 4(1):36–41.
- Shimoji, Kayoko. 2003. 'Miyako Tarama Hōgen no On'in oyobi Sono Henka no Genshō'. *Ryūkyū no Hōgen*, 28:93–113.
- Shimoji, Michinori. 2008. *A Grammar of Irabu, a Southern Ryukyuan Language*. Doctoral dissertation, Australian National University.
- Shimoji, Michinori. 2011. 'Irabu Ryukyuan'. In: Yasuhiro Yamakoshi (ed.), *Grammatical Sketches from the Field*, 77–131. Tokyo: Research Institute for Languages and Cultures of Asia and Africa.
- Shimoji, Michinori & Thomas Pellard (eds.). 2010. *An Introduction to Ryukyuan Languages*. Tokyo: Research Institute for Languages and Cultures of Asia and Africa.
- Thorpe, Maner L. 1983. *Ryūkyūan Language History*. Doctoral dissertation, University of Southern California.
- Uemura, Yukio. 1997. 'Onsei Kenkyū to Ryūkyū Hōgengaku'. In: Gengogaku Kenkyūkai (ed.), *Kotoba no Kagaku*, 8:17–47. Tokyo: Mugi Shoboo.
- Zec, Draga. 2007. 'The Syllable'. In: Paul de Lacy (ed.), *The Cambridge Handbook of Phonology*, 161–94. Cambridge: Cambridge University Press.

The Nominal Accent System of the Yonaha Dialect of the Southern Ryukyuan Language of Miyako: A Preliminary Report

Yosuke IGARASHI (Hiroshima University)

1 Introduction

The Ryukyuan language group comprises five languages, namely Amami, Okinawan (together constituting the Northern Ryukyuan group), Miyako, Yaeyama, and Yonaguni (together constituting the Southern Ryukyuan group) (Pellard 2009, 2011; Shimoji 2010). The Yonaha dialect, which will be the subject of analysis in this chapter, is a dialect of Miyako, a language in the Southern Ryukyuan group. It is spoken in the Yonaha district of Shimoji, Miyakojima City, Okinawa Prefecture.

My aim in this chapter is to describe the nominal accent system of the Yonaha dialect by analyzing the data obtained in a one-hour accent survey conducted with one native speaker, focusing especially on the surface realizations of accent patterns and the classification of vocabulary items falling under each pattern.

2 Descriptions in the literature

2.1 Overview

A description of the accent system of the Yonaha dialect may be found in the work of Teruo Hirayama et al. (1967). They state that while pitch is generally level, so that it can easily be mistaken for a one-pattern accent system, there is in fact a contrast between a low level pattern and a high level pattern (Hirayama et al. 1967:27). This description tells us, firstly, that the Yonaha dialect has a two-pattern accent system (see Uwano 1984), and secondly, that no marked pitch movements are observed in utterances of this dialect.

Hirayama et al. indicate that although the Yonaha dialect has a two-pattern accent system, a phenomenon is observed in which the distinction between the accent patterns is becoming unclear in the speech of younger speakers, which they call ‘accent conflation’. In particular, they state, a partial or complete coalescence of the accent patterns has occurred in verbs and adjectives. If the younger generation of the 1960s, when Hirayama et al. conducted their survey, can be defined as ranging from 10 to 25 years of age, the speakers in question must have been between their early sixties and late seventies in 2011, when our survey was conducted. As will be detailed below, the

analysis in this chapter is based on the utterances of a native speaker that was 75 years of age at the time. If, therefore, the description by Hirayama et al. is accurate, the distinction between the Yonaha dialect accent patterns that are the subject of the analysis in this chapter might have become unclear.

2.2 Classification of vocabulary items

According to Hirayama et al. (1967), the two-mora nouns of classes 1 through 3 (see Kindaichi 1974) fall under one accent pattern and those of classes 4 and 5 under the other in the Yonaha dialect (II-1,2,3/4,5). As regards three-mora nouns, however, the majority of classes 1 through 4 and part of class 5 fall under one accent pattern, while the majority of class 5 and almost all of classes 6 and 7 fall under the other (III-1,2,3,4,(5)/5,6,7). It has already been demonstrated sufficiently, however, that the classification of vocabulary items under accent patterns in the Ryukyuan languages cannot be explained by positing only the coalescence of classes (Hattori 1958, 1979; Matsumori 1998, 2000a, 2000b, 2008, 2010, 2011). When discussing the classification of vocabulary items under accent patterns in the Ryukyuan languages, it is useful to adopt the concept of classifying vocabulary items into ‘series’, as proposed by Akiko Matsumori.

These ‘series’ are classes of words distinguished by the accent patterns of Proto-Ryukyuan, as reconstructed by comparing the modern Ryukyuan dialects (Matsumori 2000b). Matsumori posits the existence of a distinction in Proto-Ryukyuan between at least two accent patterns for one-mora words and at least three for those with two or more morae, and calls the word classes distinguished by these accent patterns ‘series A’, ‘series B’, and ‘series C’. The order of the uppercase letters in these names is based on the correspondences between these series and the traditional classes. Specifically, the series that comprises almost all of the two-mora nouns of classes 1 and 2 is called ‘series A’, the series that comprises the majority of class 3 and part of classes 4 and 5 is called ‘series B’, and the series that comprises a minority of class 3 and part of classes 4 and 5 is called ‘series C’.

When the description by Hirayama et al. regarding which words fall under which accent pattern in the Yonaha dialect is re-examined using this classification by series, it is observed that series A and series B have coalesced into one accent pattern, series C constituting the other (A,B/C), as is pointed out by Matsumori (2011).

In the following, I will use the term ‘pattern AB’ for the accent pattern of the majority of the vocabulary items of series A and B in the Yonaha dialect and the term ‘pattern C’ for the accent pattern of the majority of the vocabulary items of series C. When referring to the accent patterns of Ryukyuan dialects that have a three-pattern accent system, I will use the terms ‘pattern A’, ‘pattern B’, and ‘pattern C’ for the accent patterns of the majority of the vocabulary items of series A, B, and C, respectively.

2.3 Surface realizations

The surface realizations of the accent patterns of the Yonaha dialect according to Hirayama et al. (1967) are given in Table 1. Below, I will follow custom in indicating the position of a pitch rise with '[' and that of a pitch drop with ']'. Judging by the realizations and the vocabulary items falling under the two patterns, the pattern that Hirayama et al. call the 'low level pattern' appears to correspond to our pattern AB, while the pattern they call the 'high level pattern' appears to correspond to our pattern C. Although Hirayama et al. give realizations of two-mora nouns both in isolation and followed by the particle *nudu* (nominative case + focus marker) and a predicate, they only give realizations in isolation for three-mora nouns.

Table 1. The descriptions by Hirayama et al. (1967) of the realizations of each of the accent patterns; the transcription is that of Hirayama et al. (1967).

No. of morae	Accent pattern	Utterance in isolation	Utterance followed by the marker <i>nudu</i> (nominative case + focus marker)
Two morae	Low level pattern (AB pattern)	jama 'mountain'	jama nudu [ʔai. 'There is a mountain.'
	High level pattern (C pattern)	[usi 'mortar; millstone'	[usi nudu ʔai. 'There is a mortar.'
Three morae	Low level pattern (AB pattern)	fūkuru 'bag; sack; pouch'	
	High level pattern (C pattern)	[fūsui 'medicine'	

As is clear from Table 1, pattern-AB words are realized entirely at low pitch, while pattern-C words are realized entirely at high pitch. When a two-mora noun is followed by the particle *nudu*, the pitch of the noun is maintained in the particle. In other words, the particle is realized with low pitch in the case of a pattern-AB noun and with high pitch in the case of a pattern-C noun.

3 Analysis

3.1 Methodology

3.1.1 Survey date and location

The data were obtained on September 7, 2011 in Shimoji, Miyakojima City, Okinawa Prefecture.

3.1.2 Informant

The survey was conducted with one male informant, born in 1936 (75 years of age at the time of the survey), who has lived in Yonaha his entire life. His parents and wife are also all from Yonaha.

3.1.3 Surveyed vocabulary

When compiling the vocabulary list used in the survey, I referred to the word forms of cognates in the Tarama (Matsumori 2010) and Ikema (Igarashi et al. 2012) dialects, which are also dialects of Miyako, to make sure that roughly the same number of two-mora nouns and three-mora nouns would be included. Vocabulary items were selected with the purpose of examining the correspondences between the traditional classes and the series in mind.

There is as yet no established view on what words constitute each series. I therefore used data from the Tarama dialect (Matsumori 2010) as a substitute for a classification into series in selecting items for the vocabulary list. This dialect has a three-pattern accent system and is among the dialects whose accent patterns display a systematic correspondence with those of other Ryukyuan languages. I made sure that of the items on the vocabulary list, roughly the same number would fall under each of the three Tarama dialect accent patterns (patterns A, B, and C).

As regards the traditional classes, I referred to *Akusento Chōsa Goi (B) (Accent Survey Vocabulary Items (B))*, a private printing by Zendo Uwano (see Uwano 1985 for the included vocabulary items), to make sure that at least one word of each class would be included in my selection of items for the vocabulary list.

Although 71 words had been included on the vocabulary list, the number of words that were actually recorded in the field and whose accent patterns could be identified through analysis is 66 (36 two-mora nouns, 25 three-mora nouns, and 5 four-mora nouns). They are given in Tables 3 and 4. Below, I will use a simplified phonetic transcription for words of the Yonaha dialect. [ɿ] represents an apical vowel; long vowels are transcribed using doubled vowel symbols.

In the survey, the vocabulary was recorded both uttered in isolation and inserted into the carrier sentences given in Table 2. One carrier sentence consisted of the surveyed vocabulary followed by the particle *nudu* (nominative case + focus marker) and a predicate; a second consisted of the surveyed vocabulary followed by the particle *mee* ‘too; also’ and a predicate¹. The various predicates used are also given in Table 2.

¹ A carrier sentence in which the demonstrative *kunu* ‘this’ was placed before and the particle *ja* (topic marker) after the surveyed vocabulary was used, as well, but as only a small portion of the surveyed vocabulary was uttered with this carrier sentence, I excluded it from the data for the analysis.

Table 2. Carrier sentences; X indicates the surveyed vocabulary.

Utterance in isolation	X.	‘X.’
Surveyed vocabulary + particle <i>nudu</i> + predicate	X <i>nudu</i> <i>nʲaaŋ</i> / <i>uraŋ</i> .	‘There is no X.’ (<i>nʲaaŋ</i> for inanimate; <i>uraŋ</i> for animate)
	X <i>nudu</i> <i>aa</i> / <i>uu</i> .	‘There is X.’ (<i>aa</i> for inanimate; <i>uu</i> for animate)
Surveyed vocabulary + particle <i>mee</i> + predicate	X <i>mee</i> <i>nʲaaŋ</i> / <i>uraŋ</i> .	‘There is no X, either.’ (<i>nʲaaŋ</i> for inanimate; <i>uraŋ</i> for animate)
	X <i>mee</i> <i>aa</i> .	‘There is X, too.’ (inanimate)
	X <i>mee</i> <i>aa</i> <i>dussɿ</i> .	‘There is X, too.’ (inanimate)
	X <i>mee</i> <i>arii</i> <i>duu</i> .	‘There is X, too.’ (inanimate)

3.1.4 Analysis procedure

The analysis is based on a combination of my own auditory impression of the recorded utterances and a visual inspection of the fundamental frequency (F0) curves extracted from the utterances. As the analysis in this chapter is of a preliminary nature and the quality and quantity of the data are limited, I did not perform a quantitative analysis. I used *Praat* (Boersma & Weenink 2011) to analyze the F0 curves.

3.2 Results

3.2.1 Overview

The validity of the descriptions in the existing literature was mostly confirmed. The range of pitch movement in the Yonaha dialect seems to be mostly narrow; one gets the impression that there are no marked fluctuations. This can be considered to be consistent with the description by Hirayama et al. (1967), who state that pitch is generally level. Furthermore, there is a distinction between at least two accent patterns in this dialect, again matching the description by Hirayama et al. (1976). Definitive evidence for a three-way distinction was not found (see Section 3.2.4, however). As regards the classification of vocabulary items, series A and series B have mostly merged to fall under one accent pattern, series C falling under the other (A,B/C), which again matches the description in the literature (Matsumori 2011).

Facts contradicting descriptions in the literature were also found, however. Hirayama et al. (1967) stated that a phenomenon was underway in which the distinction between the accent patterns was becoming unclear in the generation of our informant (accent conflation), but the results of our analysis indicate that a clear distinction between the accent patterns has been retained. The surface realizations of the accent patterns according to the analysis results do not completely match the description by Hirayama et al. (1967), which was given in Table 1.

3.2.2 Classification of vocabulary items

The accent patterns of the surveyed vocabulary according to the analysis results are given in Tables 3 and 4. In cases where the traditional classification contains a corresponding vocabulary item (a cognate), its class is indicated to the left of the Yonaha dialect word form.

As is clear from the table, all of the vocabulary items falling under pattern A in the Tarama dialect fall under pattern AB in the Yonaha dialect, with the exception of one word (*munuʎ* ‘language; word’). All of the vocabulary items falling under pattern B in the Tarama dialect, too, fall under pattern AB in the Yonaha dialect, again with the exception of one word (*pʉsʎ* ‘star; celestial body’), and all of the vocabulary items falling under pattern C in the Tarama dialect also fall under pattern C in the Yonaha dialect. This result supports Matsumori’s (2011) view that series A and series B have merged in the Yonaha dialect (A,B/C).

Table 3. The correspondences between the accent patterns of the Yonaha dialect and those of the Tarama dialect (first half).

		Accent patterns of the Yonaha dialect		
		Pattern AB		Pattern C
Accent patterns of the Tarama dialect	1-mora class 1	puu	‘sail; canvas’	— munuʎ ‘language; word’
	1-mora class 2	naa	‘name’	
	2-mora class 1	ika / ikʰa	‘squid’	
	2-mora class 1	usʎ	‘cattle (i.e. cow or bull)’	
	2-mora class 1	zzu	‘fish’	
	2-mora class 1	fʉtsʎ	‘mouth’	
	2-mora class 1	kʉsʎ	‘lower back; waist’	
	2-mora class 1	juda	‘branch’	
	2-mora class 1	musʎ	‘bug; insect’	
	2-mora class 2	kabʎ	‘paper’	
	2-mora class 2	pʰtu	‘person; human being’	
	2-mora class 2	isʎ	‘stone’	
	2-mora class 2	kaa	‘water well’	
	2-mora class X	kami	‘turtle; tortoise’	
	2-mora class X	tuʎ	‘bird’	
	3-mora class 1	butu	‘husband’	
	3-mora class 1	kʰataa	‘shape; form’	
	3-mora class 1	buduʎ	‘dancing; dance’	
	3-mora class 1	judaʎ	‘drool’	
	3-mora class 1	panatsʎʎ	‘nosebleed’	
	3-mora class 4	kagam	‘mirror’	
	3-mora class 4	fʉkuru	‘bag; sack; pouch’	
	3-mora class 4	kujum	‘calendar’	
	—	ffa	‘child; offspring’	
	—	tuzʎ	‘wife’	
	—	bikidumu	‘man; male/husband’	

Table 4. The correspondences between the accent patterns of
 the Yonaha dialect and those of the Tarama dialect (second half).

		Accent patterns of the Yonaha dialect			
		Pattern AB		Pattern C	
Accent patterns of the Tarama dialect	Pattern B	1-mora class 3	tii ‘hand; arm’	2-mora class 1	pʊsɿ ‘star; celestial body’
		2-mora class 3	mm ‘sweet potato’		
		2-mora class 3	pana ‘flower’		
		2-mora class 4	jadu ‘door’		
		2-mora class 4	dʒiŋ ‘money’		
		2-mora class 5	ami ‘rain’		
		3-mora class 1	kuruma ‘car’		
		3-mora class 4	uza ‘quail’		
		3-mora class 5	maffa ‘pillow’		
		3-mora class 5	avva ‘oil’		
		—	ŋki ‘scale (of an animal)’		
		—	kaina ‘arm’		
		—	kamatsɿ ‘cheek’		
		—	midumu ‘woman; female’		
		—	sajafu ‘carpenter’		
	Pattern C	2-mora class 3	puni ‘bone’		
		2-mora class 3	uja ‘grandfather’		
		2-mora class 3	maaɿ ‘ball’		
		2-mora class 4	usɿ ‘mortar; millstone’		
		2-mora class 4	im ‘sea’		
		2-mora class 4	funi ‘boat; ship’		
		2-mora class 5	madu ‘(spare) time’		
		2-mora class 5	nabi ‘pot; pan’		
		3-mora class 4	oogɿ ‘(folding) fan’		
		3-mora class 4	paʃsam ‘scissors; shears’		
		3-mora class 5	pookɿ ‘broom’		
		3-mora class 6	ssam ‘louse’		
		3-mora class 7	fʊsuɿ ‘medicine’		
		—	sʌta ‘sugar’		
		—	tida ‘the sun’		
		—	waa ‘pig’		
		—	aagu ‘song’		
		—	gazam ‘mosquito’		
		—	mmaga ‘grandchild’		
		—	jarabi ‘child; minor’		
		—	miipana ‘face’		
		—	nuzzuu ‘thread; string’		
		—	ʕiibuni ‘spine’		

Below, I will briefly discuss the words with irregular series or class correspondences. I will consider not only correspondences with the Tarama dialect, but also those with the Okinoerabu

dialect of Amami (Matsumori 2000b) and the Kin dialect of Okinawan (Matsumori 2008). Like the Tarama dialect, these dialects have a three-pattern accent system.

As *pʏsʏ* ‘star; celestial body’ is a two-mora class 1 word in the traditional classification, the views given in the literature regarding the correspondences between the traditional classification and the accent patterns of the Ryukyuan languages would lead one to expect it to be a series-A word (Hattori 1958, 1979; Matsumori 1998 et seq.). As it has a pattern-B accent in the Tarama dialect of Miyako and a pattern-C accent in the Yonaha dialect, however, the correspondence is irregular. In the Kin dialect of Okinawan, on the other hand, the correspondence is regular, it having a pattern-A accent (Matsumori 2008).

As *fʏkuru* ‘bag; sack; pouch’ is a three-mora class 4 word in the traditional classification, one would expect it to be either a series-B or a series-C word, but as it has a pattern-A accent in the Tarama dialect of Miyako, the correspondence is irregular. In the Yonaha dialect, on the other hand, it has a pattern-B accent, so the correspondence appears to be regular. It has a pattern-C accent in the Kin dialect of Okinawan, however, so the correspondences among the dialects are nonetheless irregular.

Similarly, *pasam* ‘scissors; shears’ is a three-mora class 4 word in the traditional classification, so one would expect it to be a series-B or a series-C word. This word has a pattern-C accent both in the Tarama dialect of Miyako and in the Yonaha dialect, but as it has a pattern-B accent in the Kin dialect of Okinawan, the correspondences among the dialects are irregular.

As *kagam* ‘mirror’ and *kujum* ‘calendar’, too, are three-mora class 4 words in the traditional classification, one would expect them to be either series-B or series-C words. Although the correspondences appear to be regular in the Kin dialect of Okinawan, where these words have a pattern-B accent, they are irregular in the case of the Tarama dialect of Miyako, where they have a pattern-A accent. In the Yonaha dialect, on the other hand, they have a pattern-AB accent, so it cannot be determined whether the correspondences are regular.

Lastly, although no cognate of the word *munuʏ* ‘language; word’ is included in the traditional classification, it has a pattern-B accent both in the Tarama dialect of Miyako and in the Okinoerabu dialect of Amami. In the Yonaha dialect, however, it has a pattern-C accent, so the correspondence is irregular.

3.2.3 Realizations in ‘noun + *nudu* + predicate’

Let us first examine the realizations of nouns followed by the particle *nudu* and a predicate. Two examples of realizations of two-mora nouns are given in Figure 1. The top portion of the figure contains the acoustic waveforms, the middle portion the F0 curves, and the bottom portion

transcriptions of the words and their morae. The vertical lines crossing the acoustic waveforms and F0 curves indicate mora boundaries.

In the pattern-AB example, F0 rises in the second mora of the particle *nudu*; before that, F0 remains low. In the pattern-C example, on the other hand, F0 rises in the second mora of the noun and remains high until the end of the particle *nudu*. The pitch of the first mora of the pattern-C noun appears not to be stable. Although the pitch of this mora is sometimes perceived to be at the same level as that of the second mora (that is, high), it is also sometimes perceived as lower than that of the second mora. This may be connected to the ‘sudden word-initial drop’ discussed below.

Hirayama et al. (1967) give a description of the realization of two-mora nouns followed by the particle *nudu* (Table 1). Let us compare it to the results of our analysis. The description by Hirayama et al. is different from our analysis results in that they state that all morae are realized with low pitch in pattern AB, including those of the particle *nudu*. It is unclear whether this is due to a generational or individual difference or caused by something else. As regards pattern C, on the other hand, Hirayama et al. state that all morae, including those of the particle *nudu*, are realized with high pitch, which mostly matches the results of our analysis (this is limited, however, to realizations in which F0 remains at roughly the same level throughout the first and second morae).

As is clear from the left-hand part of Figure 1, a sudden word-initial drop of F0 is observed in two-mora pattern-AB nouns (it is unclear if this can also be observed in two-mora pattern-C nouns). It is at present unclear whether this drop is an attribute of the beginning of the word (the beginning of the prosodic word) or an attribute of the beginning of a higher-level prosodic unit. In the following, I will call this drop the ‘sudden word-initial drop’.

This sudden word-initial drop is perceptible, but, at least in the case of two- and three-mora nouns, it does not give the same kind of auditory impression as initial-high-pattern nouns in the Tokyo dialect. This sudden word-initial drop gives one the auditory impression of the pitch of the voice tracing a concave curve. Moreover, while this sudden word-initial drop is perceived distinctly in some tokens, it is hardly perceived in others—in the case of two- and three-mora nouns, at least. It is at present unclear whether the sudden word-initial drop is a linguistically significant attribute. I will consider this question again when I will examine four-mora nouns.

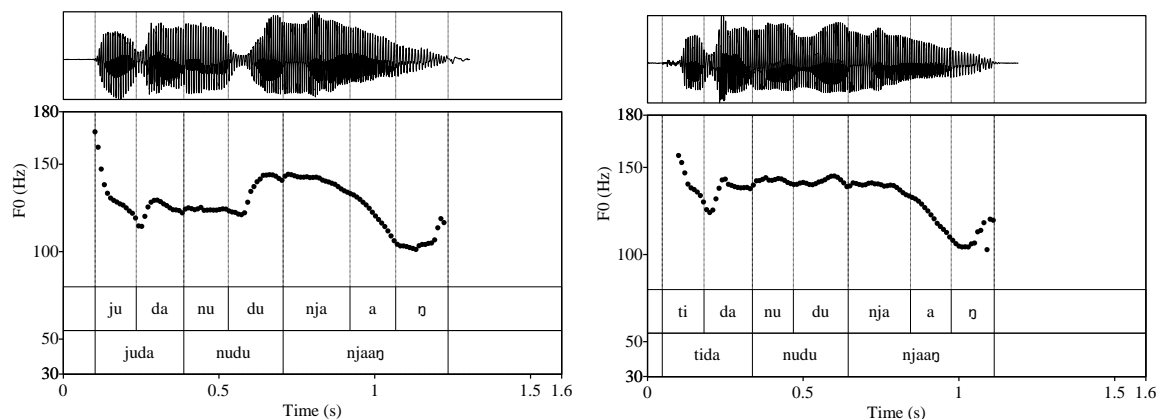


Figure 1. Two-mora noun + *nudu* + predicate;
pattern-AB *juda* ‘branch’ (left), pattern-C *tida* ‘the sun’ (right).

Two examples of realizations of three-mora nouns are given in Figure 2. In the pattern-AB example, F0 rises in the second mora of the particle *nudu*, similarly to two-mora pattern-AB nouns. It is also similar to two-mora pattern-AB nouns in that a sudden word-initial drop is observed.

In the pattern-C example, F0 rises in the third mora of the noun and remains high until the end of the particle *nudu*; it remains low before the third mora of the noun. At the beginning of the word, a sudden word-initial drop is observed.

Differently from Figure 1, a drop in F0 is observed from the particle *nudu* into the predicate in Figure 2; this is not due, however, to the accent pattern of the noun, but rather to that of the predicate (*n'aaŋ* vs. *uraŋ*).

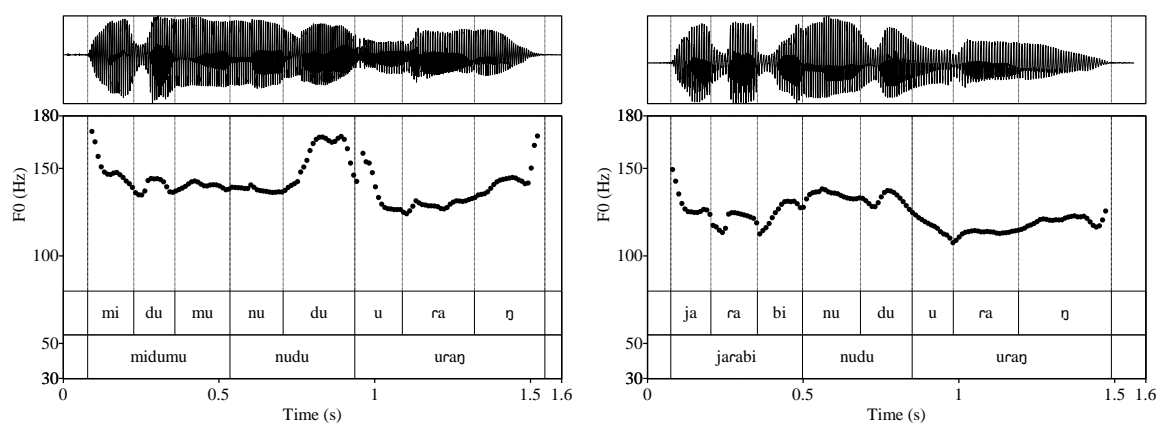


Figure 2. Three-mora noun + *nudu* + predicate;
pattern-AB *midumu* ‘woman; female’ (left); pattern-C *jarabi* ‘child; minor’ (right).

Two examples of realizations of four-mora nouns are given in Figure 4. In the pattern-AB example, F0 rises in the second mora of the particle *nudu*, similarly to two- and three-mora pattern-AB nouns. In the pattern-C example, on the other hand, F0 rises in the third mora of the noun and remains high until the end of the particle *nudu*, similarly to three-mora pattern-C nouns.

Both in the pattern-AB example and in the pattern-C example, a drop in F0 is observed from the first mora of the noun into the second mora. This drop is different from the sudden word-initial drop observed in two- and three-mora nouns, both acoustically and in terms of the auditory impression it gives. In two- and three-mora nouns, the F0 drop is completed in a very short time, so F0 has a low value for most of the first mora. In four-mora nouns, on the other hand, F0 has a high value for most of the first mora, the F0 drop occurring from around the end of the first mora into the second mora. Consequently, the beginning of four-mora nouns gives an auditory impression similar to initial-high-pattern nouns in the Tokyo dialect; that is, an impression of a high-pitched first mora and a low-pitched second mora. I will call the phenomenon observed in four-mora nouns ‘word-initial prominence’. It is unclear whether this is an attribute of the beginning of the word or an attribute of the beginning of a higher-level prosodic unit.

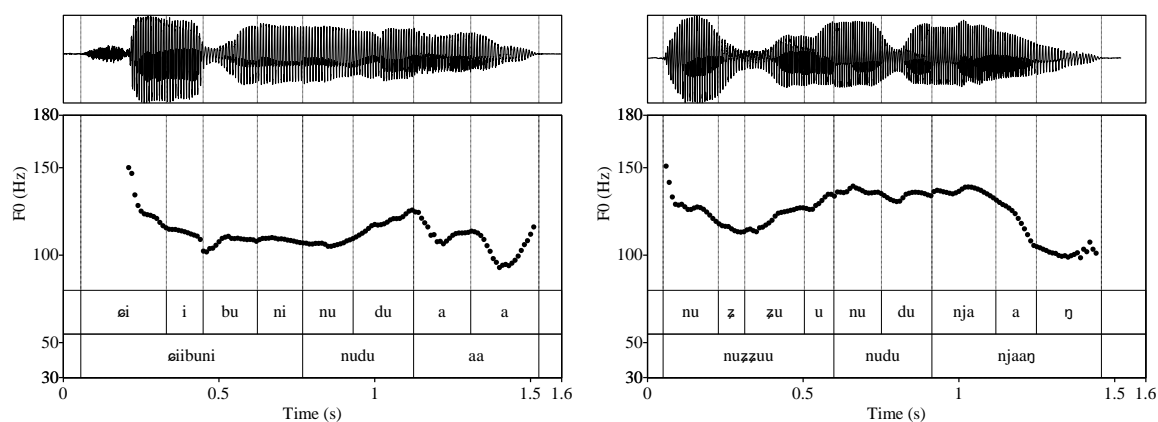


Figure 3. Four-mora noun + *nudu* + predicate;
 pattern-AB *eiibuni* ‘spine’ (left), pattern-C *nuzzuu* ‘thread; string’ (right).

In the environment of ‘four-mora noun + particle *nudu* + predicate’, the combination of this word-initial prominence with the F0 rise that occurs in the second mora of the particle *nudu* in the case of pattern AB and in the third mora of the noun in the case of pattern C results in high-pitched morae being perceived in two places, surrounding morae perceived as low-pitched. In other words, a realization with what has traditionally been called ‘double-contour pitch’ is observed².

² Akiko Matsumori had informed me before the survey that double-contour pitch can be observed in nouns comprising a large number of morae.

Whether there is a connection between this word-initial prominence in four-mora nouns and the sudden word-initial drop in two- and three-mora nouns or they are independent phenomena is a matter that has to be resolved in future research³.

3.2.4 Realizations in ‘noun + *mee* + predicate’

Next, let us examine the realizations of nouns followed by the particle *mee* and a predicate. As will become clear below, these realizations differ from those of nouns followed by the particle *nudu*. As the difference observed between these two environments is marked, it may be possible to view this phenomenon as an alternation between different accent patterns depending on the adjacent element⁴.

Two examples of realizations of two-mora nouns are given in Figure 4. It appears that in this environment, the distinction between pattern AB and pattern C is neutralized. In both accent patterns, F0 is low in the first mora, rises in the second mora, and remains high until the end of the particle. In addition, a sudden word-initial drop is observed at the beginning of the word.

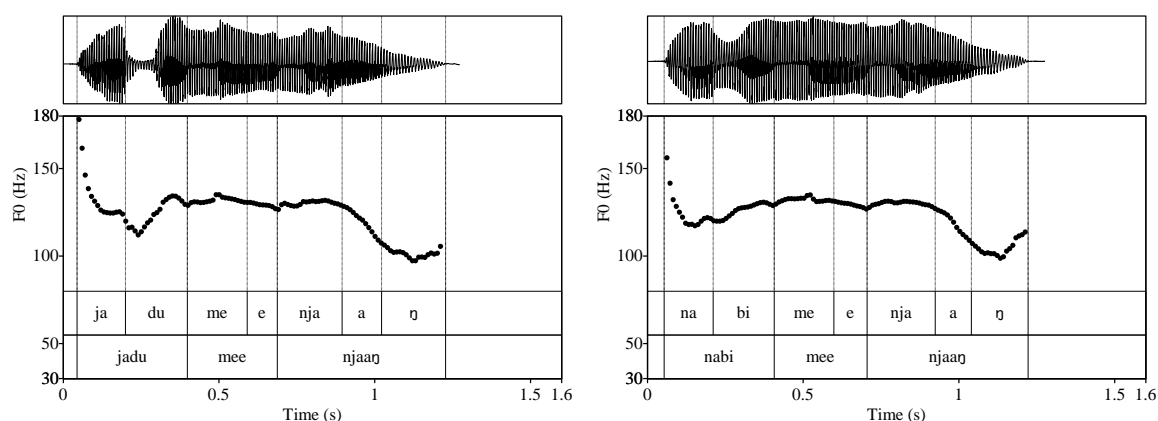


Figure 4. Two-mora noun + *mee* + predicate;
pattern-AB *jadu* ‘door’ (left), pattern-C *nabi* ‘pot; pan’ (right).

Two examples of realizations of three-mora nouns are given in Figure 5. In the pattern-AB example, F0 rises in the third mora of the noun and remains high until the end of the particle. At

³ In my subjective observation, sudden word-initial drops also occur in some of the Japanese dialects that, similarly to the Yonaha dialect, have an accent pattern in which pitch starts low word-initially and rises in the middle of the word, such as the Kagoshima dialect and the dialect of Goshogawara in Aomori Prefecture. It is interesting that dialects with what is called ‘double-contour pitch’ are found in the vicinity of the areas where these dialects are spoken (for example, the dialect of Yamada Town in Iwate Prefecture (Onishi 1989) and the dialect of Koshikijima in Kagoshima Prefecture (Kamimura 1941)).

⁴ Akiko Matsumori had informed me before the survey that such an alternation between accent patterns can be observed in this dialect.

the beginning of the word, a sudden word-initial drop is observed. In the pattern-C example, on the other hand, the whole noun is realized with a high F0, after which it drops from the end of the noun into the beginning of the particle, rising again in the second mora of the particle. A sudden word-initial drop is observed in this environment, as well.

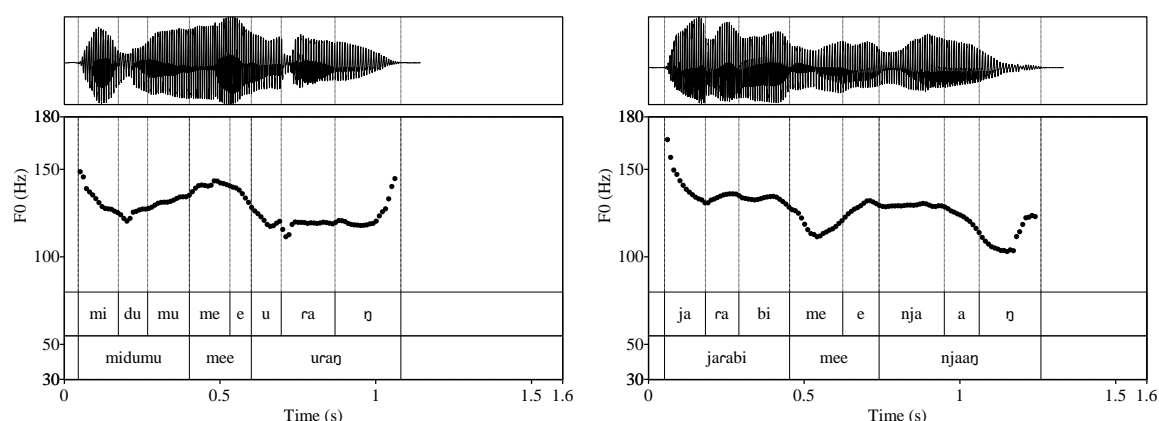


Figure 5. Three-mora noun + *mee* + predicate;
 pattern-AB *midumu* ‘woman; female’ (left), pattern-C *jarabi* ‘child; minor’ (right).

Two examples of realizations of four-mora nouns are given in Figure 6. In the pattern-AB example, word-initial prominence is observed—in other words, the first mora is high-pitched and the second mora low-pitched—after which F0 rises in the third mora, remaining high until the end of the particle. In the pattern-C example, on the other hand, roughly the whole noun is realized with a high F0, after which a drop in F0 is observed from the end of the noun into the beginning of the particle; F0 rises again in the second mora of the particle.

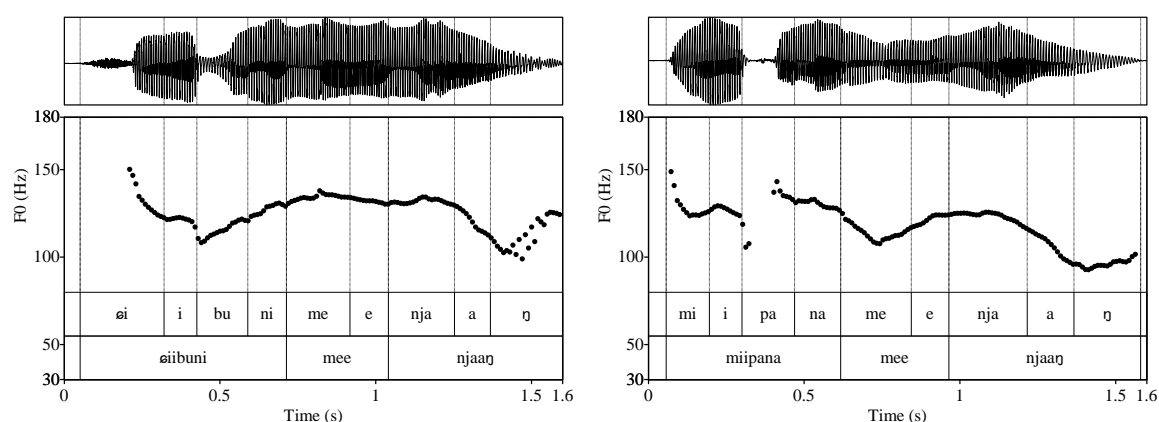


Figure 6. Four-mora noun + *mee* + predicate;
 pattern-AB *eiibuni* ‘spine’ (left), pattern-C *miipana* ‘face’ (right).

3.2.5 Realizations in utterances in isolation

Lastly, let us examine the realizations of nouns uttered in isolation. In isolation, the realizations of two-mora nouns that fall under pattern AB as well as those that fall under pattern C fluctuate between a falling pattern and a rising pattern. A ‘falling pattern’ refers here to a realization in which the first mora has high pitch and the second mora low pitch, while a ‘rising pattern’ refers to a realization in which the first mora has low pitch and the second mora high pitch. Consequently, pattern AB and pattern C cannot always be distinguished when these words are uttered in isolation. As is explained below, however, a falling pattern and a rising pattern are not always equally likely to occur.

Pattern-C words are more often realized with the rising pattern. There were eleven two-mora pattern-C nouns, but among them, *uja* ‘parent’, *waa* ‘pig’, and *pusʔ* ‘star; celestial body’ are the only three words that were pronounced with the falling pattern at least once. If we use the term ‘falling pattern ratio’ for the number we get by dividing the number of tokens of a certain word that were realized with the falling pattern in isolation by the total number of tokens of that word and multiplying the result by 100, the falling pattern ratio for pattern-C words was 21.2% (N = 11, SD = 40.2). It therefore seems justified to view the rising pattern as the typical realization of pattern-C words when uttered in isolation.

In pattern-AB words, on the other hand, no marked difference is found between the number of realizations with the falling pattern and the number of realizations with the rising pattern. There were 25 two-mora pattern-AB nouns, among which 16 words were realized with the falling pattern at least once. The falling pattern ratio was 50.3% (N = 25, SD = 44.9). It is therefore difficult to determine whether the falling pattern or the rising pattern is the typical realization of pattern-AB words.

An example of a minimal pair with contrasting accent patterns (pattern-AB *usʔ* ‘cattle (i.e. cow or bull)’ and pattern-C *usʔ* ‘mortar; millstone’), uttered in isolation, is given in Figure 7. At least in the data used for this analysis, pattern-AB *usʔ* ‘cattle (i.e. cow or bull)’ was always realized with a falling pattern and pattern-C *usʔ* ‘mortar; millstone’ always with a rising pattern. That there are pattern-AB words that are realized both with the falling pattern and with the rising pattern is shown in Figure 8. In this case, pattern-AB *ika* ‘squid’ was realized with both patterns.

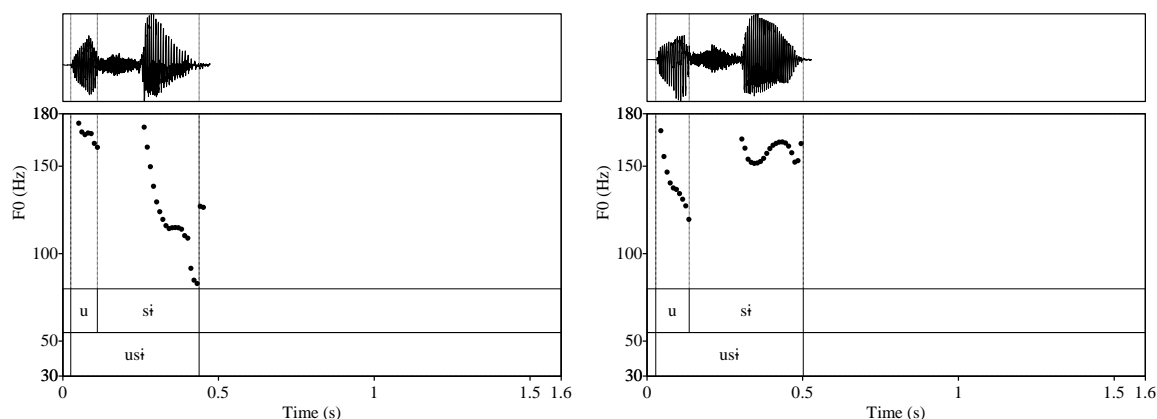


Figure 7. Two-mora nouns uttered in isolation;
 pattern-AB *usɿ* ‘cattle (i.e. cow or bull)’ (left), pattern-C *usɿ* ‘mortar; millstone’ (right).

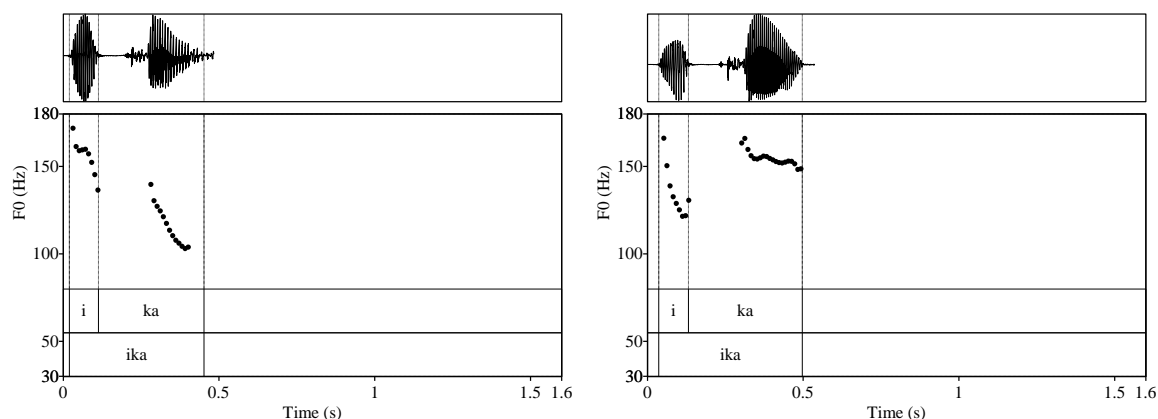


Figure 8. Fluctuation in a two-mora AB-pattern noun uttered in isolation;
 pattern-AB *ika* ‘squid’ realized with falling pitch (left) and with rising pitch (right).

As Hirayama et al. (1967) give a description of the realization of two-mora nouns uttered in isolation (Table 1), let us compare it to the results of our analysis. According to the description by Hirayama et al., all morae are realized with low pitch in pattern AB; this does not match our analysis results. They state that all morae are realized with high pitch in pattern C; this, too, does not match our analysis results. It is unclear whether this is due to a generational or individual difference or caused by something else.

Let me next point out some interesting tendencies that were observed in the fluctuation in the realizations of two-mora pattern-AB words uttered in isolation, bearing in mind that as the quality and quantity of the data used for this analysis are limited, the likelihood that they are due to chance is very high.

A tendency towards one of the series was observed in the two-mora pattern-AB nouns that were realized with the rising pattern. The seven words among the two-mora pattern-AB nouns that are regarded as belonging to series B were always realized with the rising pattern, with the exception of one word (all except the last word of *ami* ‘rain’, *mm* ‘sweet potato’, *pana* ‘flower’, *tii* ‘hand; arm’, *jadu* ‘door’, *dziŋ* ‘money’, and *uza* ‘quail’). The falling pattern ratio of the series-B words was 14.2% (N = 7, SD = 37.8). This result suggests that the rising pattern is the typical realization of series-B words. Among the eighteen words regarded as belonging to series A, on the other hand, no more than three words were always realized with the rising pattern (only the last three words of *butu* ‘husband’, *ffa* ‘child; offspring’, *fycŋ* ‘mouth’, *ika* ‘squid’, *isŋ* ‘stone’, *kaa* ‘river’, *kami* ‘turtle; tortoise’, *musŋ* ‘bug; insect’, *naa* ‘name’, *pŋtu* ‘person; human being’, *puu* ‘sail; canvas’, *tuŋ* ‘bird’, *tuzŋ* ‘wife’, *usŋ* ‘cattle (i.e. cow or bull)’, *zzu* ‘fish’, *kabŋ* ‘paper’, *kysŋ* ‘lower back; waist’, and *juda* ‘branch’). The falling pattern ratio of the series-A words was 64.4% (N = 18, SD = 40.0). This result suggests that the falling pattern is the typical realization of series-A words.

Provided that these results are not due to chance, they show that in the Yonaha dialect, there is a distinction in accent patterns between series A on the one hand and series B and C on the other in two-mora nouns uttered in isolation (A/B,C). As was discussed in sections 3.2.2 through 3.2.4, in other environments a distinction in accent patterns is made between series A and B on the one hand and series C on the other in two-mora nouns (A,B/C). This means, in other words, that the Yonaha dialect does not have a two-pattern, but a three-pattern accent system—provided that these results are not due to chance. Further research is needed to confirm this.

Next, let us examine three-mora nouns uttered in isolation. Two examples of realizations of three-mora nouns uttered in isolation are given in Figure 9. In the pattern-AB example, F0 is low in the first two morae and rises in the third mora. At the beginning of the word, a sudden word-initial drop is observed. In the pattern-C example, on the other hand, F0 is high in the first two morae and drops in the third mora. At the beginning of the word, a sudden word-initial drop is observed.

As Hirayama et al. (1967) give a description of the realization of three-mora nouns uttered in isolation (Table 1), let us compare it to the results of our analysis. According to the description by Hirayama et al., all morae are realized with low pitch in pattern AB; this does not match our analysis results. They state that all morae are realized with high pitch in pattern C; this, too, does not match our analysis results. It is unclear whether this is due to a generational or individual difference or caused by something else.

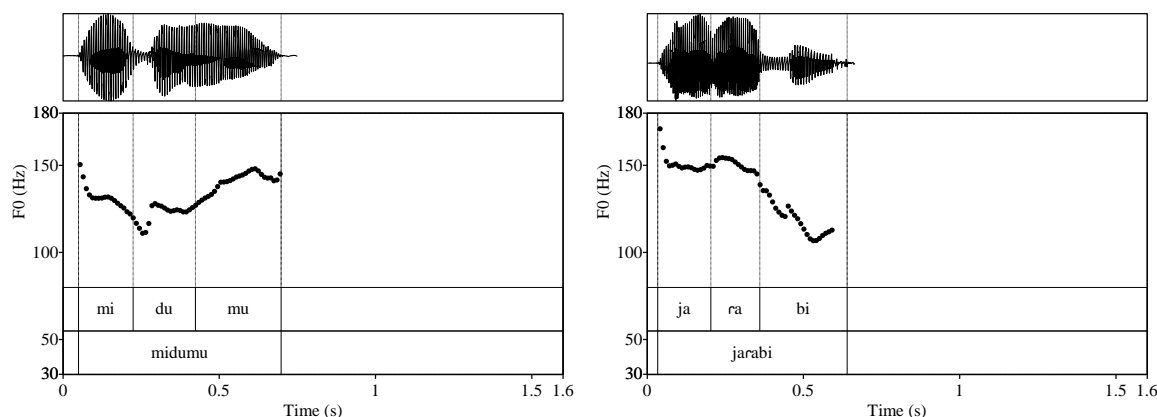


Figure 9. Three-mora nouns uttered in isolation;
 pattern-AB *midumu* ‘woman; female’ (left), pattern-C *jarabi* ‘child; minor’ (right).

Let us next examine four-mora nouns uttered in isolation. Two examples of realizations of four-mora nouns uttered in isolation are given in Figure 10. In the pattern-AB example, F0 is low in the first three morae and rises in the fourth mora. There appears to be no word-initial prominence, but a sudden word-initial drop is observed. In the pattern-C example, on the other hand, F0 is high in the first three morae and drops in the fourth mora.

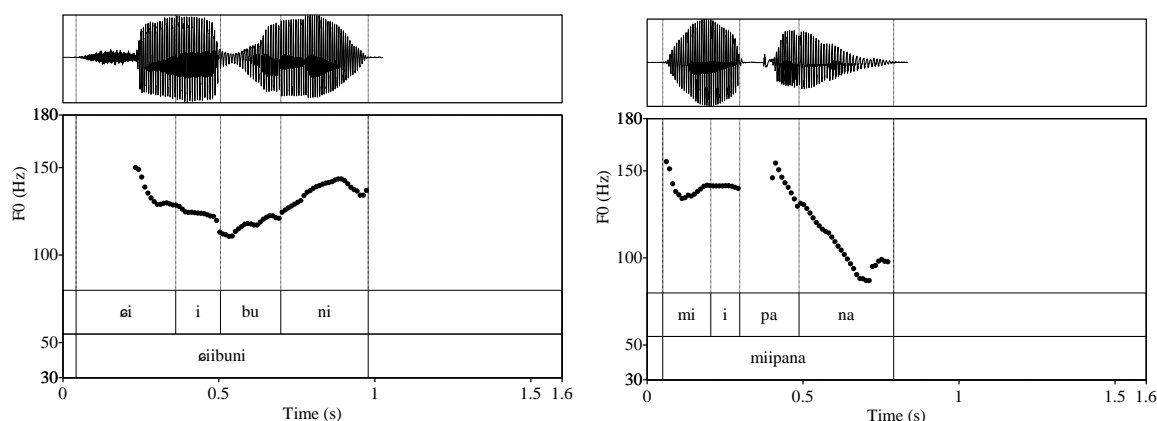


Figure 10. Four-mora nouns uttered in isolation;
 pattern-AB *iibuni* ‘spine’ (left), pattern-C *miipana* ‘face’ (right).

3.2.6 Summary of accent pattern realizations

In the above, we have examined the realizations of accent patterns in nouns comprising different numbers of morae in three different environments. As is clear from the discussion thus far, the Yonaha dialect presents us with a complicated picture as regards the realizations of its accent patterns. The fact that the realizations of the accent patterns differ markedly depending on the

presence and type of adjacent elements is especially interesting. As was mentioned in section 3.2.4, it may be possible to view this phenomenon as an alternation between different accent patterns.

An overview of the realizations of the accent patterns of the Yonaha dialect is given in Table 5. Although word-initial prominence has been transcribed in this overview, transcriptions of sudden word-initial drops have been omitted.

Table 5. Accent pattern realizations in the Yonaha dialect;
X indicates the surveyed vocabulary and periods indicate mora boundaries.

Number of morae		X <i>nudu</i>		X <i>mee</i>		X (uttered in isolation)
2	Pattern AB	ju.da nu.[du 'branch'	Pattern AB	ju.[da me.e 'branch'	Pattern AB	[i.]ka ~ i.[ka 'squid'
	Pattern C	ti.[da nu.du ~ [ti.da nu.du 'sun'	Pattern C	na.[bi me.e 'pot; pan'	Pattern C	u.[s] 'mortar; millstone'
3	Pattern AB	mi.du.mu nu.[du 'woman; female'	Pattern AB	mi.du.[mu me.e 'woman; female'	Pattern AB	mi.du.[mu 'woman; female'
	Pattern C	ja.ra.[bi nu.du 'child; minor'	Pattern C	[ja.ra.bi] me.[e 'child; minor'	Pattern C	[ja.ra.]bi 'child; minor'
4	Pattern AB	[çi].i.bu.ni nu.[du 'spine'	Pattern AB	[çi].i.[bu.ni me.e 'spine'	Pattern AB	çi.i.bu.[ni 'spine'
	Pattern C	nu.]z.[zu.u nu.du 'thread; string'	Pattern C	[mi.i.pa.na] me.[e 'face'	Pattern C	[mi.i.pa.]na 'face'

4 Conclusion

In this chapter, I have analyzed the nominal accent system of the Yonaha dialect of Miyako on the basis of the utterances of one native speaker. In doing this, I was able to confirm the validity of the description given by Hirayama et al. (1967), which states that this dialect has a two-pattern accent system. As regards what vocabulary items fall under each accent pattern, I was able to confirm the validity of the description given by Matsumori (2011), which states that series A and series B have merged in this dialect (A,B/C). The surface realizations of the accent patterns, on the other hand, were shown not always to match the description by Hirayama et al. (1967). Furthermore, a phenomenon was observed in which the realizations of the accent patterns of nouns differed markedly depending on the presence and type of adjacent elements, which may be viewed as an alternation between different accent patterns. This fact, too, had not yet been reported in the literature (see Footnote 4, however).

Further research is needed in order to elucidate the accent pattern realization rules of the Yonaha dialect, also in respect to the accent pattern alternation. The results of our analysis suggest that the accent pattern realization rules of this dialect are complex. Depending on the results of further

research, however, it may become possible to propose simple rules for accent pattern realization in this dialect. On the other hand, recent research by myself and others suggests that the accent pattern realization rules of the Ikema dialect, which, like the Yonaha dialect, is a dialect of the Miyako language, are also very complex (Igarashi et al. 2012). It is worth examining the possibility that complex realization rules are a characteristic of the accent systems of the Miyako language.

The analysis results of this chapter were based on data of a limited quality and quantity, obtained in a one-hour survey with one native speaker. What is required next is an analysis of accent pattern realizations in more diverse contexts based on utterance data from a larger number of native speakers.

References

- Boersma, Paul & David Weenink. 2011. *Praat: Doing Phonetics by Computer*, version 5.2.16. Computer program (<http://www.praat.org/>).
- Hattori, Shiro. 1958. ‘Amami Guntō no Sho-Hōgen ni Tsuite: Okinawa, Sakishima Hōgen to no Hikaku’. *Jinrui Kagaku*, XI.
- Hattori, Shiro. 1979. ‘Nihon Sogo ni Tsuite’, 21–22. *Gekkan Gengo*, 8(11):97–107; 8(12):504–516.
- Hirayama, Teruo, Ichiro Oshima & Masachie Nakamoto. 1967. *Ryūkyū Sakishima Hōgen no Sōgōteki-Kenkyū*. Tokyo: Meiji Shoin.
- Igarashi, Yosuke, Yukinori Takubo, Yuka Hayashi, Thomas Pellard & Tomoyuki Kubo. 2012. ‘Ryūkyū Miyakogo Ikema Hōgen no Akusento Taikai wa San-Kei de Atte Ni-Kei de wa Nai’. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 16(1):134–48.
- Kamimura, Takaji. 1941. ‘Koshikijima Hōgen no Akusento’. *Onseigaku Kyōkai Kaihō (Bulletin of the Phonetic Society of Japan)*, 65–66:12–15.
- Kindaichi, Haruhiko. 1974. *Kokugo Akusento no Shiteki-Kenkyū: Genri to Hōhō*. Hanawashobo.
- Matsumori, Akiko. 1998. ‘Ryūkyū Akusento no Rekishiteki-Keisei Katei: Ruibetsu Goi 2-Haku Go no Tokui na Gōryū no Shikata o Tegakari ni’. *Gengo Kenkyū*, 114:85–114.
- Matsumori, Akiko. 2000a. ‘Ryūkyū no Tagata Akusento Taikai ni Tsuite no Ichi-Kōsatsu: Ryūkyū Sogo ni Okeru Ruibetsu Goi 3-Paku no Gōryū no Shikata’. *Kokugogaku (Studies in the Japanese Language)*, 51(1):93–108.
- Matsumori, Akiko. 2000b. ‘Ryūkyū Akusento Chōsa no Tame no Ruibetsu Goi no Kaihatsu: Okinoerabujima no Chōsa kara’. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 4(1):61–71.

- Matsumori, Akiko. 2008. 'Okinawa Hontō Kin Hōgen no Taigen no Akusento-Gata to Sono Keiretsu: "Ryūkyū Chōsa-Yō Keiretsu-Betsu Goi" no Kaihatsu ni Mukete'. *Nihon Joshi Daigaku Kiyō—Bungakubu (Japan Women's University Journal—Faculty of Humanities)*, 58:97–122.
- Matsumori, Akiko. 2010. 'Taramajima no 3-Gata Akusento to "Keiretsu-Betsu Goi"'. In: Zendo Uwano (ed.), *Nihongo Kenkyū no 12-Shō*, 490–503. Tokyo: Meiji Shoin.
- Matsumori, Akiko. 2011. 'Kikaijima Sogo ni Okeru 3-Gata Akusento Taikei no Shozoku Goi: Akaren to Onotsu no Hikaku kara'. *Nihon Joshi Daigaku Kiyō—Bungakubu (Japan Women's University Journal—Faculty of Humanities)*, 60:87–106.
- Onishi, Takuichiro. 1989. 'Iwate-Ken Yamada-Chō Hōgen no Akusento'. *Kokugogaku Kenkyū*, 29:1–10.
- Pellard, Thomas. 2009. *Ōgami: Éléments de Description d'un Parler du Sud des Ryūkyū*. Doctoral dissertation, École des Hautes Études en Sciences Sociales.
- Pellard, Thomas. 2011. 'The Historical Position of the Ryukyuan Languages'. *ICHL20 Symposium: Historical Linguistics in the Asia-Pacific Region and the Position of Japanese*, 55–64. Osaka: National Museum of Ethnology.
- Shimoji, Michinori. 2010. 'Ryukyuan Languages: An Introduction.' In: Michinori Shimoji & Thomas Pellard (eds.), *An Introduction to Ryukyuan Languages*, 1–13. Tokyo: Research Institute for Languages and Cultures of Asia and Africa.
- Uwano, Zendo. 1984. 'N-Gata Akusento no Ippan Tokusei ni Tsuite'. *Gendai Hōgengaku no Kadai Dai-2-Kan: Kijutsuteki Kenkyūhen*, 167–209. Tokyo: Meiji Shoin.
- Uwano, Zendo. 1985. 'Murakami Hōgen no Meishi no Akusento Shiryō: 1–3-Mōra Go'. *Tōkyō Daigaku Gengogaku Ronshū (Tokyo University Linguistics Papers)*, 25–60.

Verb Conjugation in the Miyako Language: Perfective, Negative, Past, and Continuative Forms

Shigehisa KARIMATA

1 Survey overview

Over a period of four days between September 4 and September 7, 2011, grammar surveys were conducted at nine sites on Miyakojima as part of the joint survey of the National Institute for Japanese Language and Linguistics. The survey sites were Bora, Uruka, Miyaguni, Yonaha, Kurima, Kugai, Karimata, Ikema, and Kuninaka. The surveyed items comprised the 37 verbal items included in *Ryūkyū Rettō no Gengo no Kenkyū: Zen-Shūroku Chōsahyō* (*Studies on the Languages of the Ryukyu Islands: Survey Sheets for All Villages*; henceforth ‘the Zen-Shūroku’), compiled in 1982 by the Okinawa Center for Language Studies. The verbal items included there have been selected with the purpose of getting a grasp of the conjugation classes of the dialects of the Ryukyuan languages in mind; included were Japanese regular verbs, comprising strong as well as weak regular verbs with stems ending in sounds such as *b, *m, *k, *g, *s, *t, *n, *r, *w, and irregular verbs, namely *aru* ‘to be (inanimate); to exist’, *iru* ‘to be (animate)’, *kuru* ‘to come’, *suru* ‘to do’, and *nai* ‘to be absent; to be nonexistent’. In order to be able to identify the conjugation class of each verb, their perfective¹ (e.g. *suru*), negative (e.g. *shinai*), past (e.g. *shita*), and continuative (e.g. *shite*) forms were all included as sub-items.

The perfective forms were included in order to identify perfective aspect verb forms. The negative forms were included in order to identify the base stems of the verbs. Although base stems can also be obtained from imperative and hortative forms, the negative forms were chosen because imperative and hortative forms are not available for non-volitional verbs. The past tense forms were included in order to identify any *onbin* verb stems². In the Northern Ryukyuan languages, *onbin* stems can also be identified in continuative forms. The continuative forms were included in the *Zen-Shūroku* in order to determine whether *onbin* stems are used in forms other than past tense forms in the Southern Ryukyuan languages.

For the joint survey on Miyakojima, we amended the *Zen-Shūroku* to include example sentences. The example sentences were included in the amended survey sheet as part of the research project *The Study of the Linguistic Geography of the Miyako Dialects of Ryukyuan*, JSPS KAKENHI

¹ *Translator’s note*: throughout, the author uses the term ‘*daihyōkei*’, meaning ‘representative form’, akin to the term ‘dictionary form’.

² *Translator’s note*: ‘euphonic stems’; see section 4.1 for an explanation.

Grant-in-Aid for Scientific Research (B), led by Satoshi Nishioka (Okinawa International University), in order to make it easier to obtain the conjugated verb forms. The method used in the survey consisted of asking the informants to translate the example sentences on the survey sheet into their respective dialects.

Taking the considerable number of surveyed items and the number of survey days into account, the items were divided into three subsets and three groups of researchers tasked with eliciting the items of one subset each. Due to problems of informant availability and the number of available researchers, we were unable to form three groups and elicit all of the items at some of the sites. Furthermore, there were cases where a sentence was elicited but the intended word form was not obtained. In this chapter, I will use materials obtained in surveys I conducted in Shimajiri³ (December 10, 2011), Kugai⁴ (March 3, 2012), and Karimata⁵ (August 15 and 16, 2011) in addition to the materials obtained in the joint survey on Miyakojima. The Shimajiri grammar survey is a completely new addition. In all, data from ten sites will be examined in this chapter.

Corresponding to the *shite*-type continuative of Japanese, the dialects of the Miyako language (henceforth simply ‘the Miyako language’ or ‘Miyako’) have two types of continuative forms. One type, exemplified by *numi*: ‘to.drink-CONTINUATIVE’ and *kaki*: ‘to.write-CONTINUATIVE’, is formed by suffixing *-i* to the base stem. The other type, exemplified by *numitti* (to.drink-CONTINUATIVE) and *kakitti* (to.write-CONTINUATIVE), ends in *-ti*. On the amended survey sheet the former is called the ‘*ari*-continuative’ and the latter the ‘*shite*-continuative’, so I will also use those terms in this chapter.

The *ari*-continuative is used for non-conclusive predicates in compound sentences and sentences with multiple predicates to express how two actions take place in succession, either in a subordinate or in a non-subordinate manner. The *shite*-continuative is used for non-conclusive predicates in compound sentences and sentences with multiple predicates to express mainly non-subordinate actions. The *ari*-continuative is also used for the first element of a compound predicate. In order to be able to elicit both types of continuative forms, example sentences for both were made for each verb in preparing the survey sheet.

³ The informant was S. I., a male speaker born and raised in Shimajiri, date of birth May 6, 1937.

⁴ The informant was K. Y., a male speaker born and raised in Kugai, date of birth December 23, 1926.

⁵ The informant was Y. N., a female speaker born and raised in Karimata, date of birth December 15, 1926.

2 Stems and suffixes

Conjugated verb forms consist of elements such as the stem, suffixes, and particles⁶. The suffixes and particles form the part that is modified according to the intended grammatical meaning; the remaining, unchanging part is the stem. Verbs in the Northern Ryukyuan languages alternate between three stem types: base stems, *onbin* stems, and infinitive stems⁷. Among these three stem types, base stems and *onbin* stems also exist in Japanese, but infinitive stems can be said to be peculiar to the Northern Ryukyuan languages. In this chapter, I will use ‘-’ to indicate boundaries between stems and suffixes, as in *kak-e*-, and ‘=’ to indicate boundaries between stems and particles, as in *nudi=kara*.

Base stems	<i>Onbin</i> stems	Infinitive stems
kak-aN ‘to.write-NEGATIVE’	kate-aN ‘to.write-PAST’	kate-uN ‘to.write-PERFECTIVE’
tur-aN ‘to.take-NEGATIVE’	tut-aN ‘to.take-PAST’	tu-iN ‘to.take-PERFECTIVE’
jum-aN ‘to.read-NEGATIVE’	jud-aN ‘to.read-PAST’	jun-uN ‘to.read-PERFECTIVE’

Table 1. The Shuri dialect of Naha City, Okinawa Island.

Base stems	<i>Onbin</i> stems	Infinitive stems
hak'-aN ‘to.write-NEGATIVE’	hatt3-aN ‘to.write-PAST’	hat3-uN ‘to.write-PERFECTIVE’
tur-aN ‘to.take-NEGATIVE’	tutt-aN ‘to.take-PAST’	tu-N ‘to.take-PERFECTIVE’
jum-aN ‘to.read-NEGATIVE’	jud-aN ‘to.read-PAST’	jum-iN ‘to.read-PERFECTIVE’

Table 2. The Jana dialect of Nakijin Village.

As can be seen in Table 3, and as was also pointed out by Moriyasu Motonaga (1973), it is not necessary to posit *onbin* stems, as in Modern Japanese (henceforth just ‘Japanese’), or infinitive stems, as in the Northern Ryukyuan languages, for the Miyako language; only base stems have to be recognized⁸. The fact that it is not necessary to posit *onbin* stems is a notable characteristic of Miyako verb conjugation. Some verbs in Miyako have a base stem variant with a reduplicated final consonant. Among the items in our survey, *kav* ‘to put on (headwear)’, *niv* ‘to fall asleep’, and *az* ‘to say’ have such variant stems. While the perfective forms *kav*, *niv*, and *az* consist of stems ending in consonants without suffixes, their stem-final consonants are reduplicated in the corresponding imperative, hortative, and negative forms: *kavv-i*

⁶ I use the terms ‘stem’ and ‘suffix’ as defined by Shigeyuki Suzuki (1972).

⁷ *Translator’s note*: *ren’yō* stems.

⁸ I have adopted the terms ‘base stem’, ‘*onbin* stem’, and ‘infinitive stem’ for the three stem types from Yukio Uemura’s (1963) ‘Shuri Hōgen no Bunpō’, *Okinawago Jiten (A Dictionary of Okinawan)*. In addition to these three stems types, Uemura also posits fused stems and contracted stems.

‘to.put.on(headwear)-IMPERATIVE’, *kavv-a* ‘to.put.on(headwear)-HORTATIVE’, *kavv-an* ‘to.put.on(headwear)-NEGATIVE’, *nivv-i* ‘to.fall.asleep-IMPERATIVE’, *nivv-a* ‘to.fall.asleep-HORTATIVE’, *nivv-an* ‘to.fall.asleep-NEGATIVE’, *azz-i* ‘to.say-IMPERATIVE’, *azz-a* ‘to.say-HORTATIVE’, and *azz-an* ‘to.say-NEGATIVE’. The perfective form *v*: ‘to sell’ consists of a single long consonant without a suffix, but the corresponding imperative, hortative, and negative forms have stems that consists of just a reduplicated short consonant: *vv-i* ‘to.sell-IMPERATIVE’, *vv-a* ‘to.sell-HORTATIVE’, and *vv-an* ‘to.sell-NEGATIVE’. Although there are verb types with stem variants different from these, as well, I hope to discuss them as part of a complete description of the conjugated forms and conjugation types of the Miyako dialects at a later time.

Base stems		
kak-an ‘to.write-NEGATIVE’	kak-ŋtaŋ ‘to.write-PAST’	kak-ŋ ‘to.write-PERFECTIVE’
jum-an ‘to.read-NEGATIVE’	jum-taŋ ‘to.read-PAST’	jum ‘to.read-PERFECTIVE’
tur-an ‘to.take-NEGATIVE’	tu-ŋtaŋ ‘to.take-PAST’	tu-ŋ ‘to.take-PERFECTIVE’
kavv-an	kav-taz	kav
‘to.put.on(headwear)-NEGATIVE’	‘to.put.on(headwear)-PAST’	‘to.put.on(headwear).PERFECTIVE’

Table 3. The Shimozato dialect of Hirara.

The verbs elicited in response to the following Japanese verbs have been identified as strong verbs: *tobu* ‘to fly; to jump’, *asobu* ‘to play’, *kogu* ‘to row’, *iku* ‘to go’, *otosu* ‘to drop’, *dasu* ‘to put out’, *motsu* ‘to carry; to hold; to have’, *kiru* ‘to cut’, *shibaru* ‘to tie up’, *horu* ‘to dig’, *furu* ‘to fall (e.g. rain)’, *kaburu* ‘to put on (headwear)’, *tojiru* ‘to close’, *neru* ‘to sleep’, *kau*, ‘to buy’, *uru* ‘to sell’, *nomu* ‘to drink’, *taberu* ‘to eat’, *you* ‘to get drunk’, *arau* ‘to wash’, and *iu* ‘to say’. The verbs elicited in response to the following Japanese verbs have been identified as weak verbs: *suteru* ‘to discard’, *oriru* ‘to get off (e.g. a vehicle)’, *ochiru* ‘to fall’, *kureru* ‘to give’, *morau* ‘to receive’, *okiru* ‘to get up’, *kiru* ‘to put on (e.g. clothing)’, *suwaru* ‘to sit down’, *miru* ‘to see; to look’, and *keru* ‘to kick’. The verbs elicited in response to the following Japanese verbs have been identified as irregular verbs: *kuru* ‘to come’, *suru* ‘to do’, *aru* ‘to be (inanimate); to exist’, *iru* ‘to be (animate)’, *shinu* ‘to die’, and *nai* ‘to be absent; to be nonexistent’.

Although *nai* is classed as an adjective in Japanese, the equivalent in the Ryukyuan languages is classed as an irregular verb. In Miyako, adjectives have conjugated forms consisting of a grammaticized combination of a *-ku*-infinitive and the existential verb *az* or forms containing a reduplicated stem, for example; the Miyako equivalent of *nai* is classed as a verb because it has no such forms. Even though it is classed as a verb, however, it of course does not have the morphological categories of aspect and voice, nor does it have forms for the imperative or hortative moods; in these respects, it has the same grammatical properties as adjectives.

In response to *shibaru*, the use of a verb corresponding to Japanese *kubiru* ‘to tie up’ is expected; in response to *neru*, that of a verb corresponding to *nemuru* ‘to sleep’; in response to *taberu*, that of a verb corresponding to *kurau* ‘to eat’; in response to *tojiru*, that of a verb corresponding to *kuru*; in response to *morau*, that of a verb corresponding to *eru* ‘to get’; in response to *suwaru*, that of a verb corresponding to *wiru* ‘to sit down’; in response to *iru*, that of a verb corresponding to *woru* ‘to be (animate)’.

Among the weak verbs of Japanese, those with one-syllable stems ending in the vowel *-i*, such as *mi-ru* ‘to see; to look’, *ki-ru* ‘to put on (e.g. clothing)’, and *ni-ru* ‘to boil’, were also weak in Central Old Japanese (henceforth just ‘Old Japanese’), but those with two-syllable stems ending in either the vowel *-i* or the vowel *-e* (called ‘upper bigrade verbs’ and ‘lower bigrade verbs’, respectively) had a combination of weak conjugated forms, such as negative *oki-zu* ‘to.get.up-NEGATIVE’ and imperative *oki-yo* ‘to.get.up-IMPERATIVE’, and strong conjugated forms, such as perfective *ok-u* ‘to.get.up-PERFECTIVE’ and adnominal non-past *ok-uru* ‘to.get.up-ADNOMINAL’. Verbs of the latter type can be called verbs with a ‘mixed conjugation’ of strong and weak forms (henceforth ‘mixed verbs’). The verb *shinu* ‘to die’, a strong verb in Japanese, can be seen as having had a type of mixed conjugation combining conjugated forms comprising a strong conjugation stem and a suffix, such as *sin-azu* ‘to.die-NEGATIVE’ and *sin-itari* ‘to.die-ALTERNATIVE’, with conjugated forms comprising a mixed conjugation stem and a suffix, such as *sin-uru* ‘to.die-2ND.CONCLUSIVE’ and *sin-ure* ‘to.die-3RD.CONCLUSIVE’⁹.

			Negative	Imperative	Past	Non-past	Adnominal
Modern	Strong conjugation	‘to go’	ik-anai	ik-e	iQ-ta	ik-u	ik-u
		‘to die’	ein-anai	ein-e	eiN-da	ein-u	ein-u
	Weak conjugation	‘to get up’	oki-nai	oki-ro	oki-ta	ok-iru	ok-iru
		‘to see’	mi-nai	mi-ro	mi-ta	mi-ru	mi-ru
Old Japanese	Strong conjugation	‘to go’	ik-adzu	ik-e	ik-itari	ik-u	ik-u
	Mixed conjugation <i>a</i>	‘to die’	ein-adzu	ein-e	eiini-tari	ein-u	ein-uru
	Mixed conjugation <i>b</i>	‘to get up’	oki-dzu	oki-jo	oki-tari	ok-u	ok-uru
	Weak conjugation	‘to see’	mi-dzu	mi-jo	mi-tari	mi-ru	mi-ru

Table 4. Verb conjugation types in Japanese.

⁹ The second conclusive form is used for predicates of emphatic sentences, agreeing with the focus particles *zo*, *nan*, *ya*, and *ka*, and is homophonous with the adnominal form. The third conclusive form is used for predicates of emphatic sentences, as well, agreeing with *koso*, and is homophonous with the conditional form.

In the Shimajiri, Karimata, and Kugai dialects, not only the negative of the Old Japanese weak conjugation, but also those of the Old Japanese mixed conjugations correspond to forms in which the negative suffix *-n* is attached to a base stem ending in the vowel *-i*. In other words, the mixed conjugations of Old Japanese have become weak. In the Shimajiri and Karimata dialects *shinu* ‘to die’ has become weak, as well; it has become strong in the Kugai dialect.

- (1) *ki:ju jurugaeəa:mai n:ta: utin.* (Karimata)
tree=ACCUSATIVE to.shake-CONTINUATIVE=too fruit=TOPIC to.fall-NEGATIVE (*ochinai*)
‘No mandarins fall from the tree, even when you shake it.’¹⁰
- (2) *baja: umanna urin.* (Kugai)
I=TOPIC here=LOCATIVE=TOPIC to.get.off-NEGATIVE (*orinai*) (Kugai)
‘I don’t get off here.’

While forms such as the perfective and the imperative of verbs corresponding to Old Japanese weak and mixed verbs also follow the weak conjugation in, among others, the Bora, Miyaguni, and Kurima dialects, comprising a base stem ending in the vowel *-i* or the vowel *-i:* and a suffix such as *-ru*, the negative form instead follows the strong conjugation, comprising a base stem ending in a consonant and a suffix beginning with the vowel *-u* or the vowel *-u:*. In these dialects, the weak conjugation has become mixed.

- (3) *vvaga tuẓzuba smari fi:ru.* (Bora)
you=NOMINATIVE chicken=ACCUSATIVE to.tie.up-CONTINUATIVE to.give-IMPERATIVE (*kure*)
‘You tie up the chicken.’ (imperative)
- (4) *utỵṭha sudaŋkaija ka:ssuba fu:n.* (Bora)
younger.brother=TOPIC older.brother=DATIVE=TOPIC sweets=ACCUSATIVE
to.give-NEGATIVE (*kurenai*)
‘The younger brother doesn’t give sweets to the older brother.’
- (5) *kunu fsuẓza azumakaṛia numi mi:ru.* (Bora)
this medicine=TOPIC to.be.sweet=because to.take-CONTINUATIVE to.see-IMPERATIVE (*miro*)
‘This medicine is sweet, so try taking it.’

¹⁰ *Translator’s note:* throughout this chapter, Japanese model sentences have been replaced by glosses and their English translations; the relevant Japanese conjugated verb forms of the model sentences are given underlined in parentheses.

- (6) uja: jakju:juba: mju:ŋ. (Bora)
 father=TOPIC baseball=TOPIC to.see-NEGATIVE (*minai*)
 ‘My father doesn’t watch baseball.’
- (7) gumiu umaŋkai siti:ru. (Miyaguni)
 garbage=ACCUSATIVE there=LOCATIVE to.discard-IMPERATIVE (*sutero*)
 ‘Throw away the garbage over there.’
- (8) mma: fz:fznu kīnnumai situ:ŋ. (Miyaguni)
 grandmother=TOPIC to.be.old-ADNONMINAL kimono=too to.discard-NEGATIVE (*sutenai*)
 ‘My grandmother doesn’t even throw away her old kimonos.’
- (9) unu ma:zzu kumaŋkai kiri fi:ru. (Miyaguni)
 that ball=ACCUSATIVE here=LOCATIVE to.kick-CONTINUATIVE to.give-IMPERATIVE
 (*kure*)
 ‘Kick that ball this way.’
- (10) q^hutoo adzaŋ koosuba fu:ŋ. (Miyaguni)
 younger.brother=TOPIC older.brother=DATIVE sweets=ACCUSATIVE to.give-NEGATIVE
 (*kurenai*)
 ‘The younger brother won’t give sweets to the older brother.’
- (11) vvaŋa tuzsuba: smari/sŋmari fi:ro. (Kurima)
 you=NOMINATIVE chicken=ACCUSATIVE to.tie.up-CONTINUATIVE to.give-IMPERATIVE
 (*kure*)
 ‘You tie up the chicken.’ (imperative)
- (12) utu:toa azanna/suzanna ko:suba: fu:ŋ. (Kurima)
 younger.brother=TOPIC older.brother=DATIVE=TOPIC sweets=ACCUSATIVE
to.give-NEGATIVE (*kurenai*)
 ‘The younger brother won’t give sweets to the older brother.’

There are Miyako dialects in which a mixed conjugation is used for verbs that correspond to Old Japanese mixed verbs. They are mixed conjugations of a different kind, however; as will be discussed later, strong conjugation forms are used for the conclusive non-past and adnominal non-past forms of mixed verbs in Old Japanese, while they are used for the negative and hortative forms of mixed verbs in Miyako. The negative suffixes *-uŋ* and *-u:ŋ* are used for mixed verbs, *-iŋ* and *-i:ŋ* for weak verbs, and *-aŋ* and *-a:ŋ* for strong verbs.

			Negative	Imperative	Past	Non-past	Adnominal
Bora	Strong conjugation	‘to go’	ik-aŋ	ik-i	ik-sta:	ik-s	ik-s
		‘to die’	sn-aŋ	sn-i	sn-ta	sn	sn
	Mixed conjugation	‘to get up’	uk-uŋ	uki-ru	uki-ta:	uki	uki-z
		‘to see’	mj-u:ŋ	mi:-ru	mi:-ta:	mi:	mi:-z
Simajiri	Strong conjugation	‘to go’	ik-aŋ	ik-i	ik-staz	ik-s	ik-s
		‘to die’	sni-ŋ	sni-ru	sn-ta	sni-z	sni-z
	Weak conjugation	‘to get up’	uki-ŋ	uki-ru	uki-taz	uki-z	uki-z
		‘to see’	mi:-ŋ	mi:-ru	mi:-taz	mi:-z	mi:-z

Table 5. Verb conjugation types in the Bora and Simajiri dialects.

In this chapter, we examine the conjugated forms and conjugation types by comparing them to those of Old Japanese, and occasionally those of Modern Japanese, as well.

3 Negative forms

Whether a Miyako verb follows a strong conjugation, a weak conjugation, or a mixed conjugation can be determined by looking at its negative form.

Miyako negative forms end in either *-an*, *-in*, or *-un*. Forms in which *-dza:n* or *-dʲa:n* is substituted for the final *-n* are observed, as well. Forms ending in *-an*, *-in*, or *-un* take a variety of shapes and are used in multiple senses. Forms ending *-adza:n*, *-i-dza:n*, and *-udza:n* express the intention or judgment of the speaker. As the forms ending in *-adza:n*, *-i-dza:n*, and *-udza:n* are also formed with base stems, I will treat them together with *-an* in this chapter.

- (13) uja: tɛiŋkzga bazkaiba imkaija ikazaŋ. (Miyaguni)
 father=TOPIC weather=NOMINATIVE to.be.bad=because sea=ALLATIVE=TOPIC
to.go-NEGATIVE (*ikanai*)
 ‘My father won’t go to the sea, because the weather is bad.’
- (14) ameno tʰokʲa:nna pukaŋkai nimottsu idasadza:ŋ. (Miyaguni)
 rain=GENITIVE time=LOCATIVE=TOPIC outside=LOCATIVE=TOPIC luggage=ACCUSATIVE
to.put.out-NEGATIVE (*dasanai*)
 ‘When it’s raining, I don’t put my things outside.’
- (15) ka:ʲa: unaga du:nu wa:juba: vvan/vvadja:n. (Yonaha)
 he=TOPIC self=GENITIVE pig=TOPIC to.sell-NEGATIVE (*uranai*)
 ‘He doesn’t sell his pig.’

-an is used in verbs that correspond to Old Japanese strong verbs; it is suffixed to base stems ending in a consonant. *-in* is used in verbs that correspond to Old Japanese weak verbs; when their negative forms are compared to other conjugated forms, they can be analyzed as *uki-n*, consisting of a vowel stem of the weak conjugation to which the suffix *-n* has been attached. *-un* is used in verbs that correspond to Old Japanese mixed verbs; while their imperative forms are formed by suffixing *-ru* to a vowel stem, their negative forms can be analyzed as *uk-un*, consisting of a consonant stem of the strong conjugation to which the suffix *-un* has been attached. When their conjugations are considered in their entirety, verbs whose negative forms are formed with the suffix *-un* thus follow a mixed conjugation.

For reference, I will also give imperative forms obtained in the survey. While imperative forms are formed by suffixing *-i* to a base stem that ends in a consonant in the strong conjugation, they are formed by suffixing *-ru* to a base stem that ends in the vowel *-i* or the vowel *-i:* in the weak conjugation.

The Bora dialect

Negative forms of verbs that derive from Old Japanese mixed verbs follow the mixed conjugation in the Bora dialect, with the suffixes *-uŋ* and *-u:ŋ*. On the other hand, the forms corresponding to *keranai* ‘to.kick-NEGATIVE’, *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’, and *winai* ‘to.sit.down-NEGATIVE’, which derive from Old Japanese weak verbs, as well as *shinanai* ‘to.die-NEGATIVE’, which derives from a strong verb, follow the strong conjugation, while the form corresponding to *minai* ‘to.see-NEGATIVE’, which derives from an Old Japanese weak verb, follows the mixed conjugation. As regards irregular verbs, the form corresponding to *shinai* ‘to.do-NEGATIVE’ follows the mixed conjugation, while the form corresponding to *inai* ‘to.be(animate)-NEGATIVE’ follows the strong conjugation.

Strong conjugation

- *tubaŋ* ‘to.fly-NEGATIVE’, *asɿpaŋ* ‘to.play-NEGATIVE’, *numaŋ* ‘to.drink-NEGATIVE’, *kugaŋ* ‘to.row-NEGATIVE’, *ikaŋ* ‘to.go-NEGATIVE’, *utusaŋ* ‘to.drop-NEGATIVE’, *idasaŋ* ‘to.put.out-NEGATIVE’, *mutaŋ* ‘to.carry-NEGATIVE’, *poraŋ* ‘to.dig-NEGATIVE’, *ffaŋ* ‘to.fall(e.g. rain)-NEGATIVE’, *kssaŋ* ‘to.cut-NEGATIVE’, *vvaŋ* ‘to.sell-NEGATIVE’, *kavvaŋ* ‘to.put.on(headwear)-NEGATIVE’, *nivvaŋ* ‘to.fall.asleep-NEGATIVE’, *azzaŋ* ‘to.say-NEGATIVE’, *ka:ŋ* ‘to.buy-NEGATIVE’, *fa:ŋ* ‘to.eat-NEGATIVE’, *ara:ŋ* ‘to.wash-NEGATIVE’, *mura:ŋ* ‘to.receive-NEGATIVE’, *bja:ŋ* ‘to.get.drunk-NEGATIVE’
- *kiraŋ* ‘to.kick-NEGATIVE’, *kssaŋ* ‘to.put.on(e.g. clothing)-NEGATIVE’, *bzzaŋ* ‘to.sit.down-NEGATIVE’, *snaŋ* ‘to.die-NEGATIVE’

Mixed conjugation

- *uruŋ* ‘to.get.off-NEGATIVE’, *utuŋ* ‘to.fall-NEGATIVE’, *ukuŋ* ‘to.get.up-NEGATIVE’, *stuŋ* ‘to.discard-NEGATIVE’, *fu:ŋ* ‘to.give-NEGATIVE’
- *mju:ŋ* ‘to.see-NEGATIVE’, *ju:ŋ* ‘to.get-NEGATIVE’

Irregular conjugation

- *ku:ŋ* ‘to.come-NEGATIVE’, *su:ŋ* ‘to.do-NEGATIVE’, *uraŋ* ‘to.be(animate)-NEGATIVE’, *nja:ŋ* ‘to be absent’

Imperative forms

- *piriŋo* ‘to.go-IMPERATIVE=EMPHATIC’, *kai* ‘to.buy-IMPERATIVE’, *fai* ‘to.eat-IMPERATIVE’, *jukui* ‘to.rest-IMPERATIVE’, *njivvi* ‘to.fall.asleep-IMPERATIVE’
- *mi:ru* ‘to.see-IMPERATIVE’, *fi:ru* ‘to.give-IMPERATIVE’, *zziru* / *iziru* ‘to.put.in-IMPERATIVE’
- *ku:* ‘to.come-IMPERATIVE’, *fi:ru* / *ajiru* ‘to.do-IMPERATIVE’

The Uruka dialect

Negative forms of verbs that derive from Old Japanese mixed verbs follow the mixed conjugation in the Uruka dialect, with the suffix *-uŋ*, except for *ukiŋ* ‘to.get.up-NEGATIVE’, which follows the weak conjugation. The form corresponding to *minai* ‘to.see-NEGATIVE’, which derives from an Old Japanese weak verb, is the weak conjugation form *mi:ŋ*; forms for other verbs that derive from Old Japanese weak verbs were not obtained, however, so further details on the Uruka dialect remain unclear.

Strong conjugation

- *tubaŋ* ‘to.fly-NEGATIVE’, *aspaŋ* ‘to.play-NEGATIVE’, *numaŋ* ‘to.drink-NEGATIVE’, *kugaŋ* ‘to.row-NEGATIVE’, *ffaŋ* ‘to.fall(e.g. rain)-NEGATIVE’, *utusaŋ* ‘to.drop-NEGATIVE’, *idasaŋ* ‘to.put.out-NEGATIVE’, *poraŋ* ‘to.dig-NEGATIVE’, *vaŋ* ‘to.sell-NEGATIVE’, *kpaŋ* ‘to.cut-NEGATIVE’, *ka:ŋ* ‘to.buy-NEGATIVE’, *fa:ŋ* ‘to.eat-NEGATIVE’, *ara:ŋ* ‘to.wash-NEGATIVE’, *mura:ŋ* ‘to.receive-NEGATIVE’, *bjo:ŋ* ‘to.get.drunk-NEGATIVE’

Mixed conjugation

- *urudjaŋ* ‘to.get.off-NEGATIVE’, *utuŋ* ‘to.fall-NEGATIVE’, *stuŋ* ‘to.discard-NEGATIVE’, *ffudzaŋ* ‘to.give-NEGATIVE’

Weak conjugation

- *ukiŋ* ‘to.get.up-NEGATIVE’
- *mi:ŋ* ‘to.see-NEGATIVE’

Irregular conjugation

- *ku:ŋ* ‘to.come-NEGATIVE’

Imperative forms

- iki jo: ‘to.go-IMPERATIVE=EMPHATIC’, piri ‘to.go-IMPERATIVE’, kai ‘to.buy-IMPERATIVE’, fai ‘to.eat-IMPERATIVE’, jukui ‘to.eat-IMPERATIVE’, nivvi ‘to.fall.asleep-IMPERATIVE’
- mi:ru ‘to.see-IMPERATIVE’, kikiru ‘to.put.on-IMPERATIVE’, ffiru / fi:ru ‘to.give-IMPERATIVE’, izirujo: / idzirujo: ‘to.put.in-IMPERATIVE=EMPHATIC’
- ku: ‘to.come-IMPERATIVE’,

The Miyaguni dialect

Negative forms of verbs that derive from Old Japanese mixed verbs follow the mixed conjugation in the Miyaguni dialect, with the suffix *-uŋ*, except for *ukin* ‘to.get.up-NEGATIVE’, which follows the weak conjugation. The form corresponding to *keranai* ‘to.kick-NEGATIVE’ is the strong conjugation form *kiraŋ*; forms for other verbs that derive from Old Japanese weak verbs were not obtained, however, so further details on the Miyaguni dialect remain unclear.

Strong conjugation

- asŋpaŋ ‘to.play-NEGATIVE’, nomaŋ ‘to.drink-NEGATIVE’, kugaŋ ‘to.row-NEGATIVE’, ikazaŋ ‘to.go-NEGATIVE’, ffaŋ ‘to.fall(e.g. rain)-NEGATIVE’, utusaŋ ‘to.drop-NEGATIVE’, idasadza:ŋ ‘to.put.out-NEGATIVE’, motadza:ŋ ‘to.carry-NEGATIVE’, poraŋ ‘to.dig-NEGATIVE’, kŋsaŋ ‘to.cut-NEGATIVE’, “vaŋ ‘to.sell-NEGATIVE’, fŋa:ŋ ‘to.eat-NEGATIVE’, ka:ŋ ‘to.buy-NEGATIVE’, bjo:ŋ ‘to.get.drunk-NEGATIVE’, ara:ŋ ‘to.wash-NEGATIVE’, mora:ŋ ‘to.receive-NEGATIVE’
- kiraŋ ‘to.kick-NEGATIVE’

Mixed conjugation

- uruza:ŋ ‘to.get.off-NEGATIVE’, utuŋ ‘to.fall-NEGATIVE’, sutuŋ ‘to.discard-NEGATIVE’, fuzzaŋ ‘to.tie.up-NEGATIVE’, fŋu:ŋ ‘to.give-NEGATIVE’, ituŋ ‘to.go.out-NEGATIVE’

Weak conjugation

- ukin ‘to.get.up-NEGATIVE’

Irregular conjugation

- ku:ŋ ‘to.come-NEGATIVE’

Imperative forms

- p^hiri ‘to.go-IMPERATIVE’, kai ‘to.buy-IMPERATIVE’, fŋai ‘to.eat-IMPERATIVE’, jukui ‘to.rest-IMPERATIVE’, nivvi ‘to.fall.asleep-IMPERATIVE’
- miru ‘to.see-IMPERATIVE’, fi:ru ‘to.give-IMPERATIVE’, sŋtiru ‘to.discard-IMPERATIVE’, kŋ: ‘to.come-IMPERATIVE’

The Yonaha dialect

The negative forms of some verbs that derive from Old Japanese mixed verbs follow the mixed conjugation in the Yonaha dialect, with the suffix *-uŋ*, while those of others follow the weak conjugation, with the suffix *-iŋ*. Negative forms of verbs that derive from Old Japanese weak verbs were not obtained, so further details on the Yonaha dialect remain unclear.

Strong conjugation

- tuban ‘to.fly-NEGATIVE’, kugan ‘to.row-NEGATIVE’, ikan ‘to.go-NEGATIVE’, ffan ‘to.fall(e.g. rain)-NEGATIVE’, utusan ‘to.drop-NEGATIVE’, kiran ‘to.kick-NEGATIVE’, kiran ‘to.cut-NEGATIVE’, idasan (to.put.out-NEGATIVE) mutan ‘to.carry-NEGATIVE’, vvan ~ vvadja:n ‘to.sell-NEGATIVE’, ka:n ‘to.buy-NEGATIVE’

Mixed conjugation

- urudjan ‘to.get.off-NEGATIVE’, utun ‘to.fall-NEGATIVE’, stun ‘to.discard-NEGATIVE’, fudja:n ‘to.give-NEGATIVE’

Weak conjugation

- ukin ‘to.get.up-NEGATIVE’

Irregular conjugation

- ku:n ‘to.come-NEGATIVE’

Imperative forms

- iki ‘to.go-IMPERATIVE’, kai ‘to.buy-IMPERATIVE’, fe: ‘to.eat-IMPERATIVE’, jukui ‘to.rest-IMPERATIVE’, nivvi ‘to.fall.asleep-IMPERATIVE’
- mi:ru ‘to.see-IMPERATIVE’, kakiru ‘to.put.on-IMPERATIVE’, ffiru / firu ‘to.give-IMPERATIVE’
- ku: ‘to.come-IMPERATIVE’

The Kurima dialect

Negative forms of verbs that derive from Old Japanese mixed verbs follow the mixed conjugation in the Kurima dialect, with the suffix *-uŋ*. The form corresponding to *keranai* ‘to.kick-NEGATIVE’ is the strong conjugation form *kiran*; forms for other verbs that derive from Old Japanese weak verbs were not obtained, however, so further details on the Kurima dialect remain unclear.

Strong conjugation

- tuban ‘to.fly-NEGATIVE’, aspan ‘to.play-NEGATIVE’, numan ‘to.drink-NEGATIVE’, kugan ‘to.row-NEGATIVE’, ikan ‘to.go-NEGATIVE’, utusan ‘to.drop-NEGATIVE’, idasan ‘to.put.out-NEGATIVE’, mutean ‘to.carry-NEGATIVE’, pran ‘to.dig-NEGATIVE’, sɣmaran

‘to.tie.up-NEGATIVE’, ffaŋ ‘to.fall(e.g. rain)-NEGATIVE’, tssaŋ ‘to.cut-NEGATIVE’, muraŋ ‘to.receive-NEGATIVE’, vvaŋ ‘to.sell-NEGATIVE’, fa:ŋ ‘to.eat-NEGATIVE’, ka:ŋ ‘to.buy-NEGATIVE’, ara:ŋ ‘to.wash-NEGATIVE’, bʲo:ŋ ‘to.get.drunk-NEGATIVE’

- kiraŋ ‘to.kick-NEGATIVE’

Mixed conjugation

- uruŋ ‘to.get.off-NEGATIVE’, utuŋ ‘to.fall-NEGATIVE’, ukuŋ ‘to.get.up-NEGATIVE’, stuŋ ‘to.discard-NEGATIVE’, fu:ŋ ‘to.give-NEGATIVE’

Irregular conjugation

- ku:ŋ ‘to.come-NEGATIVE’

Imperative forms

- iki ‘to.go-IMPERATIVE’, pire ‘to.go-IMPERATIVE’, smare ‘to.tie.up-IMPERATIVE’, idae: ‘to.put.out-IMPERATIVE’, jarae ‘to.give(-CAUSATIVE)-IMPERATIVE’, teje: ‘to.cut-IMPERATIVE’, ke: ‘to.buy-IMPERATIVE’, fe: ‘to.eat-IMPERATIVE’, jukui / juke: ‘to.rest-IMPERATIVE’, nivvi ‘to.fall.asleep-IMPERATIVE’
- mi:ru ‘to.see-IMPERATIVE’, fi:ru ‘to.give-IMPERATIVE’, stiro ‘to.discard-IMPERATIVE’, zziro ‘to.put.in-IMPERATIVE’
- ku: ‘to.come-IMPERATIVE’

The Kugai dialect

Negative forms of verbs that derive either from Old Japanese weak verbs or from mixed verbs follow the weak conjugation in the Kugai dialect, with the suffixes *-iŋ* and *-i:ŋ*. Furthermore, the form corresponding to *shinai* ‘to.do-NEGATIVE’, which derives from an Old Japanese irregular verb, is the weak conjugation form *ʃi:ŋ*. The forms corresponding to *keranai* ‘to.kick-NEGATIVE’ and *shinanai* ‘to.die-NEGATIVE’ follow the strong conjugation. While the forms corresponding to *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’ and *winai* ‘to.sit.down-NEGATIVE’ follow the strong conjugation in other dialects, the weak conjugation forms *kifŋ* and *bizŋ* are used in the Kugai dialect.

Strong conjugation

- tubaŋ ‘to.fly-NEGATIVE’, aspaŋ ‘to.play-NEGATIVE’, numaŋ ‘to.drink-NEGATIVE’, kugaŋ ‘to.row-NEGATIVE’, ikaŋ ‘to.go-NEGATIVE’, utasaŋ ‘to.drop-NEGATIVE’, idasaŋ ‘to.put.out-NEGATIVE’, mutaŋ ‘to.carry-NEGATIVE’, puraŋ ‘to.dig-NEGATIVE’, furaŋ ‘to.fall(e.g. rain)-NEGATIVE’, kʲsaŋ ‘to.cut-NEGATIVE’, sɰmaraŋ ‘to.tie.up-NEGATIVE’, vvaŋ ‘to.sell-NEGATIVE’, kavvaŋ ‘to.put.on(headwear)-NEGATIVE’, ffaŋ ‘to.close-NEGATIVE’,

nivvaŋ ‘to.fall.asleep-NEGATIVE’, ka:ŋ ‘to.buy-NEGATIVE’, fa:ŋ ‘to.eat-NEGATIVE’, bja:ŋ ‘to.get.drunk-NEGATIVE’, ara:ŋ ‘to.wash-NEGATIVE’, andzaŋ ‘to.say-NEGATIVE’

- kiraŋ ‘to.kick-NEGATIVE’, snaŋ ‘to.die-NEGATIVE’

Weak conjugation

- uriŋ ‘to.get.off-NEGATIVE’, utiŋ ‘to.fall-NEGATIVE’, ukiŋ ‘to.get.up-NEGATIVE’, sɽiŋ ‘to.discard-NEGATIVE’, fi:ŋ ‘to.give-NEGATIVE’
- zɽiŋ ‘to.get-NEGATIVE’, kiɽiŋ ‘to.put.on(e.g. clothing)-NEGATIVE’, biɽiŋ ‘to.sit.down-NEGATIVE’, mi:ŋ ‘to.see-NEGATIVE/to.be(animate)-NEGATIVE’

Irregular conjugation

- ku:ŋ ‘to.come-NEGATIVE’, ɽi:ŋ ‘to.do-NEGATIVE’, nja:ŋ ‘to be absent’

Imperative forms

- iki ‘to.go-IMPERATIVE’, jukui ‘to.rest-IMPERATIVE’, kai ‘to.buy-IMPERATIVE’, idafɽi ‘to.put.out-IMPERATIVE’, uri ‘to.be(animate)-IMPERATIVE’, kavvi ‘to.put.on(headwear)-IMPERATIVE’, ffijo: ‘to.close-IMPERATIVE’
- mi:ru ‘to.see-IMPERATIVE’, fi:ru ‘to.give-IMPERATIVE’, kaɽiru ‘to.put.on-IMPERATIVE’, kiɽiru ‘to.put.on(e.g. clothing)-IMPERATIVE’
- ku: ‘to.come-IMPERATIVE’, ɽi:ru ‘to.do-IMPERATIVE’

The Shimajiri dialect

Negative forms of verbs that derive either from Old Japanese weak verbs or from mixed verbs follow the weak conjugation in the Shimajiri dialect, with the suffixes *-iŋ* and *-i:ŋ*. The forms corresponding to *keranai* ‘to.kick-NEGATIVE’ and *winai* ‘to.sit.down-NEGATIVE’, which derive from weak verbs, follow the strong conjugation. As regards irregular verbs, the form corresponding to *shinai* ‘to.do-NEGATIVE’ follows the weak conjugation. *ɽiro* > *sru* > *ssu*.

Strong conjugation

- tubaŋ ‘to.fly-NEGATIVE’, appaŋ ‘to.play-NEGATIVE’, numaŋ ‘to.drink-NEGATIVE’, kugaŋ ‘to.row-NEGATIVE’, ikaŋ ‘to.go-NEGATIVE’, utusaŋ ‘to.drop-NEGATIVE’, idasaŋ ‘to.put.out-NEGATIVE’, mutaŋ ‘to.carry-NEGATIVE’, puraŋ ‘to.dig-NEGATIVE’, ffaŋ ‘to.fall(e.g. rain)-NEGATIVE’, kssaŋ ‘to.cut-NEGATIVE’, fgzzaŋ ‘to.tie.up-NEGATIVE’, kavvaŋ ‘to.put.on(headwear)-NEGATIVE’, vva:ŋ ‘to.sell-NEGATIVE’, ffaŋ ‘to.close-NEGATIVE’, nivvaŋ ‘to.fall.asleep-NEGATIVE’, azzaŋ ‘to.say-NEGATIVE’, ka:ŋ ‘to.buy-NEGATIVE’, fa:ŋ ‘to.eat-NEGATIVE’, ara:ŋ ‘to.wash-NEGATIVE’, bja:ŋ ‘to.get.drunk-NEGATIVE’
- kiraŋ ‘to.kick-NEGATIVE’, bz:zaŋ ‘to.sit.down-NEGATIVE’

Weak conjugation

- uriŋ ‘to.get.off-NEGATIVE’, utŋ ‘to.fall-NEGATIVE’, stŋ ‘to.discard-NEGATIVE’, fiŋ ‘to.give-NEGATIVE’, ukiŋ ‘to.get.up-NEGATIVE’, sniŋ ‘to.die-NEGATIVE’
- mi:ŋ ‘to.see-NEGATIVE/to.be(animate)-NEGATIVE’, zziŋ ‘to.get-NEGATIVE’, ʃʃiŋ ‘to.put.on(e.g. clothing)-NEGATIVE’

Irregular conjugation

- ku:ŋ ‘to.come-NEGATIVE’, ʃiŋ ‘to.do-NEGATIVE’, nja:ŋ ‘to be absent’

Imperative forms

- iki ‘to.go-IMPERATIVE’, uki ‘to.place-IMPERATIVE’, piri ‘to.go-IMPERATIVE’, kai ‘to.buy-IMPERATIVE’, fai ‘to.eat-IMPERATIVE’, jukai ‘to.rest-IMPERATIVE’, nivvi ‘to.fall.asleep-IMPERATIVE’
- mi:u ‘to.see-IMPERATIVE’, fi:ru ‘to.give-IMPERATIVE’, ʃʃiru ‘to.put.on(e.g. clothing)-IMPERATIVE’, ku: ‘to.come-IMPERATIVE’, ssu ‘to.do-IMPERATIVE’

The Karimata dialect

Negative forms of verbs that derive either from Old Japanese weak verbs or from mixed verbs follow the weak conjugation in the Karimata dialect, with the suffixes *-iŋ* and *-i:ŋ*. The forms corresponding to *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’, *winai* ‘to.sit.down-NEGATIVE’, and *shinanai* ‘to.die-NEGATIVE’ also follow the weak conjugation. As regards irregular verbs, the form corresponding to *shinai* ‘to.do-NEGATIVE’ follows the weak conjugation, while the form corresponding to *inai* ‘to.be(animate)-NEGATIVE’ follows to the strong conjugation.

Strong conjugation

- tubaŋ ‘to.fly-NEGATIVE’, asbaŋ ‘to.play-NEGATIVE’, numaŋ ‘to.drink-NEGATIVE’, kugaŋ ‘to.row-NEGATIVE’, ikaŋ ‘to.go-NEGATIVE’, utasaŋ ‘to.drop-NEGATIVE’, idasaŋ ‘to.put.out-NEGATIVE’, mutaŋ ‘to.carry-NEGATIVE’, puraŋ ‘to.dig-NEGATIVE’, smaraŋ ‘to.tie.up-NEGATIVE’, ffaŋ ‘to.fall(e.g. rain)-NEGATIVE’, kssaŋ ‘to.cut-NEGATIVE’, kavvaŋ ‘to.put.on(headwear)-NEGATIVE’, ffaŋ ‘to.close-NEGATIVE’, vvaŋ ‘to.sell-NEGATIVE’, nivvaŋ ‘to.fall.asleep-NEGATIVE’, azzaŋ ‘to.say-NEGATIVE’, ka:ŋ ‘to.buy-NEGATIVE’, ara:ŋ ‘to.wash-NEGATIVE’, fa:ŋ ‘to.eat-NEGATIVE’
- kiraŋ ‘to.kick-NEGATIVE’

Weak conjugation

- uriŋ ‘to.get.off-NEGATIVE’, utiŋ ‘to.fall-NEGATIVE’, ukiŋ ‘to.get.up-NEGATIVE’, ʃitiŋ ‘to.discard-NEGATIVE’, fi:ŋ ‘to.give-NEGATIVE’, ʃimiŋ ‘to.close-NEGATIVE’, kadziŋ

‘to.nibble-NEGATIVE/to.dig-NEGATIVE’, sniŋ ‘to.die-NEGATIVE’, bʲu:iŋ
‘to.get.drunk-NEGATIVE’¹¹

- iziŋ ‘to.get-NEGATIVE’, kiŋiŋ ‘to.put.on(e.g. clothing)-NEGATIVE’, biŋiŋ
‘to.sit.down-NEGATIVE’, mi:iŋ ‘to.see-NEGATIVE/to.be(animate)-NEGATIVE’

Irregular conjugation

- ku:iŋ ‘to.come-NEGATIVE’, aŋiŋ ‘to.do-NEGATIVE’, uraŋ ‘to.be(animate)-NEGATIVE’, nja:iŋ ‘to
be absent’

Imperative forms

- iki ‘to.go-IMPERATIVE’, uki ‘to.place-IMPERATIVE’, idaŋi ‘to.put.out-IMPERATIVE’, kai
‘to.buy-IMPERATIVE’, ɸai / fai ‘to.eat-IMPERATIVE’, jukui ‘to.rest-IMPERATIVE’, nivi
‘to.fall.asleep-IMPERATIVE’
- mi:ru ‘to.see-IMPERATIVE’, fi:ru / ffiru ‘to.give-IMPERATIVE’, uriru ‘to.get.off-IMPERATIVE’,
kakiŋi ‘to.put.on-IMPERATIVE’, ɕimiru ‘to.close-IMPERATIVE’, ŋgiri
‘to.return.home-IMPERATIVE’, iziru ‘to.put.in-IMPERATIVE’
- ku: ‘to.come-IMPERATIVE’, aŋiru ‘to.do-IMPERATIVE’

The Ikema dialect

Negative forms of verbs that derive either from Old Japanese weak verbs or from mixed verbs follow the weak conjugation in the Ikema dialect, with the suffixes *-iŋ* and *-i:iŋ*. The forms corresponding to *keranai* ‘to.kick-NEGATIVE’, *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’, *winai* ‘to.sit.down-NEGATIVE’, and *shinanai* ‘to.die-NEGATIVE’ follow the strong conjugation. As regards irregular verbs, the form corresponding to *shinai* ‘to.do-NEGATIVE’ follows the mixed conjugation.

Strong conjugation

- tuban ‘to.fly-NEGATIVE’, aeiban ‘to.play-NEGATIVE’, numan ‘to.drink-NEGATIVE’, kugan
‘to.row-NEGATIVE’, ikan ‘to.go-NEGATIVE’, utuhan ‘to.drop-NEGATIVE’, idanan
‘to.put.out-NEGATIVE’, mutean ‘to.carry-NEGATIVE’, furadza:n ‘to.dig-NEGATIVE’, kiran
‘to.cut-NEGATIVE’, ɕimaran ‘to.tie.up-NEGATIVE’, ffan ‘to.fall(e.g. rain)-NEGATIVE’, vvan
‘to.sell-NEGATIVE’, kavvan ‘to.put.on(headwear)-NEGATIVE’, ttadza:n ‘to.close-NEGATIVE’,
nʲivvan ‘to.fall.asleep-NEGATIVE’, azzan ‘to.say-NEGATIVE’, ka:n ‘to.buy-NEGATIVE’, ara:n
‘to.wash-NEGATIVE’, fa:n ‘to.eat-NEGATIVE’

¹¹ *bʲu:iŋ* may be a negative potential form corresponding to Japanese *yoenai* ‘to.get.drunk-POTENTIAL-NEGATIVE’.

- kiran ‘to.kick-NEGATIVE’, ttean ‘to.put.on(e.g. clothing)-NEGATIVE’, bidzan ‘to.sit.down-NEGATIVE’, einan ‘to.die-NEGATIVE’

Weak conjugation

- ukin ‘to.get.up-NEGATIVE’, uridza:n ‘to.get.off-NEGATIVE’, utin ‘to.fall-NEGATIVE’, sītin ‘to.discard-NEGATIVE’, fi:n ‘to.give-NEGATIVE’
- zzin / ddzin ‘to.get-NEGATIVE’, b’u:i:n ‘to.get.drunk-NEGATIVE¹²’, mi:n ‘to.see-NEGATIVE/to.be(animate)-NEGATIVE’

Irregular conjugation

- ku:n ‘to.come-NEGATIVE’, φun ‘to.do-NEGATIVE’, n’a:n ‘to be absent’

Imperative forms

- iki ‘to.go-IMPERATIVE’, jukui ‘to.rest-IMPERATIVE’, kai ‘to.buy-IMPERATIVE’, n’ivvi / n’iuvvi ‘to.fall.asleep-IMPERATIVE’
- mi:ru ‘to.see-IMPERATIVE’, fi:ru ‘to.give-IMPERATIVE’, sītiru ‘to.discard-IMPERATIVE’
- ku: ‘to.come-IMPERATIVE’, assu ‘to.do-IMPERATIVE’

The Kuninaka dialect

The form corresponding to *minai* ‘to.see-NEGATIVE’, which derives from an Old Japanese weak verb, is the weak conjugation form *mi:n*; those corresponding to *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’ and *winai* ‘to.sit.down-NEGATIVE’, however, are the strong conjugation forms *ʔtan* and *bʔzan*, respectively. The form corresponding to *okinai* ‘to.get.up-NEGATIVE’, which derives from an Old Japanese mixed verb, follows the weak conjugation. As only a small number of word forms was obtained for the Kuninaka dialect, no more than a brief outline can be given at present.

Strong conjugation

- kavvan ‘to.put.on(headwear)-NEGATIVE’, nivvan ‘to.fall.asleep-NEGATIVE’, azzan / aʔzan ‘to.say-NEGATIVE’
- sʔnan ‘to.die-NEGATIVE’, ʔtan ‘to.put.on(e.g. clothing)-NEGATIVE’, bʔzan ‘to.sit.down-NEGATIVE’

Weak conjugation

- okinni: ‘to.get.up-NEGATIVE¹³’
- mi:n ‘to.see-NEGATIVE/to.be(animate)-NEGATIVE’

¹² *b’u:iŋ* may be a negative potential form corresponding to Japanese *yoenai* ‘to.get.drunk-POTENTIAL-NEGATIVE’; further confirmation is needed.

¹³ *ni:* in *okinni:* may be a sentence-final particle.

Irregular conjugation

- ahon / ason ‘to.do-NEGATIVE’, nja:n ‘to be absent’

Imperative forms

- mi:ru ‘to.see-IMPERATIVE’, φi:ru ‘to.give-IMPERATIVE’, ɕimiru ‘to.close-IMPERATIVE’, kɔ: ‘to.come-IMPERATIVE’, asso ‘to.do-IMPERATIVE’

3.1 Summary of negative forms

As it was not possible to obtain data for all the survey items at all the sites where the verb conjugation survey was conducted, the number of word forms that were obtained is limited, but when comparing the conjugation types of the Northern Ryukyuan languages (the dialects of Okinawa Island in particular), Old Japanese, and the Miyako language, the following observations can be made.

- (i) Miyako has strong, weak, mixed, and irregular conjugation types.
- (ii) Verbs deriving from Old Japanese strong verbs consistently follow the strong conjugation in Miyako.
- (iii) The verb corresponding to *keru* ‘to kick’, which derives from an Old Japanese weak verb, follows the strong conjugation in Miyako.
- (iv) The verb corresponding to *miru* ‘to see; to look’, which derives from an Old Japanese weak verb, follows the weak conjugation in some dialects and the mixed conjugation in others.
- (v) Verbs deriving from Old Japanese mixed verbs follow the weak conjugation in the Kugai, Karimata, Ikema, and Kuninaka dialects, while they follow the mixed conjugation in the Bora, Uruka, Miyaguni, Yonaha, and Kurima dialects.
- (vi) The verb corresponding to *shinu* ‘to die’, which derives from an Old Japanese mixed verb, follows the weak conjugation in the Karimata and Shimajiri dialects, while it follows the strong conjugation in the Bora, Kugai, and Ikema dialects¹⁴.

¹⁴ In the Nishizato dialect of Miyako, according to Moriyasu Motonaga (1973), the form *snan* ‘to.die-NEGATIVE’, among others, follows the strong conjugation, while the forms *sniru* ‘to.die-IMPERATIVE’, *sniriba* ‘to.die-CONDITIONAL’, and others follow the weak conjugation. Furthermore, in a survey on the Nobaru dialect of former Ueno Village I conducted in November 2011 (the informant: Y. N., male, b. 1943), both a strong form, *snatti: u:* ‘to be about to die’, and a weak form, *snitti: u:* ‘to be about to die’ were obtained for expressing an impending boundary point of the event referred to by the verb. Of these, the former expresses the impending inception point of a volitional action, while the latter expresses an impending terminal point of a non-volitional change of state. All kinds of conjugated forms have to be examined in order to determine what the conjugation type of *sn* ‘to die’ is and which of its conjugated forms follow the weak conjugation. It is interesting to note that there are different mixed conjugation variants in different dialects. Together with the question of how these things have arisen, these are matters to be resolved in future research.

- (vii) A phenomenon is observed in the dialects of Okinawa Island in which verbs deriving from Old Japanese weak verbs have changed into strong verbs; similarly, the form corresponding to *keranai* ‘to.kick-NEGATIVE’, which derives from an Old Japanese weak verb, follows the strong conjugation in every Miyako dialect, while the same holds for *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’ in the Bora and Ikema dialects, and for *winai* ‘to.sit.down-NEGATIVE’ in the Bora, Shimajiri, and Ikema dialects. Not enough word forms were obtained draw conclusions regarding the other dialects.
- (viii) Although a phenomenon is observed in the dialects of Okinawa Island in which verbs deriving from Old Japanese mixed verbs have changed into strong verbs (i.e. into verbs with *-r*-stems), such a change is not observed in Miyako.
- (ix) In the Kugai, Shimajiri, and Karimata dialects, the forms corresponding to *kinai* ‘to.put.on(e.g. clothing)-NEGATIVE’, *winai* ‘to.sit.down-NEGATIVE’, and *enai* ‘to.get-NEGATIVE’ also follow the weak conjugation.
- (x) The form corresponding to *shinai* ‘to.do-NEGATIVE’, which derives from an Old Japanese irregular verb, follows the weak conjugation in the Kugai, Karimata, and Shimajiri dialects, while it follows the mixed conjugation in the Bora and Ikema dialects.

An interesting fact regarding the lexical meaning of negative verbs is that there were multiple sites where the negative form of *miz* ‘to see; to look’ was used in addition to *uraŋ* as a present tense negative form of *uz* ‘to be (animate)’.

- (16) *tunaznna imma mi:ŋ.* (Shimajiri)
 next.door=LOCATIVE=TOPIC dog=TOPIC to.be(animate)-NEGATIVE
 ‘My neighbors don’t have a dog.’
- (17) *tunaznu ja:nna inna mi:ŋ.* (Kugai)
 next.door=GENITIVE house=LOCATIVE=TOPIC dog=TOPIC to.be(animate)-NEGATIVE
 ‘My neighbors don’t have a dog.’

4 Past tense forms

Irrespective of whether a verb is strong, weak, mixed, or irregular, the suffixes used for the past tense are *-ta:*, *-ta*, *-tai*, and *-taʔ*. Unlike in Japanese and the Northern Ryukyuan languages, voicing of the *-t-* in these suffixes is not observed in strong verbs. As the sound changes *ri > i*, exemplified by *tuʔ* ‘bird’ and *paʔ* ‘needle; pin’, and *ru > z*, exemplified by *piru > piʔ* ‘garlic’ and

saru > *saʔ* ‘monkey’, have occurred in Miyako, *-taʔ*, *-tai*, *-ta:*, and *-ta* must derive either from *-tari* or from *-taru*.

The Bora dialect

Irrespective of whether a verb is strong, weak, mixed, or irregular, the suffix used for the past tense is either *-ta:* or *-ta*, in which the final *-z* has undergone lenition. The sole exception is *ataʔ* ‘to.be(inanimate)-PAST’, in which *-taʔ* is used.

Strong conjugation

- *tubzta:* ‘to.fly-PAST’, *asɿpɿta* ‘to.play-PAST’, *kugzta:* ‘to.row-PAST’, *iksta:* ‘to.go-PAST’, *utusta:* ‘to.drop-PAST’, *idasuta:* ‘to.put.out-PAST’, *mutsɿta* ‘to.carry-PAST’, *numta* ‘to.drink-PAST’, *fumta:* ‘to.put.on(footwear)-PAST’, *puzɿta:* ‘to.dig-PAST’, *fuzta:* ‘to.fall(e.g. rain)-PAST’, *pizta:* ‘to.go-PAST’, *smazta:* ‘to.tie.up-PAST’, *kssta:* ‘to.cut-PAST’, *kavta:* ‘to.buy-PAST’, *arɔʊta* ‘to.wash-PAST’, *fɔʊta* ‘to.eat-PAST’, *bju:ta:* ‘to.get.drunk-PAST’, *kavta:* ‘to.put.on(headwear)-PAST’, *niʊta:* ‘to.fall.asleep-PAST’, *fɔ:ta:* ‘to.close-PAST’, *azta:* ‘to.say-PAST’, *vvita:* ‘to.sell-PAST’, *kssta:* ‘to.put.on(e.g. clothing)-PAST’, *kizta:* ‘to.kick-PAST’, *fttsta:* ‘to.tie.up-PAST’, *bz:ta:* ‘to.sit.down-PAST’, *snta:* ‘to.die-PAST’

Mixed conjugation

- *urita:* ‘to.get.off-PAST’, *uteita:* ‘to.fall-PAST’, *steita:* ‘to.discard-PAST’, *ffita:* ‘to.give-PAST’, *bakita:* ‘to.divide-PAST’, *pingita* ‘to.escape-PAST’, *ukita:* ‘to.get.up-PAST’
- *mi:ta:* ‘to.see-PAST’, *i:ta:* ‘to.get-PAST’

Irregular conjugation

- *ksta:* ‘to.come-PAST’, *sɿ:ta:* ‘to.do-PAST’, *ataʔ* ‘to.be(inanimate)-PAST’, *uta:* ‘to.be(animate)-PAST’

The Uruka dialect

Irrespective of whether a verb is strong, weak, mixed, or irregular, the suffix used for the past tense is *-taʔ*. Forms in which *-ta:* is used are also observed.

Strong conjugation

- *tuvʔɿtaʔ* ~ *tubʔɿtaʔ* ‘to.fly-PAST’, *asɿpʔɿtaʔ* ‘to.play-PAST’, *iksɿtaʔ* ~ *iksta:* ‘to.go-PAST’, *kugʔɿtaʔ* ‘to.row-PAST’, *utuʂtaʔ* ~ *utuʂta:* ‘to.drop-PAST’, *idasɿtaʔ* ‘to.put.out-PAST’, *mutsɿtaʔ* ‘to.carry-PAST’, *numtaʔ* ‘to.drink-PAST’, *funtaʔ* ‘to.put.on(footwear)-PAST’, *puʔɿtaʔ* ‘to.dig-PAST’, *muduri piʔɿtaʔ* ‘to.return to.go-PAST’, *fʔɿtaʔ* ~ *fʔɿta:* ‘to.fall(e.g. rain)-PAST’, *kavtaʔ* ‘to.put.on(headwear)-PAST’, *kautaʔ* ‘to.buy-PAST’, *fo:taʔ* ~ *fautaʔ* ~

fouta^zl ‘to.eat-PAST’, murauta^zl ‘to.receive-PAST’, bju:ta^zl ‘to.get.drunk-PAST’, arauta^zl ‘to.wash-PAST’, v:ta^zl ‘to.sell-PAST’, ksta^zl ~ ksɿ:ta^zl ‘to.cut-PAST’, sɿma^zlta^zl ‘to.tie.up-PAST’, k^sɿta^zl ‘to.kick-PAST’

Mixed conjugation

- urita: ~ urita^zl ‘to.get.off-PAST’, utita^zl ~ utita: ‘to.fall-PAST’, piŋgita: ‘to.escape-PAST’, stita^zl ~ stita: ‘to.discard-PAST’, ffita^zl ‘to.give-PAST’, bakita^zl ‘to.divide-PAST’, piŋgita^zl ‘to.escape-PAST’

Irregular conjugation

- sɿta^zl ‘to.do-PAST’, ksɿta^zl ~ ksɿta: ~ k^sɿ:ta^zl ‘to.come-PAST’, kugi^kstaɿ ~ kug^zi^kstaɿ ‘to.row-to.come-PAST’

The Miyaguni dialect

Irrespective of whether a verb is strong, weak, mixed, or irregular, the suffix used for the past tense is *-ta:*.

Strong conjugation

- asɿp^hɿta: ‘to.play-PAST’, u:gɜ:ta: ‘to.swim-PAST’, iksta: / ikɿta: ‘to.go-PAST’, utu^ɕsta: ‘to.drop-PAST’, ida^æita / idasɿta ‘to.put.out-PAST’, pira^sɿta: ‘to.go-CAUSATIVE-PAST’, mɔtɕi^ɕta: ‘to.carry-PAST’, numta: ‘to.drink-PAST’, fuzta: ‘to.fall(e.g. rain)-PAST’, pɔzta ‘to.dig-PAST’, mudu^ɕta: ‘to.return-PAST’, kɿ:ta: ‘to.cut-PAST’, naka^zɿta: ‘to.divide-PAST’, fuzta: / fɿzta: ‘to.tie.up-PAST’, kizta: ‘to.kick-PAST’, kauta: ‘to.buy-PAST’, fɔota: ‘to.eat-PAST’, morauta: / moroota: ‘to.receive-PAST’, bjo:ta: ‘to.get.drunk-PAST’, arauta: ‘to.wash-PAST’, u:ta: / uvta: / uvta: ‘to.sell-PAST’

Mixed conjugation

- urita: ‘to.get.off-PAST’, ucɿta: ‘to.fall-PAST’, sɿtita: ‘to.discard-PAST’, fɿiita: ‘to.give-PAST’, p^hiŋgita: / fɿiŋgita: ‘to.escape-PAST’

Irregular conjugation

- kɿ:ta: / kɿta: ‘to.come-PAST’, kugiksta: ‘to.row-to.come-PAST’, kugiuta ‘to.row-PROGRESSIVE-PAST’

The Yonaha dialect

Irrespective of whether a verb is strong, weak, mixed, or irregular, the suffix used for the past tense is *-ta:*.

Strong conjugation

- tubɿta: / tubɿtan ‘to.fly-PAST’, appɿta: ‘to.play-PAST’, ikʷɿta: ‘to.go-PAST’, kugɿta: ‘to.row-PAST’, utusɿta: ‘to.drop-PAST’, idasɿta: ‘to.put.out-PAST’, mutsɿta: ‘to.carry-PAST’, numta: ‘to.drink-PAST’, ffɯtta: ‘to.fall(e.g. rain)-PAST’, puzta: ‘to.dig-PAST’, pi:ta: ‘to.go-PAST’, kɿsɿta: ‘to.cut-PAST’, ko:ta: ‘to.buy-PAST’, aro:ta: ‘to.wash-PAST’, fo:ta: ‘to.eat-PAST’, bju:ta: ‘to.get.drunk-PAST’, ʊ:ta: / u:ta: ‘to.sell-PAST’, kizɿta: ‘to.kick-PAST’, sɿmaʷɿta: ‘to.tie.up-PAST’

Mixed conjugation

- urita: ‘to.get.off-PAST’, utita: ‘to.fall-PAST’, sɯtita: ‘to.discard-PAST’, fi:ta: ‘to.give-PAST’, bakita: ‘to.divide-PAST’

Weak conjugation

- zzita: ‘to.get-PAST’

Irregular conjugation

- ksta: / kɿsɿta: ‘to.come-PAST’, kugɿdu sɿta: ‘to.row=FOCUS to.do-PAST’, ʊ:du:sɿta: ‘to.sell=FOCUS to.do-PAST’ bju:i uta: ‘to.get.drunk-STATIVE-PAST’, tubɿdu sɿta: ‘to.fly=FOCUS to.do-PAST’

The Kurima dialect

Irrespective of whether a verb is strong, mixed, or irregular, the suffix used for the past tense is *-taɿ*. Forms deriving from Old Japanese weak verbs were not obtained. In the strong conjugation, the suffix takes the shapes *-ztaɿ*, *-ɿtaɿ*, and *-taɿ*; in the mixed conjugation, it takes the shape *-taɿ*.

Strong conjugation

- tubʒtaʒ / tubʒtaɿ ‘to.fly-PAST’, aspɿtaɿ ‘to.play-PAST’, numutaɿ¹⁵ ‘to.drink-PAST’, kudʒtaɿ ‘to.row-PAST’, iʒtaɿ ‘to.go-PAST’, piɿtaɿ / piʒtaɿ ‘to.go-PAST’, utɯstaʒ / utɯstaɿ ‘to.drop-PAST’, idastaɿ ‘to.put.out-PAST’, puztaɿ ‘to.dig-PAST’, sɿmaɿtaɿ / smaʒtaɿ ‘to.tie.up-PAST’, fɸtaɿ ‘to.fall(e.g. rain)-PAST’, ʈʂtaɿ / ʈʂtaʒ ‘to.cut-PAST’, muro:taɿ ‘to.receive-PAST’, u:taɿ ‘to.sell-PAST’, fo:taɿ ‘to.eat-PAST’, ko:taɿ ‘to.buy-PAST’, aro:taɿ ‘to.wash-PAST’, biu:taɿ ‘to.get.drunk-PAST’
- kiʒtaʒ / kiʒtaɿ ‘to.kick-PAST’

Mixed conjugation

- uritaʒ / uritaɿ ‘to.get.off-PAST’, utɿtaʒ ‘to.fall-PAST’, stɿtaʒ / stɿtaɿ ‘to.discard-PAST’, fi:taɿ ‘to.give-PAST’, bakɿtaɿ ‘to.divide-PAST’, piŋgitaɿ ‘to.escape-PAST’

¹⁵ Although the suffix does not begin with a vowel in strong verbs with a stem ending in *-m* in the other dialects, *-u-* appears here; further confirmation is needed.

Irregular conjugation

- tsstaŋ / tsstaŋ ‘to.come-PAST’, kugitstaŋ ‘to.row-to.come-PAST’, uritstaŋ / tsstaŋ ‘to.get.off-to.come-PAST’, muraitstaŋ ‘to.receive-to.come-PAST’, ikū:taz / ikū:taŋ ‘to.go-STATIVE-PAST’, mmiaŋtaŋ ‘to.come-HONORIFIC-PAST’ u:gi tsstaŋ ‘to.swim-to.come-PAST’

The Kugai dialect

Irrespective of whether a verb is strong, weak, or irregular, the suffix used for the past tense is *-ta:*. In the strong conjugation, the suffix takes the shapes *-sta:*, *-ŋta:*, and *-ta:*; in the weak conjugation, it takes the shape *-ta:*.

Strong conjugation

- aspsta: ‘to.play-PAST’, kugzŋta: ‘to.row-PAST’, ikŋta: ‘to.go-PAST’, utasta: ‘to.drop-PAST’, idasta: ‘to.put.out-PAST’, mutsta: ‘to.carry-PAST’, numta: ‘to.drink-PAST’, fūmta: ‘to.put.on(footwear)-PAST’, fuŋta: ‘to.fall(e.g. rain)-PAST’, puzta: ‘to.dig-PAST’, pī:ta: ‘to.go-PAST’, kŋta: ‘to.cut-PAST’, kiŋta: / kiŋta: ‘to.kick-PAST’, sŋmaŋta: ‘to.tie.up-PAST’, naka:zta: ‘to.divide-PAST’, ko:ta: ‘to.buy-PAST’, aro:ta: ‘to.wash-PAST’, fo:ta: ‘to.eat-PAST’, moro:ta: ‘to.receive-PAST’, bju:ta: ‘to.get.drunk-PAST’, v:ta: ‘to.sell-PAST’, nivta: ‘to.fall.asleep-PAST’, kavta: ‘to.put.on(headwear)-PAST’, ffta: ‘to.close-PAST’, anta: ‘to.say-PAST’, snta: ‘to.die-PAST’

Weak conjugation

- urita: ‘to.get.off-PAST’, utita: ‘to.fall-PAST’, ukita: ‘to.get.up-PAST’, sŋtita: ‘to.discard-PAST’, kieita: ‘to.sell-PAST’, fi:ta: ‘to.give-PAST’, smita: ‘to.wash-PAST’, piŋgipī:ta: ‘to.escape-PAST’
- mi:ta: ‘to.see-PAST’, zzita: ‘to.get-PAST’, bizita: ‘to.sit.down-PAST’

Irregular conjugation

- kŋta: ‘to.come-PAST’, kugikŋta: ‘to.row-to.come-PAST’, sta: ‘to.do-PAST’, uta: ‘to.be/animate-PAST’, ata: ‘to.be/inanimate-PAST’, ariuta: ~ arju:ta: ‘to.be/inanimate-PAST’, bju:iuta: ‘to.get.drunk-STATIVE-PAST’, tatei:uta: ‘to.stand.up-STATIVE-PAST’, niviuta: ‘to.fall.asleep-STATIVE-PAST’

The Shimajiri dialect

-ta: is the suffix most often used for the past tense in the Shimajiri dialect, but *-ta* and *-taz* are used, as well. In the strong conjugation, the suffix takes the shapes *-sta:*, *-zta:*, *-uta:*, and *-ta:*; in the weak conjugation, it takes the shape *-taz*.

Strong conjugation

- tubzta: ‘to.fly-PAST’, appsta: ‘to.play-PAST’, kugzta: ‘to.row-PAST’, iksta: ‘to.go-PAST’, utusta: / utusta ‘to.drop-PAST’, idasta: ‘to.put.out-PAST’, mutsta ‘to.carry-PAST’, nunta: ‘to.drink-PAST’, funta: / fnta: ‘to.put.on(footwear)-PAST’, puzta: ‘to.dig-PAST’, ffta: / ffuta ‘to.fall(e.g. rain)-PAST’, pizta: ‘to.go-PAST’, kssta: ‘to.cut-PAST’, kauta: ‘to.buy-PAST’, arauta: ‘to.wash-PAST’, fauta: ‘to.eat-PAST’, bju:taz ‘to.get.drunk-PAST’, kavta: ‘to.put.on(headwear)-PAST’, n’ivta: ‘to.fall.asleep-PAST’, ffta: / ffuta: ‘to.close-PAST’, azta: ‘to.say-PAST’, v:ta: / v:ta: ‘to.sell-PAST’, fgzta: ‘to.tie.up-PAST’, kizta: ‘to.kick-PAST’, bz:ta: ‘to.sit.down-PAST’, snta: ‘to.die-PAST’

Weak conjugation

- urita: ‘to.get.off-PAST’, uteita: ‘to.fall-PAST’, steita: ‘to.discard-PAST’, fi:ta: ‘to.give-PAST’, bakitaz ‘to.divide-PAST’, ukitaz / ukita: ‘to.get.up-PAST’
- mi:ta: ‘to.see-PAST’, zzitaz ‘to.get-PAST’, jfitaz ‘to.sell-PAST’

Irregular conjugation

- ssta: ‘to.come-PAST’, ssta: ‘to.do-PAST’, ata: ‘to.be(inanimate)-PAST’, u:ta: / uta: ‘to.be(animate)-PAST’

The Karimata dialect

In addition to *-taz*, *-daz* is used as a suffix for the past tense in the Karimata dialect. At first glance, *-daz* in *nundaz* ‘to.drink-PAST’ looks like an *onbin* form¹⁶, but as *-daz* is used in weak verb forms such as *uridaz* ‘to.get.off-PAST’ and *utidaz* ‘to.fall-PAST’ as well as in strong verb forms such as *asvdaz* ‘to.play-PAST’, and as there are verbs such as *sntaz* / *sndaz* ‘to.die-PAST’ and *εimitaz* / *εimidaz* ‘to.close-PAST’ in which the use of *-taz* and *-daz* as variant forms is observed, they seem to be phonetic variants. In the Karimata dialect the suffix thus takes the shapes *-itaz* and *-taz* in the strong conjugation; in the weak conjugation, it takes the shape *-taz*.

Strong conjugation

- tubitaz / tuvtaz ‘to.fly-PAST’, asvdaz ‘to.play-PAST’, kugitaz / kuvtaz ‘to.row-PAST’, iftaz / ikitaz ‘to.go-PAST’, utastaz ‘to.drop-PAST’, idastaz ‘to.put.out-PAST’, mutstaz ‘to.carry-PAST’, nundaz ‘to.drink-PAST’, puztaz ‘to.dig-PAST’, ffutaz ‘to.fall(e.g. rain)-PAST’, ksstaz ‘to.cut-PAST’, kaztaz / ko:ta: / ko:taz ‘to.buy-PAST’, aro:daz ‘to.wash-PAST’, fo:taz ‘to.eat-PAST’, b’u:ztaz ‘to.get.drunk-PAST’, kavtaz ‘to.put.on(headwear)-PAST’, n’ivtaz

¹⁶ *Translator’s note*: a ‘euphonic form’; see section 4.1 for an explanation

‘to.fall.asleep-PAST’, ffitaz ‘to.close-PAST’, aztaz ‘to.say-PAST’, v:taz ‘to.sell-PAST’, ks:daz ‘to.kick-PAST’, smaztaz ‘to.tie.up-PAST’, sntaz / sndaz¹⁷ ‘to.die-PAST’

Weak conjugation

- uridaz ‘to.get.off-PAST’, utidaz ‘to.fall-PAST’, eitidaz ‘to.discard-PAST’, fi:taz ‘to.give-PAST’, ŋgidaz ‘to.return.home-PAST’, taskaritzaz ‘to.be.saved-PAST’, ukitaz ‘to.get.up-PAST’, eimitaz / eimidaz ‘to.close-PAST’
- mi:daz ‘to.see-PAST’, zzitaz ‘to.get-PAST’, kiitaz ‘to.sell-PAST’, bizitaz ‘to.sit.down-PAST’

Irregular conjugation

- ksstaz ‘to.come-PAST’, kugiftaz ‘to.row-to.come-PAST’, astaz ‘to.do-PAST’, ataz ‘to.be(inanimate)-PAST’, utaz ‘to.be(animate)-PAST’

The Ikema dialect

Irrespective of whether a verb is strong, weak, or irregular, the suffix used for the past tense in the Ikema dialect is *-tai*.

Strong conjugation

- aeibitai ~ aeu:tai ‘to.play-PAST’, kugitai ‘to.row-PAST’, ifutai ~ ikitai ‘to.go-PAST’, utaetaitai ‘to.drop-PAST’, idaeitaitai ‘to.put.out-PAST’, muttai ‘to.carry-PAST’, nuntai ‘to.drink-PAST’, mmitai ‘to.put.on(footwear)-PAST’, fu:tai ‘to.fall(e.g. rain)-PAST’, fuitai ‘to.dig-PAST’, muduitai ‘to.return-PAST’, hatai ‘to.go-PAST’, kiritai ‘to.cut-PAST’, eɽmaritai ‘to.tie.up-PAST’, kautai ~ kavtai ~ kaitai ‘to.buy-PAST’, vvitai ‘to.sell-PAST’, faitai ~ fautai ~ fautai ‘to.eat-PAST’, bʲu:itai ‘to.get.drunk-PAST’, araitai ‘to.wash-PAST’, aitai ‘to.say-PAST’, kavvitai ‘to.put.on(headwear)-PAST’, ffitai ‘to.close-PAST’, nʲu:tai ‘to.fall.asleep-PAST’, taskaitai ‘to.be.saved-PAST’, ki:tai ‘to.kick-PAST’, tteaddan ‘to.cut-POTENTIAL-NEGATIVE-PAST’¹⁸

Weak conjugation

- ukitai ‘to.get.up-PAST’, uritai ‘to.get.off-PAST’, uteita: ‘to.fall-PAST’, bakitai ‘to.divide-PAST’, uɕɕimitai ‘to.bury-PAST’, piŋgita ‘to.escape-PAST’, fi:tai ‘to.give-PAST’
- mi:tai ‘to.see-PAST’, tsɕitai ~ ttitai ‘to.sell-PAST’, bi:tai ‘to.sit.down-PAST’, ddzитай ‘to.get-PAST’

¹⁷ While the past tense forms *sntaz* / *sndaz* ‘to.die-PAST’ follow the strong conjugation, the negative form *snij* ‘to.die-NEGATIVE’ follows the weak conjugation. This verb thus follows a mixed conjugation, albeit a different one from that of Old Japanese.

¹⁸ This form was elicited in response to Japanese *kirenakatta* ‘to.cut-POTENTIAL-NEGATIVE-PAST’, but as it appears to follow the strong conjugation, it may be a form corresponding to *kiranakatta* ‘to.cut-NEGATIVE-PAST’.

Irregular conjugation

- ttai ‘to.come-PAST’, asʔtai / aeitai ‘to.do-PAST’, aru:tai ‘to.be(inanimate)-PAST’, uru:tai ‘to.be(animate)-PAST’

The Kuninaka dialect

Although only a small number of word forms was obtained, the suffix observed most often is *-tal*, irrespective of whether the verb is strong, mixed, weak, or irregular; *-ta:* is used as well.

Strong conjugation

- Ngital ‘to.go-PAST’, pialtal ‘to.go-PAST’, kavtal ‘to.put.on(headwear)-PAST’, φumtal ‘to.put.on(footwear)-PAST’, nivtal ‘to.fall.asleep-PAST’, sʔntal ‘to.die-PAST’

Mixed conjugation

- ɕimɕetal ‘to.close-PAST’, okital ‘to.get.up-PAST’

Weak conjugation

- mi:tal ‘to.see-PAST’, ʔʔ:ta: ‘to.sell-PAST’, bʔ:ta: / bʔzta: ‘to.sit.down-PAST’

Irregular conjugation

- asta:l ‘to.do-PAST’, atal ‘to.be(inanimate)-PAST’, ɕtal ‘to.be(animate)-PAST’, tateii ɕtal ‘to.stand.up-STATIVE-PAST’

4.1 Past tense forms—discussion (1): on the presence of *onbin*

The sound changes undergone by Heian-era Japanese verb stems that are called ‘*onbin*’ are also observed in the *Omoro Sōshi*¹⁹ and the Northern Ryukyuan languages. ‘*Onbin*’ refers to sound changes involving stem-final consonants and suffixes that have resulted in changes in the paradigms of strong verbs, which acquired alternating stems in the process. Alternate stems are used in past tense and *shite*-continuative forms, which includes derived forms containing a *shite*-continuative as an element.

Neither ‘*-i-onbin*’ in *-k*-stem and *-g*-stem verbs, nor ‘nasal *onbin*’ in *-b*-stem verbs, nor ‘geminating *onbin*’ in *-t*-stem or *-r*-stem verbs are observed in the strong conjugation of the Miyako language. The ‘*-i-onbin*’ seen in *-s*-stem verbs in the Northern Ryukyuan languages are not observed, either. Although the suffix-initial vowel *-i-* is elided in the case of *-m*-stem verbs, ‘nasal *onbin*’ is not observed. Furthermore, the ‘elision *onbin*’ seen in the strong conjugation of the Northern Ryukyuan languages is not observed, either. It can thus be concluded that *onbin* stems need not be posited for Miyako.

¹⁹ *Translator’s note*: a Ryukyuan compilation of poems and songs compiled in the sixteenth and seventeenth centuries.

In the *Omoro Sōshi*, the stem-final consonant and the initial vowel *-i-* of the suffix *-ite* are elided in the *shite*-continuatives of *-b*-stem and *-m*-stem verbs, and the *-t-* in the suffix is voiced, resulting in the suffix *-de*: *tsu-de* < *tsuNde* < *tsum-ite* ‘to.pile-CONTINUATIVE’; *era-de* < *eraNde* < *erab-ite* ‘to.choose-CONTINUATIVE’. It is assumed that the syllables *-mi-* and *-bi-* on the boundary between the stem and the suffix collapsed into the moraic nasal *-N-*, which then caused the voicing of the *-t-* in the suffix through assimilation, after which the moraic nasal was elided. The sound changes *-mi-* > *-N-* and *-bi-* > *-N-* occurred before palatalization.

In *-r*-stem verbs, too, the stem-final consonant and the suffix-initial vowel are elided. The stem-final consonant *-r-* and the initial vowel *-i-* of the *shite*-continuative suffix *-ite* are thus elided, but voicing of the *-t-* in the suffix is not observed: *ino-te* < *inoQte* < *inor-ite* ‘to.pray-CONTINUATIVE’. The elision of the suffix-initial vowel *-i-* and the appearance of the geminate element *-Q-* are thought to have occurred before palatalization, after which degemination must have occurred.

In *-w*-stem verbs, the stem-final consonant and the suffix-initial vowel collapsed into the vowel *-u-*, which was then elided. It is thought that Old Japanese intervocalic *-p-* consecutively underwent fricativization, voicing, labial lenition, and *onbin* into *-u-*: *wara-te* < *waraute* < *waraw-ite* ‘to.laugh-CONTINUATIVE’. Both the sound change *-ri-* > *-Q-* and the sound change *-wi-* > *-u-* occurred before palatalization.

In the case of *-k*-stem, *-s*-stem, and *-g*-stem verbs, the stem final consonant and the suffix-initial vowel *-i-* are elided, and the consonant *-t-* in the suffix palatalized into *-tɕ-*: *da-tɕe* < *da-itɕe* < *dak-ite* ‘to.embrace-CONTINUATIVE’; *wata-tɕe* < *wata-itɕe* < *wataɕ-ite* ‘to.transfer-CONTINUATIVE’; *ko-dze* < *ko-idze* < *kog-ite* ‘to.row-CONTINUATIVE’. ‘Elision *onbin*’, in which the stem consonant is elided, is thus observed. Furthermore, the voicing of the suffix-initial consonant into *-dze-* in the case of *-g*-stem verbs is the result of voicing occurring before ‘*-i-onbin*’.

In *-t*-stem verbs, the *-t-* in the suffix is palatalized: *mote-itɕe* < *mote-ite* ‘to.carry-CONTINUATIVE’. Although palatalization and affrication due to the suffix-initial *-i-* are thus observed, any kind of *onbin* is not.

In the weak conjugation, in which stems end in vowels, no *onbin* of any kind has occurred: *ore-te* ‘to.get.off-CONTINUATIVE’; *ake-te* ‘to.open-CONTINUATIVE’. In verbs with stems ending in the vowel *-i-*, however, the *-t-* in the suffix is palatalized under the influence of this *-i-*: *mi-tɕe* < *mi-te* ‘to.see-CONTINUATIVE’; *mitɕi-tɕe* < *mitɕite* ‘to.become.full-CONTINUATIVE’.

The *onbin*-phenomena observed in the *Omoro Sōshi* have been preserved in the Northern Ryukyuan languages:

tudi ‘to.fly-CONTINUATIVE’, iradi ‘to.choose-CONTINUATIVE’, nudi ‘to.drink-CONTINUATIVE’,
 huti ‘to.fall(e.g. rain)-CONTINUATIVE’, huti ‘to.dig-CONTINUATIVE’, ʔarati
 ‘to.wash-CONTINUATIVE’, warati ‘to.laugh-CONTINUATIVE’, datʃi ‘to.embrace-CONTINUATIVE’,
 katʃi ‘to.write-CONTINUATIVE’, kudʒi ‘to.row-CONTINUATIVE’, tudʒi ‘to.sharpen-CONTINUATIVE’,
 ukutʃi ‘to.raise’, watatʃi ‘to.transfer-CONTINUATIVE’, nitʃi ‘to.boil-CONTINUATIVE’, n:tʃi
 ‘to.see-CONTINUATIVE’

Conclusions regarding why the Miyako language does not have *onbin* stems and if this is indicative of its age can as yet not be drawn. When we consider, however, that *onbin*-phenomena are not observed in the Southern Ryukyuan languages and *onbin* had thus not yet occurred when the Southern Ryukyuan languages split from Proto-Ryukyuan, while *onbin* had already occurred in the sixteenth century, when the *Omoro Sōshi* was compiled, it can at least be surmised that the Northern Ryukyuan languages and the Southern Ryukyuan languages had split before the writing of the *Omoro Sōshi*, and that *onbin* occurred in the Northern Ryukyuan languages after this split.

4.2 Past tense forms—discussion (2): the *shi*-continuative form observed in stems

Another aspect of past tense forms that warrants attention is that they appear to consist of *shi*-continuatives to which *-ta*, *-ta:*, *-tai*, or *-tazʔ* has been attached, similarly to pre-*onbin* Old Japanese *shitari* ‘to.do-PAST’, *nomitari* ‘to.drink-PAST’, and *uketari* ‘to.receive-PAST’. Of course, a variety of sound changes have occurred in the Miyako language, so it has not preserved the *shi*-continuative forms of Old Japanese in their original shape.

Shi-continuatives are almost never observed in their original adverbial usage, but rather exclusively as elements in the formation of forms and words; it is therefore possible to determine the phonetic shapes of *shi*-continuative forms in Miyako by looking at the stem portions of Miyako past tense forms.

As I have discussed before (Karimata 1999), forms deriving from *shi*-continuatives are used as the perfective forms of *-b*-stem, *-k*-stem, and *-g*-stem verbs in the strong conjugation of the dialects of the central and southern regions of Miyakojima, such as those of Hirara and Bora. I concluded from this that the perfective forms of the Miyako language may derive from *shi*-continuative forms. In dialects such as those of Karimata and Ikema, however, forms deriving from *suru*-conclusives or *suru*-adnominals are used as well, as will be discussed below. As past tense forms allow us to identify the shape of *shi*-continuative forms, they also play a key role when investigating the origin of the perfective forms of verbs in Miyako.

As the non-past assertive predicative conclusive (henceforth ‘*su*-conclusive’) and non-past adnominal (henceforth ‘*suru*-adnominal’) forms of the strong conjugation of Old Japanese are

homophonous, it cannot be determined whether the perfective forms of **-w-stem* verbs such as Bora dialect *kau* ‘to.buy-PERFECTIVE’ and *arau* ‘to.wash-PERFECTIVE’ and Shimajiri dialect *ko:* ‘to.buy-PERFECTIVE’ and *aro:* ‘to.wash-PERFECTIVE’ derive from *su*-conclusives or from *suru*-adnominals. As regards strong conjugation *-m-stem*, *-s-stem*, *-t-stem*, and *-r-stem* verbs in the Miyako language, it cannot be determined whether their perfective forms derive from Old Japanese *shi*-continuatives, *su*-conclusives, or *suru*-adnominals.

Weak conjugation *shi*-continuative and *su*-conclusive forms differ in shape in Old Japanese as well as in Miyako, but as their *su*-conclusive and *suru*-adnominal forms are homophonous both in Old Japanese and in Miyako, it cannot be determined whether perfective forms derive from *su*-conclusives or from *suru*-adnominals. Mixed conjugation *shi*-continuative, *su*-conclusive, and *suru*-adnominal forms, on the other hand, all differ in shape in Old Japanese, and their reflexes in Miyako are different, as well; it is therefore essential to examine Miyako verbs that correspond to Old Japanese mixed verbs.

In the following, we will examine past tense forms by conjugation, covering each of the strong, weak, and mixed conjugations; as regards the strong conjugation, we will look at the shapes taken by *-b-stem*, *-k-stem*, *-g-stem*, and **-w-stem* verbs.

4.2.1 *-b-stem* verbs

The Japanese *-b-stem* verb past tense form that was included on the survey sheet was *tonda* ‘to.fly-PAST’, but the only past tense forms of a *-b-stem* verb that were obtained in Miyaguni, Kugai, and Ikema were those corresponding to *asonda* ‘to.play-PAST’. Forms with stems deriving from one of the *shi*-continuatives **tobi* and **asobi* were observed at every site; in Karimata and Ikema, respectively, the stems *tuv-* and *æu:-*, which derive from the *su*-conclusive or *suru*-adnominal forms **tobu* and **asubu*, were observed in addition to those deriving from *shi*-continuatives.

tubzta: (Bora), tuv^zɿta^zɿ ~ tub^zɿta^zɿ (Uruka), tubɿta: / tubɿtan (Yonaha), tubzta^z / tubztaɿ (Kurima), tubzta: (Shimajiri), tubitaz / tuvtaz (Karimata), asɿp^hɿta: (Miyaguni), aspsta: (Kugai), æibitai ~ æu:taɿ (Ikema)

4.2.2 *-g-stem* verbs

The Japanese *-g-stem* verb past tense form that was included on the survey sheet was *koida* ‘to.row-PAST’, but the only past tense form of a *-g-stem* verb that was obtained in Miyaguni was the form corresponding to *oyoida* ‘to.swim-PAST’. Forms with stems deriving from one of the *shi*-continuatives **kogi* and **ojogi* were observed at every site; in Karimata, the stem *kuv-*, which

derives from the *su*-conclusive or *suru*-adnominal form **kogu*, was observed in addition to the stem deriving from the *shi*-continuative.

kugzta: (Bora), kug^zta^z (Uruka), kugta: (Yonaha), kudzta (Kurima), kug^zta: (Kugai), kugzta: (Shimajiri), kugitaz / kuvtaz (Karimata), kugitai (Ikema), u:g^z:ta: (Miyaguni)

4.2.3 -*k*-stem verbs

The Japanese *-k*-stem verb past tense form that was included on the survey sheet was *itta* ‘to.go-PAST’. Forms with stems deriving from the *shi*-continuative **iki* were observed at every site; in Karimata and Ikema, the stem *if-*, which derives from the *su*-conclusive or *suru*-adnominal form **iku*, was observed in addition to the stem deriving from the *shi*-continuative.

iksta: (Bora), iks^zta^z ~ iksta: (Uruka), iksta: / ikta: (Miyaguni), ik^sta: (Yonaha), ista (Kurima), ik^sta: (Kugai), iksta: (Shimajiri), iftaz / ikitaz (Karimata), ifutai ~ ikitai (Ikema)

4.2.4 *-*w*-stem verbs

The Japanese **-w*-stem verb past tense forms that were included on the survey sheet were *katta* ‘to.buy-PAST’, *kuratta* ‘to.eat-PAST’, *aratta* ‘to.wash-PAST’, *yotta* ‘to.get.drunk-PAST’, and *itta* ‘to.say-PAST’. We will look at word forms corresponding to *katta*. Forms with one of the stems *kau-* and *ko:-*, which derive from the *su*-conclusive or *suru*-adnominal form **kawu*, were observed at every site. In Karimata and Ikema, the stem *kai-*, which derives from the *shi*-continuative **kawi*, was observed in addition to the stems deriving from the *su*-conclusive or *suru*-adnominal form.

kavta: (Bora), kauta^z (Uruka), kauta: (Miyaguni), ko:ta: (Yonaha), ko:ta (Kurima), ko:ta: (Kugai), kauta: (Shimajiri), kaztaz / ko:ta: / ko:taz (Karimata), kautai ~ kavtai ~ kaitai (Ikema)

4.2.5 The weak conjugation

The Japanese weak verb past tense forms that were included on the survey sheet were *mita* ‘to.see-PAST’, *kita* ‘to.put.on(e.g. clothing)-PAST’, *ketta* ‘to.kick-PAST’, *eta* ‘to.get-PAST’, and *wita* ‘to.sit.down-PAST’. The form corresponding to *ketta* follows the strong conjugation at every site, as does the form corresponding to *kita* at some of them. Below, I give the forms corresponding to *mita*, except for Yonaha, for which I give the form corresponding to *eta*. No weak verb forms were obtained in Uruka, Miyaguni, and Kurima. Past tense forms with stems deriving from *shi*-continuatives were observed, not only for *mita* and *eta*, but for all weak verbs.

mi:ta: (Bora), mi:ta: (Kugai), mi:ta: (Shimajiri), mi:daz (Karimata), mi:tai (Ikema), mi:taɭ (Kuninaka), zzita: (Yonaha)

4.2.6 The mixed conjugation

The Japanese mixed verb past tense forms that were included on the survey sheet were *orita* ‘to.get.off-PAST’, *ochita* ‘to.fall-PAST’, *suteta* ‘to.discard-PAST’, *kureta* ‘to.give-PAST’, and *okita* ‘to.get.up-PAST’. We will consider word forms corresponding to *okita*, except for those from Uruka, Miyaguni, Yonaha, and Kurima, where no word forms corresponding to *okita* were obtained; for these dialects, I give the word forms corresponding to *ochita*, instead. Forms with stems deriving from one of the *shi*-continuative forms **oke* and **ote* were observed at every site. Past tense forms with stems deriving from *shi*-continuatives were observed not only for *okita* and *ochita*, but for all mixed verbs.

Although there are two types of mixed verb in Old Japanese, namely those that have *-i* as the stem-final vowel of the *shi*-continuative (‘upper bigrade verbs’) and those that have *-e* (‘lower bigrade verbs’), only one type of mixed verb is observed in the Ryukyuan languages, which has *-e*.

ukita: (Bora), utitaʔ ~ utita: (Uruka), ucita: (Miyaguni), utita: (Yonaha), utitaʔ (Kurima), ukita: (Kugai), ukitaz / ukita: (Shimajiri), ukitaz (Karimata), ukitai (Ikema), okitaɭ (Kuninaka)

While in all the other dialects forms with stems deriving from *shi*-continuatives are observed for *-b*-stem, *-g*-stem, and *-k*-stem verbs, two kinds of forms coexist in the Karimata and Ikema dialects, namely those with stems deriving from *shi*-continuatives and those with stems deriving from *su*-conclusive (or *suru*-adnominal) forms. Forms with stems deriving from *su*-conclusive (or *suru*-adnominal) forms are observed for **-w*-stem verbs. As regards mixed and weak verbs, forms with stems deriving from *shi*-continuatives are observed at every site.

The questions of why forms with stems deriving from *su*-conclusive (or *suru*-adnominal) forms are observed for *-g*-stem and *-k*-stem verbs in the Karimata and Ikema dialects and why forms with stems deriving from *su*-conclusive (or *suru*-adnominal) forms are observed for **-w*-stem verbs, instead of the expected forms with stems deriving from *shi*-continuatives, must be considered when we examine the perfective forms.

5 Perfective forms

Although the *shi*-continuative and *su*-conclusive forms of the strong and weak conjugation differ in shape in Old Japanese, their *su*-conclusive and *suru*-adnominal forms are homophonous.

Conversely, although the *su*-conclusive forms of the verbs corresponding to *aru* ‘to be (inanimate)’ and *oru* ‘to be (animate)’ differ in shape from their *suru*-adnominal forms in Old Japanese, their *shi*-continuative and *su*-conclusive forms are homophonous. *Shi*-continuative, *su*-conclusive, and *suru*-adnominal forms each take a different shape in the mixed conjugation, as well as in those of the verbs corresponding to *shinu* ‘to die’, *kuru* ‘to come’, and *suru* ‘to do’.

In the case of Miyako, it can be determined whether the perfective forms of *-k*-stem, *-g*-stem, *-b*-stem, and **-w*-stem strong verbs derive from *shi*-continuatives or from *su*-conclusive or *suru*-adnominal forms, but not whether they derive from *su*-conclusives on the one hand or from *suru*-adnominals on the other. Furthermore, as sound changes such as *-mi* > *-m*, *-mu* > *-m*, *-si* > *-s*, *-su* > *-s*, *-tsi* > *-ts*, *-tsu* > *-ts*, *-ri* > *-z*, and *-ru* > *-z* have occurred, it cannot be determined whether the perfective forms of *-m*-stem, *-s*-stem, *-ts*-stem, and *-r*-stem strong verbs as well as those of the irregular verbs corresponding to *suru*, *oru*, and *aru* derive from *shi*-continuatives, *su*-conclusives, or *suru*-adnominals. As regards *sn* ‘to die’, which has changed into a strong verb, it is difficult to determine from which form it derives, as the sound changes *-ni* > *-n* and *-nu* > *-n* have also occurred. As regards the verb corresponding to *kuru*, which follows either the weak or an irregular conjugation, it can be determined whether it derives from a *shi*-continuative or from a *su*-conclusive, but not whether it derives from a *su*-conclusive or from a *suru*-adnominal. It can be determined whether a perfective form derives from a *shi*-continuative, from a *su*-conclusive, or from a *suru*-adnominal only in the case of the mixed conjugation.

In emphatic sentences with the focus particle =*du*, emphatic forms homophonous with adnominal forms and different from the perfective forms used in sentences without =*du* are used in the dialects of Okinawa Island, but in the Miyako language, the same forms are used for the predicate irrespective of whether the focus particle =*du* is used²⁰. For this reason, I will not take into account whether =*du* is used in reporting the perfective forms in this chapter.

- (18) p̄atume: t̄akame: tubz. (Kurima)
 pigeon=too hawk=too to.fly-PERFECTIVE (tobu)
 ‘Pigeons and hawks both fly.’
- (19) t̄akanudu tubz. (Kurima)
 hawk=NOMINATIVE to.fly-PERFECTIVE (tobu)
 ‘A hawk flies away.’
- (20) sarumai ki:kara utei. (Bora)
 monkey=too tree=ABLATIVE to.fall-PERFECTIVE (ochiru)

²⁰ I have pointed out that whether a focus particle is used does not determine which conjugated form is used as a conclusive form in an earlier work, as well (Karimata 2011).

- ‘Even monkeys fall from trees./Even the best sometimes make mistakes.’
- (21) m:na umandu uri. (Bora)
 everyone there=LOCATIVE to.get.off-PERFECTIVE (*oriru*)
 ‘Everyone gets off (e.g. the bus) there.’
- (22) maznudu ama:tta ari uz²¹. (Shimajiri)
 rice=NOMINATIVE much to.be-PROGRESSIVE (*iru*)
 ‘I have a lot of rice.’
- (23) ssuznu arittēi taskari: uz. (Shimajiri)
 medicine=NOMINATIVE to.be-CONTINUATIVE to.be.saved-PROGRESSIVE (*iru*)
 ‘I’m lucky to have some medicine.’

The Bora dialect

In the Bora dialect, perfective forms deriving from *shi*-continuatives are observed for strong (e.g. *tubz* ‘to.fly-PERFECTIVE’), mixed (e.g. *uki* ‘to.get.up-PERFECTIVE’), and weak (e.g. *kʰɿ* ‘to.put.on(e.g. clothing)-PERFECTIVE’) verbs, as well as for the irregular verb *kʰɿ* ‘to.come-PERFECTIVE’. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-w-stem strong verbs (e.g. *kʰav* ‘to.buy-PERFECTIVE’). Either a perfective form deriving from a strong conjugation *shi*-continuative or one deriving from a *suru*-adnominal is used for *sɿŋ* ~ *ʃŋ* ‘to.die-PERFECTIVE’.

Strong conjugation

- *tubz* ‘to.fly-PERFECTIVE’, *asɿpʰɿ* ~ *asɿbɿ* ‘to.play-PERFECTIVE’, *kugz* ‘to.row-PERFECTIVE’, *iks* ‘to.go-PERFECTIVE’, *piz* ‘to.go-PERFECTIVE’, *utus* ~ *utusɿ* ‘to.drop-PERFECTIVE’, *idasɿ* ‘to.put-PERFECTIVE’, *mutsɿ* ‘to.carry-PERFECTIVE’, *num* ‘to.drink-PERFECTIVE’, *puzɿ* ‘to.dig-PERFECTIVE’, *fʊz* ‘to.fall(e.g. rain)-PERFECTIVE’, *kʰɿ* ‘to.cut-PERFECTIVE’, *ftts* ‘to.tie.up-PERFECTIVE’, *smaz* ‘to.tie.up-PERFECTIVE’, *kʰav* ‘to.buy-PERFECTIVE’, *fɔv* ‘to.eat-PERFECTIVE’, *arɔv* ‘to.wash-PERFECTIVE’, *bju* ‘to.get.drunk-PERFECTIVE’, *kav* ~ *kaf* ‘to.put.on(headwear)-PERFECTIVE’, *fʊ:* ‘to.close-PERFECTIVE’, *niɿ* ‘to.fall.asleep-PERFECTIVE’, *az* ‘to.say-PERFECTIVE’, *vvɿ* ‘to.sell-PERFECTIVE’, *sɿŋ* ~ *ʃŋ* ‘to.die-PERFECTIVE’
- *kiz* ‘to.kick-PERFECTIVE’, *kʰɿ* ‘to.put.on(e.g. clothing)-PERFECTIVE’, *bʰɿ* ‘to.sit.down-PERFECTIVE’

²¹ *ari uz*, a combination of the *ari*-continuative form of *az* ‘to be (inanimate)’ and the existential verb *uz* corresponding to Japanese *atte iru* ‘to.be-PROGRESSIVE’, is used for the transient, actual existence of inanimate objects. Further confirmation is needed in regard to the details of this form.

Mixed conjugation

- *stei* ‘to.discard-PERFECTIVE’, *uri* ‘to.get.off-PERFECTIVE’, *utei* ‘to.fall-PERFECTIVE’, *ffi:* ‘to.give-PERFECTIVE’, *uki* ‘to.get.up-PERFECTIVE’
- *mi:* ‘to.see-PERFECTIVE’, *i:* ‘to.get-PERFECTIVE’

Irregular conjugation

- *k^sɿ:* ‘to.come-PERFECTIVE’, *sɿ:* ‘to.do-PERFECTIVE’, *uz̥ ~ u:* ‘to.be(animate)-PERFECTIVE’, *aɿ* ‘to.be(inanimate)-PERFECTIVE’, *nja:ŋ* ‘to be absent’

The Uruka dialect

In the Uruka dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *asip^si* ‘to.play-PERFECTIVE’), as well as for the irregular verb *ksɿ:* / *ks^sɿ:* ‘to.come-PERFECTIVE’. Only a small number of examples of mixed verbs were obtained, but *ɕti* ‘to.discard-PERFECTIVE’ appears to derive from a *shi*-continuative. No examples of weak verbs were obtained. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-w-stem strong verbs (e.g. *kau* ‘to.buy-PERFECTIVE’).

Strong conjugation

- *asip^si* ‘to.play-PERFECTIVE’, *kugu^sɿ* / *kugu^sɿ* ²² ‘to.row-PERFECTIVE’, *ik^sɿ* / *ikɿs* ‘to.go-PERFECTIVE’, *fu^sɿ* ‘to.fall(e.g. rain)-PERFECTIVE’, *utusɿ* ‘to.drop-PERFECTIVE’, *idasɿ* ‘to.put-PERFECTIVE’, *mutsi* ‘to.carry-PERFECTIVE’, *ks^sɿ* ‘to.cut-PERFECTIVE’, *sɿmari* ‘to.tie.up-PERFECTIVE’ ²³, *pu^sɿ* ‘to.dig-PERFECTIVE’, *num* ‘to.drink-PERFECTIVE’, *kau* ‘to.buy-PERFECTIVE’, *fou* / *fau* ‘to.eat-PERFECTIVE’, *arau* ‘to.wash-PERFECTIVE’, *murau* ‘to.receive-PERFECTIVE’ *bju:* ‘to.get.drunk-PERFECTIVE’, *kav* ‘to.put.on(headwear)-PERFECTIVE’, *v:* / *vuu* ‘to.sell-PERFECTIVE’, *ki^sɿ* ‘to.kick-PERFECTIVE’

Mixed conjugation

- *ɕti* ‘to.discard-PERFECTIVE’, *urittea:* ‘to.get.off-PERFECTIVE-QUOTATIVE (evidential?)’, *utidu* *sɿ:* / *sɿ^sɿ* ‘to.fall=FOCUS to.do-PERFECTIVE’

Weak conjugation

(no data)

Irregular conjugation

- *ksɿ:* / *ks^sɿ:* ‘to.come-PERFECTIVE’, *sɿ:* / *sɿ^sɿ* ‘to.do-PERFECTIVE’, *u^sɿ* ‘to.be(animate)-PERFECTIVE’

²² The obtained word forms suggest a derivation from either **kogoru* or **kogori*.

²³ *sɿmari* may correspond to Japanese *shibare* ‘to.tie.up-IMPERATIVE’.

The Miyaguni dialect

In the Miyaguni dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *ikʰi* ‘to.go-PERFECTIVE’), as well as for the irregular verb *kī*: ‘to.come-PERFECTIVE’. Only a small number of examples of mixed verbs were obtained, but *uci* ‘to.fall-PERFECTIVE’ appears to derive from a *shi*-continuative. No examples of weak verbs were obtained. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs (e.g. *kau* ‘to.buy-PERFECTIVE’).

Strong conjugation

- *butukī* ‘to.fly-PERFECTIVE’, *kugi* ‘to.row-PERFECTIVE’, *ikʰi* ‘to.go-PERFECTIVE’, *fuŋ* ‘to.fall(e.g. rain)-PERFECTIVE’, *utʰu* ‘to.drop-PERFECTIVE’, *idaei* ‘to.put-PERFECTIVE’, *kʰsi* ‘to.cut-PERFECTIVE’, *mʰtʰŋ* ‘to.carry-PERFECTIVE’, *kau* ‘to.buy-PERFECTIVE’, *arau* ‘to.wash-PERFECTIVE’, *ɸau* / *ɸoo* ‘to.eat-PERFECTIVE’, *bʰu*: *duŋ*: ‘to.get.drunk=FOCUS to.do-PERFECTIVE’, *u*: / *uv* ‘to.sell-PERFECTIVE’, *kiz* ‘to.kick-PERFECTIVE’

Mixed conjugation

- *sʰiciu* ‘to.discard-PERFECTIVE²⁴’, *uriru* ‘to.get.off-PERFECTIVE²⁵’, *uci* ‘to.fall-PERFECTIVE’, *ɸi*: ‘to.give-PERFECTIVE’,

Weak conjugation

(no data)

Irregular conjugation

- *kī*: ‘to.come-PERFECTIVE’, *u*: ‘to.be(animate)-PERFECTIVE’

The Yonaha dialect

In the Yonaha dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *kugŋ* ‘to.row-PERFECTIVE’), as well as for the irregular verb *kʰsŋ* ‘to.come-PERFECTIVE’. Only a small number of examples of mixed verbs were obtained, but *uti*: ‘to.fall-PERFECTIVE’ derives from a *shi*-continuative, while *sutiʰŋ* ‘to.discard-PERFECTIVE’ appears to derive from a *suru*-adnominal. No examples of weak verbs were obtained. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs (e.g. *ko*: ‘to.buy-PERFECTIVE’).

²⁴ *sʰiciu* may correspond to Japanese *sutete iru* ‘to.discard-PROGRESSIVE’.

²⁵ *uriru* may correspond to Japanese *oriro* ‘to.get.off-IMPERATIVE’.

Strong conjugation

- tubɿdu sɿ ‘to.fly=FOCUS to.do-PERFECTIVE’, kugɿ ‘to.row-PERFECTIVE’, ik*ɿ ‘to.go-PERFECTIVE’, utusɿ ‘to.drop-PERFECTIVE’, idasɿ ‘to.put-PERFECTIVE’, mutsɿ ‘to.carry-PERFECTIVE’, num ‘to.drink-PERFECTIVE’, puzɿ ‘to.dig-PERFECTIVE’, ffɿ ‘to.fall(e.g. rain)-PERFECTIVE’, kɿsɿ ‘to.cut-PERFECTIVE’, sɿmaɿ ‘to.tie.up-PERFECTIVE’, ko: ‘to.buy-PERFECTIVE’, fo: ‘to.eat-PERFECTIVE’, aro: ‘to.wash-PERFECTIVE’, bju: ‘to.get.drunk-PERFECTIVE’, kɿ:dusu / kizɿ ‘to.kick-PERFECTIVE’

Mixed conjugation

- sutiʔ ‘to.discard-PERFECTIVE’, uriru ‘to.get.off-PERFECTIVE²⁶’, uti: ‘to.fall-PERFECTIVE’

Weak conjugation

(no data)

Irregular conjugation

- kɿsɿ ‘to.come-PERFECTIVE’, sɿ ‘to.do-PERFECTIVE’, uɿ ‘to.be(animate)-PERFECTIVE’

The Kurima dialect

In the Kurima dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *tubʔ* ‘to.fly-PERFECTIVE’), as well as for the irregular verb *tsɿ* ‘to.come-PERFECTIVE’. Perfective forms deriving from *suru*-adnominals are used for mixed verbs (e.g. *uriʔ* ‘to.get.off-PERFECTIVE’). Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs (e.g. *ko:* ‘to.buy-PERFECTIVE’).

Strong conjugation

- tubʔ ‘to.fly-PERFECTIVE’, aspi ‘to.play-PERFECTIVE²⁷’, kudʔɿ ‘to.row-PERFECTIVE’, its / itsɿ ‘to.go-PERFECTIVE’, utʔsɿ ‘to.drop-PERFECTIVE’, idaɛɛ: ‘to.put-PERFECTIVE²⁸’, mutsu / mutsɿ ‘to.carry-PERFECTIVE’, num ‘to.drink-PERFECTIVE’, puɿ ‘to.dig-PERFECTIVE’, ffʔ ‘to.fall(e.g. rain)-PERFECTIVE’, samaɿ²⁹ ‘to.tie.up-PERFECTIVE’, tsʔ / tsɿ ‘to.cut-PERFECTIVE’, v: ‘to.sell-PERFECTIVE’, ko: ‘to.buy-PERFECTIVE’, fo: ‘to.eat-PERFECTIVE’, muroa ‘to.receive-PERFECTIVE’, aroa ‘to.wash-PERFECTIVE’, bju: ‘to.get.drunk-PERFECTIVE’
- kiz / kiɿ ‘to.kick-PERFECTIVE’

²⁶ *uriru* may correspond to Japanese *oriro* ‘to.get.off-IMPERATIVE’.

²⁷ *aspi* may correspond to Japanese *asobe* ‘to.play-IMPERATIVE’.

²⁸ *idaɛɛ:* may correspond to Japanese *dase* ‘to.put.out-IMPERATIVE’.

²⁹ Perhaps *smaɿ*.

Mixed conjugation

- stiŋ / stiz ‘to.discard-PERFECTIVE’, uriʔŋ ‘to.get.off-PERFECTIVE’, utidus / utidusŋ ‘to.fall=FOCUS to.do-PERFECTIVE’, utimdo: ‘to.fall-PERFECTIVE=FOCUS’, fi:ŋ ‘to.give-PERFECTIVE’

Irregular conjugation

- tssŋ ‘to.come-PERFECTIVE’, nja:ŋ ‘to be absent’

The Kugai dialect

In the Kugai dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *tubʔŋ* ‘to.fly-PERFECTIVE’), as well as for the irregular verb *kʃŋsŋ* / *ks*: ‘to.come-PERFECTIVE’. Perfective forms deriving from *suru*-adnominals are used for mixed (e.g. *ukiz* ‘to.get.up-PERFECTIVE’) and weak (e.g. *mi:z* ‘to.see-PERFECTIVE’) verbs. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs (e.g. *ko:* ‘to.buy-PERFECTIVE’). A perfective form deriving from a strong conjugation *su*-conclusive or *suru*-adnominal form is used for *ʃŋ* ‘to.die-PERFECTIVE’.

Strong conjugation

- *tubʔŋ* ‘to.fly-PERFECTIVE’, *asps* ‘to.play-PERFECTIVE’, *kugʔŋ* ‘to.row-PERFECTIVE’, *ikʃŋ* ‘to.go-PERFECTIVE’, *utasŋ* ‘to.drop-PERFECTIVE’, *idas* ‘to.put-PERFECTIVE’, *muts* ‘to.carry-PERFECTIVE’, *num* ‘to.drink-PERFECTIVE’, *sŋmaʔŋ* ‘to.tie.up-PERFECTIVE’, *puz* ‘to.dig-PERFECTIVE’, *fuʔŋ* ‘to.fall(e.g. rain)-PERFECTIVE’, *kŋei* ‘to.cut-PERFECTIVE’, *kiʔŋ* ‘to.kick-PERFECTIVE’, *ko:* ‘to.buy-PERFECTIVE’, *moro:* ‘to.receive-PERFECTIVE’, *fo:* ‘to.eat-PERFECTIVE’, *bʔu:* ‘to.get.drunk-PERFECTIVE’, *aro:* ‘to.wash-PERFECTIVE’, *kav* ‘to.put.on(headwear)-PERFECTIVE’, *ffʔ* ‘to.close-PERFECTIVE’, *niʔ* ‘to.fall.asleep-PERFECTIVE’, *v:* ‘to.sell-PERFECTIVE’, *andz* ‘to.say-PERFECTIVE’, *ʃŋ* ‘to.die-PERFECTIVE’

Weak conjugation

- *ukiz* ‘to.get.up-PERFECTIVE’, *stiʔŋ* ‘to.discard-PERFECTIVE’, *uriʔŋ* ‘to.get.off-PERFECTIVE’, *utiʔŋ* ‘to.fall-PERFECTIVE’, *fi:z* ‘to.give-PERFECTIVE’, *ukiz* ‘to.get.up-PERFECTIVE’
- *mi:z* ‘to.see-PERFECTIVE’, *biziz* ‘to.sit.down-PERFECTIVE’, *kŋeiz* ‘to.put.on(e.g. clothing)-PERFECTIVE’

Irregular conjugation

- *kʃŋsŋ* / *ks*: ‘to.come-PERFECTIVE’, *ss* ‘to.do-PERFECTIVE’, *u:* ‘to.be(animate)-PERFECTIVE’, *az* ‘to.be(inanimate)-PERFECTIVE’, *nja:ŋ* ‘to be absent’

The Shimajiri dialect

In the Shimajiri dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *tubz* ‘to.fly-PERFECTIVE’, *kugz* ‘to.row-PERFECTIVE’), as well as for the irregular verb *ss* ‘to.come-PERFECTIVE’. Perfective forms deriving from *suru*-adnominals are used for mixed verbs. For *uriz* / *uri* ‘to.get.off-PERFECTIVE’, however, a perfective form deriving from a *suru*-adnominal and one deriving from a *shi*-continuative appear to coexist. As regards weak verbs, *mi:z* ‘to.see-PERFECTIVE’ derives from a *suru*-adnominal, while *bz:* ‘to.sit.down-PERFECTIVE’ derives from a *shi*-continuative. As only a small number of examples was obtained, a definitive conclusion cannot be drawn. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs. A perfective form deriving from a mixed conjugation *suru*-adnominal is used for *sniz* ‘to.die-PERFECTIVE’.

Strong conjugation

- *tubz* ‘to.fly-PERFECTIVE’, *kugz* ‘to.row-PERFECTIVE’, *iks* ‘to.go-PERFECTIVE’, *ffv* / *ff* ‘to.fall(e.g. rain)-PERFECTIVE’, *utus* ‘to.drop-PERFECTIVE’, *kizdus* ‘to.kick=FOCUS to.do-PERFECTIVE’, *kss* ‘to.cut-PERFECTIVE’, *fgz* ‘to.tie.up-PERFECTIVE’, *puz* ‘to.dig-PERFECTIVE’, *muts* ‘to.carry-PERFECTIVE’, *kau* ‘to.buy-PERFECTIVE’, *v:* ‘to.sell-PERFECTIVE’, *nun* ‘to.drink-PERFECTIVE’, *fau* / *fao* / *fo:* ‘to.eat-PERFECTIVE’, *apps* ‘to.play-PERFECTIVE’, *bju:* ‘to.get.drunk-PERFECTIVE’, *arau* ‘to.wash-PERFECTIVE’, *kav* ‘to.put.on(headwear)-PERFECTIVE’, *ff* / *ffv* ‘to.close-PERFECTIVE’, *niy* ‘to.fall.asleep-PERFECTIVE’, *az* ‘to.say-PERFECTIVE’, *bz:* ‘to.sit.down-PERFECTIVE’

Weak conjugation

- *steiz* ‘to.discard-PERFECTIVE’, *uriz* / *uri* ‘to.get.off-PERFECTIVE’, *uteiz* ‘to.fall-PERFECTIVE’, *ffi:z* ‘to.give-PERFECTIVE’, *zziz* ‘to.get-PERFECTIVE’, *ukiz* ‘to.get.up-PERFECTIVE’, *sniz* ‘to.die-PERFECTIVE’
- *mi:z* ‘to.see-PERFECTIVE’, *ss* ‘to.put.on(e.g. clothing)-PERFECTIVE’

Irregular conjugation

- *ss* ‘to.come-PERFECTIVE’, *ss* ‘to.do-PERFECTIVE’, *az* ‘to.be(inanimate)-PERFECTIVE’, *uz* ‘to.be(animate)-PERFECTIVE’, *nja:ŋ* ‘to be absent’

The Karimata dialect

In the Karimata dialect, perfective forms deriving from *shi*-continuatives (*tubi* ‘to.fly-PERFECTIVE’) and perfective forms deriving from *su*-conclusive or *suru*-adnominal forms (*tuv* ‘to.fly-PERFECTIVE’) coexist for strong verbs. For mixed verbs (*utei* / *utvz* ‘to.fall-PERFECTIVE’), too, perfective forms deriving from *shi*-continuatives and perfective forms

deriving from *suru*-adnominals coexist. As regards weak verbs, *mi*: ‘to.see-PERFECTIVE’ derives from a *shi*-continuative, while *bz:z* ‘to.sit.down-PERFECTIVE’ derives from a *suru*-adnominal. It cannot be determined from which form *kss*: ‘to.put.on(e.g. clothing)’ derives. Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs (e.g. *ko*: ‘to.buy-PERFECTIVE’). A perfective form deriving from a mixed conjugation *suru*-adnominal is used for *snɿz* ‘to.die-PERFECTIVE’. The perfective form used for the irregular verb *ffu* / *ff* ‘to.come-PERFECTIVE’ may derive either from a *su*-conclusive or from a *suru*-adnominal; a definitive conclusion cannot be drawn.

Strong conjugation

- *tubi* / *tuv* ‘to.fly-PERFECTIVE’, *asuvi* / *asv* ‘to.play-PERFECTIVE’, *kugi* / *kuv* ‘to.row-PERFECTIVE’, *ifu* / *if* ‘to.go-PERFECTIVE’, *utasɿ* / *utaʃ* ‘to.drop-PERFECTIVE’, *idas* ‘to.put-PERFECTIVE’, *mutsɿ* / *muts* ‘to.carry-PERFECTIVE’, *num* ~ *nuɿ* ‘to.drink-PERFECTIVE’, *ffu* / *fʊ*: ‘to.fall(e.g. rain)-PERFECTIVE’, *ᵑᵑɿ* / *ᵑᵑ*: / *puz* ‘to.dig-PERFECTIVE’, *kiri* / *kss* ‘to.cut-PERFECTIVE’, *sɿmari* / *smaz* ‘to.tie.up-PERFECTIVE’, *ko*: ‘to.buy-PERFECTIVE’, *aro*: ‘to.wash-PERFECTIVE’, *fo*: / *ᵑo*: ‘to.eat-PERFECTIVE’, *bɿu*: / *bɿu:z* ‘to.get.drunk-PERFECTIVE’, *kavvi* / *kav* ‘to.put.on(headwear)-PERFECTIVE’, *ffi* ‘to.close-PERFECTIVE’, *niv* ‘to.fall.asleep-PERFECTIVE’, *az* ‘to.say-PERFECTIVE’, *ɸ*: ‘to.sell-PERFECTIVE’, *ki*: / *ks:ɸus* ‘to.kick-PERFECTIVE’

Weak conjugation

- *uriz* ‘to.get.off-PERFECTIVE’, *utei* / *utɿz* ‘to.fall-PERFECTIVE’, *ukɿ* ~ *ukɿz* ‘to.get.up-PERFECTIVE’, *fɿ* / *fɿ* / *fɿ*: ‘to.give-PERFECTIVE’, *sɿti* / *sɿtidu* / *sɿtɿ* ‘to.discard-PERFECTIVE’, *kadz:z* ‘to.dig-PERFECTIVE/to.nibble-PERFECTIVE’, *snɿz* ‘to.die-PERFECTIVE’
- *mi*: ‘to.see-PERFECTIVE’, *kss*: ‘to.put.on(e.g. clothing)-PERFECTIVE’, *bz:z* ‘to.sit.down-PERFECTIVE’, *izitaʔ* / *zzidaz* ‘to.get-PERFECTIVE’

Irregular conjugation

- *ffu* / *ff* ‘to.come-PERFECTIVE’, *as* ‘to.do-PERFECTIVE’, *uz* ‘to.be(animate)-PERFECTIVE’, *az* ‘to.be(inanimate)-PERFECTIVE’, *nɿa:ɿ* ‘to be absent’

The Ikema dialect

In the Ikema dialect, perfective forms deriving from *shi*-continuatives are used for strong verbs (e.g. *tubi* ‘to.fly-PERFECTIVE’). Perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used for *-*w*-stem strong verbs (e.g. *kau* ‘to.buy-PERFECTIVE’). As only a small number of examples were obtained, a definitive conclusion cannot be drawn, but the perfective forms used

for mixed verbs (e.g. *uki*: ‘to.get.up-PERFECTIVE’) seemingly derive from *shi*-continuatives. The possibility that they derive from *suru*-adnominals can at present not be denied, however.

Weak verb forms such as *bizi* ‘to.sit.down-PERFECTIVE’ also seem to derive from *shi*-continuatives, although the possibility that they derive from *su*-conclusive or *suru*-adnominal forms can at present not be denied, either. More examples of mixed and weak verb forms have to be obtained and the sound changes that have occurred in the Ikema dialect must be examined. The perfective form *ɛini* ‘to.die-PERFECTIVE’ seems to derive from a mixed conjugation *shi*-continuative.

Strong conjugation

- *tubi* ‘to.fly-PERFECTIVE’, *kugi* ‘to.row-PERFECTIVE’, *ifu* ‘to.go-PERFECTIVE’, *idaɛi* ‘to.put-PERFECTIVE’, *kiri* ‘to.cut-PERFECTIVE’, *numi* / *nun* ‘to.drink-PERFECTIVE’, *sīmai* ‘to.tie.up-PERFECTIVE’, *fu*: ‘to.fall(e.g. rain)-PERFECTIVE’, *kau* ‘to.buy-PERFECTIVE’, *fau* / *fav* ‘to.eat-PERFECTIVE’, *arau* ‘to.wash-PERFECTIVE’, *bju:i* ‘to.get.drunk-PERFECTIVE’, *kavvi* / *kavvi* ‘to.put.on(headwear)-PERFECTIVE’, *ffi* ‘to.close-PERFECTIVE’, *nivvi* ‘to.fall.asleep-PERFECTIVE’, *addzi* ‘to.say-PERFECTIVE’

Weak conjugation

- *fi*: ‘to.give-PERFECTIVE’, *uki*: ‘to.get.up-PERFECTIVE’, *ɛini* ‘to.die-PERFECTIVE’, *uriru* ‘to.get.off-PERFECTIVE³⁰’
- *bizi* ‘to.sit.down-PERFECTIVE’, *tsɿ*: / *tsɿ* ‘to.put.on(e.g. clothing)-PERFECTIVE’

Irregular conjugation

- *fu*: ‘to.come-PERFECTIVE’, *assɿ* / *aɛɛi* ‘to.do-PERFECTIVE’, *urijui* / *uri:ui* ³¹ ‘to.be(animate)-PERFECTIVE’, *ari:jui* ‘to.be(inanimate)-PERFECTIVE’, *nja:N* ‘to be absent’

The Kuninaka dialect

Only a small number of examples of strong verbs were obtained for the Kuninaka dialect; moreover, only examples of which it is difficult to determine whether they derive from *shi*-continuatives or from *su*-conclusives were obtained. The mixed verb example *okiɿ* ‘to.get.up-PERFECTIVE’ seems to derive from a *suru*-adnominal.

Strong conjugation

- *kav* ‘to.put.on(headwear)-PERFECTIVE’, *al* ‘to.say-PERFECTIVE’, *sɿN* ‘to.die-PERFECTIVE’, *tsɿ*: / *tsɿ:i* ‘to.put.on(e.g. clothing)-PERFECTIVE’, *bɿ*: / *bizi* / *bɿzɿ* ‘to.sit.down-PERFECTIVE’

³⁰ *uriru* may correspond to Japanese *oriro* ‘to.get.off-IMPERATIVE’.

³¹ /ui/ is used as an auxiliary verb in continuous aspect forms, such as *tubiui* ‘to.fly-PROGRESSIVE’.

Weak conjugation

- okil / okilli ‘to.get.up-PERFECTIVE’, eimidzi ‘to.close-PERFECTIVE’
- mi:dzi ‘to.see-PERFECTIVE’

Irregular conjugation

- asɿ ‘to.do-PERFECTIVE’, ol ‘to.be(animate)-PERFECTIVE’, al ‘to.be(inanimate)-PERFECTIVE’, nʲa:N ‘to be absent’

5.1 Summary of perfective forms

Regarding the origin of the perfective forms of the Miyako language, it has been thought that forms deriving from *shi*-continuatives functioned both as perfective forms and as adnominal forms, on the basis of sound correspondences between these forms in the dialect of the urban area of former Hirara City (Nishizato, Shimoato, Higashi-Nakasone, and Nishi-Nakasone; henceforth just the ‘Hirara dialect’) and the *shi*-continuatives of Japanese. I have taken this view in previous work, as well (Karimata 1990). Until now, however, discussion has been limited to the strong conjugation; moreover, it has only taken into account the south-western dialects of Miyako, spoken for example in former Gusukube Town, former Ueno Village, and former Shimoji Town, centering on the Hirara dialect. In this section, we additionally considered the Karimata and Ikema dialects, and although the number of examples was limited, we examined data regarding the weak and mixed conjugations and looked at the derivations of the assertive forms of Miyako verbs.

- (i) In all of the dialects except for those of Karimata and Ikema, the perfective forms of *-k*-stem, *-g*-stem, and *-b*-stem verbs derive from *shi*-continuatives.
- (ii) In the Karimata and Ikema dialects, perfective forms deriving from *shi*-continuatives and perfective forms deriving from *su*-conclusive or *suru*-adnominal forms coexist for strong verbs.
- (iii) For **-w*-stem verbs, perfective forms deriving from *su*-conclusive or *suru*-adnominal forms are used.
- (iv) The Ikema form *einʲi* ‘to.die-PERFECTIVE’ derives from a mixed conjugation *shi*-continuative, while the Karimata form *snɿz* ‘to.die-PERFECTIVE’ derives from a mixed conjugation *suru*-adnominal.
- (v) In the Bora, Kurima, and Ikema dialects, the perfective forms of weak verbs derive from *shi*-continuatives, while in the Kugai dialect, the perfective forms of weak verbs derive from *su*-conclusive or *suru*-adnominal forms.
- (vi) In the Bora, Miyaguni, and Ikema dialects, the perfective forms of mixed verbs derive from *shi*-continuatives, while in the Kurima and Shimajiri dialects, the perfective forms

of mixed verbs derive from *suru*-adnominals. In the Karimata dialect, perfective forms deriving from *shi*-continuatives and perfective forms deriving from *suru*-adnominals coexist for mixed verbs.

- (vii) In the Bora, Uruka, Miyaguni, Yonaha, Kurima, Kugai, and Shimajiri dialects, the perfective form of the irregular verb corresponding to *kuru* ‘to.come-PERFECTIVE’ derives from a *shi*-continuative. In the Karimata and Ikema dialects, the perfective form of the irregular verb corresponding to *kuru* seems to derive from a *su*-conclusive or *suru*-adnominal form.
- (viii) It cannot be determined whether the perfective forms of *-m*-stem, *-s*-stem, *-ts*-stem, and *-r*-stem strong verbs derive from *shi*-continuatives, from *su*-conclusives, or from *suru*-adnominals.

More examples of verb forms from the sites reported on in this chapter have to be obtained, and it must be determined what sound changes have occurred in each of the dialects; moreover, further research at an increased number of survey sites is necessary. Although the extent to which we can draw conclusions is thus limited, it is possible to identify within the whole of the data forms deriving specifically from *shi*-continuatives as well as forms deriving specifically from *suru*-adnominals, while no dialects or verbs are found for which forms deriving specifically from *su*-conclusives can be identified³².

6 *Ari*-continuative forms

Among the continuative forms of the Miyako language, the one that is most similar in function to the Japanese *shite*-continuative is the *ari*-continuative. *Ari*-continuatives can be used as independent constituents for non-conclusive predicates in compound sentences and sentences with multiple predicates to express how two actions take place in succession, either in a subordinate or in a non-subordinate manner. The *ari*-continuative can also be used for forming compound predicates. In these respects, it corresponds to the Japanese *shite*-continuative.

- (24) ki:nu va:gun nu:ri n:to: uta:ei fi:ru. (Karimata)
 tree=GENITIVE top=LOCATIVE to.climb-CONTINUATIVE fruit=ACCUSATIVE
 to.drop-CONTINUATIVE to.give-IMPERATIVE (*nobotte*)

³² The mixed conjugation form *ukiN* ‘to get up’ and the weak conjugation form *mi:N* ‘to see’ of the Ishigaki dialect of the Yaeyama language seem to be forms deriving from *shi*-continuatives with *-N* suffixed to them, while *ukiruN* ‘to get up’ and *mi:ruN* ‘to see’ seem to be forms deriving from *suru*-adnominals with *-N* suffixed to them.

- ‘Climb the tree and drop some fruit.’
- (25) tuzzu smari kagoŋkai iziru. (Karimata)
 chicken=ACCUSATIVE to.tie.up-CONTINUATIVE cage=LOCATIVE to.put.in-IMPERATIVE
 (*shibatte*)
 ‘Tie up the chicken and put it into the cage.’
- (26) tavkia:ɕidu fɲu: kuɟi ksta:. (Bora)
 one.person=INSTRUMENTAL boat=ACCUSATIVE to.row-CONTINUATIVE to.come-PAST
 (*koiɕe*)
 ‘I rowed the boat by myself.’
- (27) ki:n nu:ri: nazzu utuɕi fi:ru. (Bora)
 tree=LOCATIVE to.climb-CONTINUATIVE fruit=ACCUSATIVE to.drop-CONTINUATIVE
 to.give-IMPERATIVE (*otoshite*)
 ‘Climb the tree and drop some fruit.’
- (28) kaɾa: bju:itti cununu kɯtɔ: bassii uɟ. (Kurima)
 he=TOPIC to.get.drunk-CONTINUATIVE yesterday=GENITIVE thing=TOPIC
to.forget-STATIVE (*wasurete*)
 ‘He got drunk, so he has forgotten about yesterday.’

Formally, the Miyako *ari*-continuative does not correspond to the *shite*-continuative. At first glance, it appears to correspond to the *shi*-continuative of Old Japanese. If the Miyako *ari*-continuative corresponded to the Japanese *shi*-continuative, the fact that sound changes such as *-ki* > *-ks*, *-gi* > *-gz*, *-bi* > *-bz*, *-mi* > *-m*, *-si* > *-s*, *-tei* > *-ts*, and *-ri* > *-z* have occurred in many of the dialects of Miyako would lead us to expect the *ari*-continuative forms of strong verbs to be identical to the *shi*-continuative forms contained in their past tense forms that were discussed above, such as *kaks* ‘to.write-CONTINUATIVE’, *kugz* ‘to.row-CONTINUATIVE’, *tubz* ‘to.fly-CONTINUATIVE’, *num* ‘to.drink-CONTINUATIVE’, *utus* ‘to.drop-CONTINUATIVE’, *mutz* ‘to.carry-CONTINUATIVE’, and *puz* ‘to.dig-CONTINUATIVE’. Formally, however, the *ari*-continuative does not correspond to the *shi*-continuatives of Japanese and the Northern Ryukyuan languages. The *shi*-continuative forms used in the Miyako language as elements in the formation of words and forms differ formally from *ari*-continuative forms. Let us take a look at the kinds of forms observed for the *ari*-continuative.

The Bora dialect

Strong conjugation

- tubi ‘to.fly-CONTINUATIVE’, asɿpi: ~ asɿbi: ‘to.play-CONTINUATIVE’, kugi / kugʻi ‘to.row-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, ffi: ‘to.fall(e.g. rain)-CONTINUATIVE’, idaɕi ‘to.put.out-CONTINUATIVE’, utuɕi ‘to.drop-CONTINUATIVE’, puri ‘to.dig-CONTINUATIVE’, kiri ‘to.kick-CONTINUATIVE’, kiei ‘to.cut-CONTINUATIVE’, mutɕi ‘to.carry-CONTINUATIVE’, numi ‘to.drink-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, fai ‘to.eat-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’, bʲu:i ‘to.get.drunk-CONTINUATIVE’, vvi: ‘to.sell-CONTINUATIVE’, kavvi: ‘to.put.on(headwear)-CONTINUATIVE’, ffi ‘to.close-CONTINUATIVE’, nivvi ‘to.fall.asleep-CONTINUATIVE’, ftei ‘to.tie.up-CONTINUATIVE’, azzi: ‘to.say-CONTINUATIVE’
- sɿnʲi ‘to.die-CONTINUATIVE’, kiei ‘to.put.on(e.g. clothing)-CONTINUATIVE’, bizi: ‘to.sit.down-CONTINUATIVE’

Mixed conjugation

- fi: ‘to.give-CONTINUATIVE’, utɕi ‘to.fall-CONTINUATIVE’, sumi: ‘to.wash-CONTINUATIVE’, uki: ‘to.get.up-CONTINUATIVE’, stei ‘to.discard-CONTINUATIVE’, uri ‘to.get.off-CONTINUATIVE’
- mi: ‘to.see-CONTINUATIVE’, i: ‘to.get-CONTINUATIVE’

Irregular conjugation

- kiei ‘to.come-CONTINUATIVE’, ei: ‘to.do-CONTINUATIVE’, ari: ‘to.be(inanimate)-CONTINUATIVE’, uri ‘to.be(animate)-CONTINUATIVE’

The Uruka dialect

Strong conjugation

- tuvi ‘to.fly-CONTINUATIVE’, asɿpi ‘to.play-CONTINUATIVE’, kugi ‘to.row-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, utuɕi ‘to.drop-CONTINUATIVE’, idaɕi ‘to.put.out-CONTINUATIVE’, muɸi ‘to.carry-CONTINUATIVE’, numi ‘to.drink-CONTINUATIVE’, puri ‘to.dig-CONTINUATIVE’, sɿmari ‘to.tie.up-CONTINUATIVE’, kɕei / kiei ‘to.cut-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’, fai ‘to.eat-CONTINUATIVE’, murai ‘to.receive-CONTINUATIVE’, bʲu:i ‘to.get.drunk-CONTINUATIVE’, ffi ‘to.fall(e.g. rain)-CONTINUATIVE’, vvi ‘to.sell-CONTINUATIVE’, kavvi ‘to.put.on(headwear)-CONTINUATIVE’
- kiri ‘to.kick-CONTINUATIVE’

Mixed conjugation

- uri ‘to.get.off-CONTINUATIVE’, uti ‘to.fall-CONTINUATIVE’, sɿti ‘to.discard-CONTINUATIVE’, ffi ‘to.give-CONTINUATIVE’

Irregular conjugation

- kjei / kiei ‘to.come-CONTINUATIVE’

The Miyaguni dialect

Strong conjugation

- tɯbi ‘to.fly-CONTINUATIVE’, kugi ‘to.row-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, ffi ‘to.fall(e.g. rain)-CONTINUATIVE’, utɯsi ‘to.drop-CONTINUATIVE’, kʲisʲi ‘to.cut-CONTINUATIVE’, sɯmari ‘to.tie.up-CONTINUATIVE’, pɔri ‘to.dig-CONTINUATIVE’, idaeitei³³ ‘to.put.out-CONTINUATIVE’, motei ‘to.carry-CONTINUATIVE’, k^hai ‘to.buy-CONTINUATIVE’, uvi ‘to.sell-CONTINUATIVE’, morai ‘to.receive-CONTINUATIVE’, nɔmi ‘to.drink-CONTINUATIVE’, ɸai ‘to.eat-CONTINUATIVE’, asɰpi ‘to.play-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’
- kiri ‘to.kick-CONTINUATIVE’

Mixed conjugation

- ɸii ‘to.give-CONTINUATIVE’, sʲitʲsʲi ‘to.discard-CONTINUATIVE’, ucj ‘to.fall-CONTINUATIVE’, uri ‘to.get.off-CONTINUATIVE’

Irregular conjugation

- kʲisi ‘to.come-CONTINUATIVE’

The Yonaha dialect

Strong conjugation

- tubi ‘to.fly-CONTINUATIVE’, appi ‘to.play-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, numi: ‘to.drink-CONTINUATIVE’, utuei ‘to.drop-CONTINUATIVE’, mutai ‘to.carry-CONTINUATIVE’, sɰmari ‘to.tie.up-CONTINUATIVE’, puri ‘to.dig-CONTINUATIVE’, kɰei ‘to.cut-CONTINUATIVE’, vvi ‘to.sell-CONTINUATIVE’, ffi ‘to.fall(e.g. rain)-CONTINUATIVE’, ke: ‘to.buy-CONTINUATIVE’, bju:i ‘to.get.drunk-CONTINUATIVE’, are: ‘to.wash-CONTINUATIVE’
- kiri ‘to.kick-CONTINUATIVE’

Mixed conjugation

- uri ‘to.get.off-CONTINUATIVE’, uti ‘to.fall-CONTINUATIVE’, sɰti ‘to.discard-CONTINUATIVE’, ɰzi ‘to.put.in-CONTINUATIVE’, piŋgi ‘to.flee-CONTINUATIVE’, fi: ‘to.give-CONTINUATIVE’
- zzi ‘to.get-CONTINUATIVE’

Irregular conjugation

- kɰei ‘to.come-CONTINUATIVE’

³³ When compared to other word forms, it appears that this may be a *shite*-continuative form.

The Kurima dialect

Strong conjugation

- tubi ‘to.fly-CONTINUATIVE’, kugi ‘to.row-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, idasi ‘to.put.out-CONTINUATIVE’, utuēi ‘to.drop-CONTINUATIVE’, mutēi ‘to.carry-CONTINUATIVE’, tejei ‘to.cut-CONTINUATIVE’, smari ‘to.tie.up-CONTINUATIVE’, puri ‘to.dig-CONTINUATIVE’, ffi ‘to.fall(e.g. rain)-CONTINUATIVE’, nu:ri: ‘to.climb-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, vvi ‘to.sell-CONTINUATIVE’, murai ‘to.receive-CONTINUATIVE’, numi ‘to.drink-CONTINUATIVE’, fai ‘to.eat-CONTINUATIVE’
- kiri ‘to.kick-CONTINUATIVE’

Mixed conjugation

- uri ‘to.get.off-CONTINUATIVE’, uti ‘to.fall-CONTINUATIVE’, sti ‘to.discard-CONTINUATIVE’, fi: ‘to.give-CONTINUATIVE’, pingi ‘to.flee-CONTINUATIVE’

Irregular conjugation

- tejei ‘to.come-CONTINUATIVE’

The Kugai dialect

Strong conjugation

- tubi ‘to.fly-CONTINUATIVE’, aspi / aspi: ‘to.play-CONTINUATIVE’, numi ‘to.drink-CONTINUATIVE’, kugi ‘to.row-CONTINUATIVE’, u:gi ‘to.swim-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, ka:raki ‘to.dry.up-CONTINUATIVE’, utaēi ‘to.drop-CONTINUATIVE’, idaēi ‘to.put.out-CONTINUATIVE’, mutēi ‘to.carry-CONTINUATIVE’, smari ‘to.tie.up-CONTINUATIVE’, puri ‘to.dig-CONTINUATIVE’, javvi: ‘to.tear-CONTINUATIVE’, furi: ‘to.fall(e.g. rain)-CONTINUATIVE’, nu:ri ‘to.climb-CONTINUATIVE’, vvi: ‘to.sell-CONTINUATIVE’, kiei ‘to.cut-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, fai ‘to.eat-CONTINUATIVE’, bju:i ‘to.get.drunk-CONTINUATIVE’, tskai ‘to.use-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’, kavvi ‘to.put.on(headwear)-CONTINUATIVE’, ffi ‘to.close-CONTINUATIVE’, nivvi ‘to.fall.asleep-CONTINUATIVE’, tatei: ‘to.stand.up-CONTINUATIVE’, andzi ‘to.say-CONTINUATIVE’
- kiri ‘to.kick-CONTINUATIVE’
- sn’i ‘to.die-CONTINUATIVE’

Weak conjugation

- uri ‘to.get.off-CONTINUATIVE’, uti ‘to.fall-CONTINUATIVE’, fa:sari ‘to.be.run.over-CONTINUATIVE’, uki: ‘to.get.up-CONTINUATIVE’, ʔzi ‘to.put.in-CONTINUATIVE’, pingi ‘to.flee-CONTINUATIVE’, fi: ‘to.give-CONTINUATIVE’, sʔi ‘to.discard-CONTINUATIVE’

- mi: ‘to.see-CONTINUATIVE’, bizi ‘to.sit.down-CONTINUATIVE’, zzi ‘to.get-CONTINUATIVE’,
 kiei ‘to.put.on(e.g. clothing)-CONTINUATIVE’

Irregular conjugation

- kiei ‘to.come-CONTINUATIVE’, ei: ‘to.do-CONTINUATIVE’, ari:
 ‘to.be(inanimate)-CONTINUATIVE’, uri: ‘to.be(animate)-CONTINUATIVE’

The Shimajiri dialect

Strong conjugation

- tubi ‘to.fly-CONTINUATIVE’, appi ‘to.play-CONTINUATIVE’, kugi ‘to.row-CONTINUATIVE’,
 ujagi ‘to.swim-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, utuei ‘to.drop-CONTINUATIVE’,
 idaei ‘to.put.out-CONTINUATIVE’, mutei ‘to.carry-CONTINUATIVE’, numi
 ‘to.drink-CONTINUATIVE’, piri ‘to.go-CONTINUATIVE’, ffi ‘to.fall(e.g. rain)-CONTINUATIVE’,
 kiei ‘to.cut-CONTINUATIVE’, vvi ‘to.sell-CONTINUATIVE’, fgzzi ‘to.tie.up-CONTINUATIVE’,
 puri ‘to.dig-CONTINUATIVE’, kavvi ‘to.put.on(headwear)-CONTINUATIVE’, ffi
 ‘to.close-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, fai ‘to.eat-CONTINUATIVE’, b’u:i
 ‘to.get.drunk-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’, nivvi
 ‘to.fall.asleep-CONTINUATIVE’, azzi ‘to.say-CONTINUATIVE’
- kiri ‘to.kick-CONTINUATIVE’

Weak conjugation

- uki ‘to.get.up-CONTINUATIVE’, uri ‘to.get.off-CONTINUATIVE’, stēi
 ‘to.discard-CONTINUATIVE’, utei ‘to.fall-CONTINUATIVE’, izi: ‘to.put.in-CONTINUATIVE’, sskai
 ‘to.be.run.over-CONTINUATIVE’, baēei ‘to.forget-CONTINUATIVE’, fi: ‘to.give-CONTINUATIVE’,
 piŋgi ‘to.flee-CONTINUATIVE’
- sn’i ‘to.die-CONTINUATIVE’
- mi: ‘to.see-CONTINUATIVE’, bizi ‘to.sit.down-CONTINUATIVE’, ēei ‘to.put.on(e.g.
 clothing)-CONTINUATIVE’, zzi ‘to.get-CONTINUATIVE’

Irregular conjugation

- ēei ‘to.come-CONTINUATIVE’, ei: ‘to.do-CONTINUATIVE’, uri ‘to.be(animate)-CONTINUATIVE’

The Karimata dialect

Strong conjugation

- asbi ‘to.play-CONTINUATIVE’, tubi ‘to.fly-CONTINUATIVE’, numi ‘to.drink-CONTINUATIVE’,
 kugi ‘to.row-CONTINUATIVE’, uigi ‘to.swim-CONTINUATIVE’, iki ‘to.go-CONTINUATIVE’, idaei
 ‘to.put.out-CONTINUATIVE’, utaei ‘to.drop-CONTINUATIVE’, mutei ‘to.carry-CONTINUATIVE’,
 ffi ‘to.fall(e.g. rain)-CONTINUATIVE’, kiei ‘to.cut-CONTINUATIVE’, smari

‘to.tie.up-CONTINUATIVE’, puri ‘to.dig-CONTINUATIVE’, kadzi
 ‘to.dig-CONTINUATIVE/to.nibble-CONTINUATIVE’, vvi ‘to.sell-CONTINUATIVE’, kavvi
 ‘to.put.on(headwear)-CONTINUATIVE’, nivvi ‘to.fall.asleep-CONTINUATIVE’, ffi
 ‘to.close-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, fai ‘to.eat-CONTINUATIVE’, b’u:i
 ‘to.get.drunk-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’, azzi ‘to.say-CONTINUATIVE’

- kiri ‘to.kick-CONTINUATIVE’

Weak conjugation

- uri ‘to.get.off-CONTINUATIVE’, uti ‘to.fall-CONTINUATIVE’, uki ‘to.get.up-CONTINUATIVE’, eiti
 ‘to.discard-CONTINUATIVE’, fi: ‘to.give-CONTINUATIVE’, pingi ‘to.flee-CONTINUATIVE’, baeei
 ‘to.forget-CONTINUATIVE’, eikari ‘to.be.run.over-CONTINUATIVE’
- mi: ‘to.see-CONTINUATIVE’, izi ‘to.get-CONTINUATIVE’, bizi ‘to.sit.down-CONTINUATIVE’,
 kiei ‘to.put.on(e.g. clothing)-CONTINUATIVE’
- sn’i ‘to.die-CONTINUATIVE’

Irregular conjugation

- kiei ‘to.come-CONTINUATIVE’, aei ‘to.do-CONTINUATIVE’, ari
 ‘to.be(inanimate)-CONTINUATIVE’, uri ‘to.be(animate)-CONTINUATIVE’,

The Ikema dialect

Strong conjugation

- tubi ‘to.fly-CONTINUATIVE’, aeibi: ‘to.play-CONTINUATIVE’, numi: ‘to.drink-CONTINUATIVE’,
 kugi ‘to.row-CONTINUATIVE’, u:gi ‘to.swim-CONTINUATIVE’, iki: / ik̥i: ‘to.go-CONTINUATIVE’,
 ka:ki ‘to.dry.up-CONTINUATIVE’, utaçi / utaçi: ‘to.drop-CONTINUATIVE’, idaçi:
 ‘to.put.out-CONTINUATIVE’, muti: ‘to.carry-CONTINUATIVE’, nu:ri: ‘to.climb-CONTINUATIVE’,
 ffi: ‘to.fall(e.g. rain)-CONTINUATIVE’, kiri: ‘to.cut-CONTINUATIVE’, s̥mari:
 ‘to.tie.up-CONTINUATIVE’, furi: ‘to.dig-CONTINUATIVE’, vvi: ‘to.sell-CONTINUATIVE’, kavvi /
 kavvi: ‘to.put.on(headwear)-CONTINUATIVE’, ffi: ‘to.close-CONTINUATIVE’, sadari:
 ‘to.precede-CONTINUATIVE’, nivvi / nivvi: ‘to.fall.asleep-CONTINUATIVE’, hari:
 ‘to.go-CONTINUATIVE’, kai ‘to.buy-CONTINUATIVE’, arai ‘to.wash-CONTINUATIVE’, fai
 ‘to.eat-CONTINUATIVE’, b’u:i ‘to.get.drunk-CONTINUATIVE’, addzi: ‘to.say-CONTINUATIVE’,
 kiri: ‘to.kick-CONTINUATIVE’

Weak conjugation

- uki: ‘to.get.up-CONTINUATIVE’, uri / uri: ‘to.get.off-CONTINUATIVE’, uti:
 ‘to.fall-CONTINUATIVE’, s̥ti: ‘to.discard-CONTINUATIVE’, baeei ‘to.forget-CONTINUATIVE’,
 hikai: ‘to.be.run.over-CONTINUATIVE’, çing̥i ‘to.flee-CONTINUATIVE’, s̥mi: / s̥mi:
 ‘to.wash-CONTINUATIVE’, fi: ‘to.give-CONTINUATIVE’, d̥zi ‘to.get-CONTINUATIVE’

- mi: ‘to.see-CONTINUATIVE’, tti: ‘to.put.on(e.g. clothing)-CONTINUATIVE’, bizi: ‘to.sit.down-CONTINUATIVE’, ein’i ‘to.die-CONTINUATIVE’,

Irregular conjugation

- tti ‘to.come-CONTINUATIVE’, çi: ‘to.do-CONTINUATIVE’, ari: ‘to.be(inanimate)-CONTINUATIVE’, uri ‘to.be(animate)-CONTINUATIVE’

The Kuninaka dialect

Strong conjugation

- kavvi: ‘to.put.on(headwear)-CONTINUATIVE’, niyvi: ‘to.fall.asleep-CONTINUATIVE’, a^zzi: ‘to.say-CONTINUATIVE’
- sɲi: ‘to.die-CONTINUATIVE’
- tɛi: ‘to.put.on(e.g. clothing)-CONTINUATIVE’, bizi: ‘to.sit.down-CONTINUATIVE’

Weak conjugation

- okii ‘to.get.up-CONTINUATIVE’, p^ɲikaii ‘to.be.run.over-CONTINUATIVE’, ɕimii / ɕimi ‘to.close-CONTINUATIVE’, taskari ‘to.be.saved-CONTINUATIVE’
- mi: ‘to.see-CONTINUATIVE’

Irregular conjugation

- ɛi: ‘to.do-CONTINUATIVE’, arii ‘to.be(inanimate)-CONTINUATIVE’, ore: ‘to.be(animate)-CONTINUATIVE’

In the Miyako language, *ari*-continuatives of strong verbs are formed by suffixing *-i* to stems ending in consonants, while those of weak verbs are identical in shape to base stems ending in vowels. Both the suffix used for strong verbs and the final vowel observed in weak verbs derive from *e*.

As will be discussed below, it is thought that the *ari*-continuative arose through the grammaticization of *shi*-continuatives to which the *shi*-continuative form of the existential verb *az* had been suffixed, in which these were fused together, but this can not yet be said to be certain³⁴. Further surveys and research into these forms in Miyako and the dialects of the Yaeyama language are needed.

6.1 Characteristics of *ari*-continuative forms

Although their origins are different, the grammatical behavior of the Miyako *ari*-continuative is identical to that of the *shite*-continuative of the Northern Ryukyuan languages. Not only are they

³⁴ Mitsunari Nakama (1982) views the Miyako forms in question as *shite*-continuatives.

used for non-conclusive predicates in compound sentences and sentences with multiple predicates, they are also used identically as elements in, for example, continuous aspect forms, forms expressing attempts such as *numi mi:ru* ‘to.drink-CONTINUATIVE to.see-IMPERATIVE’ and *tubi mi:ro* ‘to.fly-CONTINUATIVE to.see-IMPERATIVE’, and benefactive forms such as *sti fi:ro* ‘to.discard-CONTINUATIVE to.give-IMPERATIVE’ and *tejei fi:ru* ‘to.cut-CONTINUATIVE to.give-IMPERATIVE’.

Continuous aspect forms such as *aeibi ui* ‘to.play-PROGRESSIVE’ and *ffi u?* ‘to.fall(e.g. rain)-PROGRESSIVE’, which are analytical forms combining *ari*-continuatives with the existential verb *uz* or *u:*, coexist with fused, synthetic forms such as *aeib'u:i* ‘to.play-PROGRESSIVE’ and *f'u:z?* ‘to.fall(e.g. rain)-PROGRESSIVE’. The continuous aspect forms of action verbs in examples (29)–(32) express a continuing action of the subject referent³⁵, while those of inchoative verbs in examples (33)–(40) express a continuing state resulting from a change in the subject referent³⁶. How the semantics of the continuous aspect are realized is also similar to how they are realized with the *shite*-continuative of the Northern Ryukyuan languages³⁷.

Continuing action of the subject referent

- (29) *ffaf naik'ata:çi: aran aeibi ui / aeib'u:i.* (Ikema)
to.be.dark-INFINITIVE to.become=TERMINATIVE outside=LOCATIVE to.play-PROGRESSIVE
(*asonde iru*)
‘I’m playing outside until it gets dark.’
- (30) *mainitei tereb'u: mi: jui.* (Ikema)
every.day television=ACCUSATIVE to.see-PROGRESSIVE (*mite iru*)
‘I’m watching television every day.’
- (31) *nama: aminudu ffi u? / f'u:z?* (Uruka)
now=TOPIC rain=NOMINATIVE to.fall-PROGRESSIVE (*futte iru*)
‘It’s raining now.’
- (32) *nnama: aminudu fju: / ffju:.* (Karimata)
now=TOPIC rain=NOMINATIVE to.fall-PROGRESSIVE (*futte iru*)
‘It’s raining now.’

³⁵ *Translators note:* in glosses, this usage is represented as ‘progressive’.

³⁶ *Translators note:* in glosses, this usage is represented as ‘stative’.

³⁷ There is also a continuous aspect form that combines the *ari*-continuative form of the existential verb *az* with *uz*, which expresses a transient state existing at the time of the utterance.

maznu ama:tta ari uz. (Shimajiri)

rice=NOMINATIVE much to.be-PROGRESSIVE ‘I have a lot of rice.’

kumanna ka:nu arju:ta:. (Kugai)

here=LOCATIVE=TOPIC well=NOMINATIVE to.be-PROGRESSIVE-PAST ‘There used to be a well here.’

Continuing state resulting from a change in the subject referent

- (33) upuaminu ffitteidu pja:rinu tsudziku:. (Bora)
 heavy.rain=NOMINATIVE to.fall-CONTINUATIVE drought=NOMINATIVE
 to.continue-STATIVE (*tsuzuite iru*)
 ‘After the heavy rain, there has continued to be a drought.’
- (34) karja: bju:ittidu k*ɲnu:nu kutu:ba baceidu uɲ. (Uruka)
 he=TOPIC to.get.drunk-CONTINUATIVE yesterday=GENITIVE thing=TOPIC
 to.forget-STATIVE (*wasurete iru*)
 ‘He got drunk, so he has forgotten about yesterday.’
- (35) gaba:aminu ffi: ntanu ka:ki jui. (Karimata)
 heavy.rain=NOMINATIVE to.fall-CONTINUATIVE earth=NOMINATIVE to.dry.up-STATIVE
 (*kawaite iru*)
 ‘After the heavy rain, the soil has dried up.’
- (36) karja: ksnunu kutu:ba bacei uɲ. (Ikema)
 he=TOPIC yesterday=GENITIVE thing=TOPIC to.forget-STATIVE (*wasurete iru*)
 ‘He has forgotten about yesterday.’
- (37) bo:eu: utueiteidu tuzga iku:ta:. (Bora)
 hat=ACCUSATIVE to.drop-CONTINUATIVE to.get=DATIVE to.go-STATIVE-PAST (*itte ita*)
 ‘I had dropped my hat and was on my way to get it.’
- (38) bututuzza jamakasa numi:du bju:i uta:. (Kugai)
 day.before.yesterday=TOPIC much to.drink-CONTINUATIVE to.get.drunk-STATIVE-PAST
 (*yotte ita*)
 ‘The day before yesterday, I had drank a lot and was drunk.’
- (39) einci:ja bizieitidu, ffanukja:ja tatei: uta:. (Kugai)
 teacher=TOPIC to.sit.down-CONTINUATIVE child=PLURAL=TOPIC
 to.stand.up-STATIVE-PAST (*tatte ita*)
 ‘The teacher was sitting, while the children were standing.’
- (40) ku:mujamai sni:du jumunumai sni u:. (Kugai)
 cockroach=too to.die-CONTINUATIVE mouse=too to.die-STATIVE (*shinde iru*)
 ‘The cockroach is dead, as is the mouse.’

Although the phonetic forms are different, the tense and aspect contrasts displayed by Miyako verbs are similar to the binary contrasts of the eastern Japanese languages (Modern Japanese).

	Non-past	Past
Perfective	asps ‘to.play-PERFECTIVE’ sn ‘to.die-PERFECTIVE’	aspsta: ‘to.play-PAST’ snta: ‘to.die-PAST’
Continuous	aspju: ‘to.play-PROGRESSIVE’ snju: ‘to.die-STATIVE’	aspju:ta: ‘to.play-PROGRESSIVE-PAST’ snju:ta: ‘to.die-STATIVE-PAST’

Table 6. Tense and aspect in the Bora dialect.

Miyako *ari*-continuatives can be used as sentence-final predicates to express past events; in this, too, they are similar to the *shite*-continuatives of the Northern Ryukyuan languages. In the case of the dialects of Okinawa Island, the *shite*-continuative is used for past perfective polar questions, while in the dialects of Amami Ōshima, the *shite*-continuative is used for the past indicative. I hope to discuss this matter in more detail at a later time.

- (41) kju:ja tubansuga ksno: tubi. (Karimata)
 today=TOPIC to.fly-NEGATIVE=CONCESSIVE yesterday=TOPIC to.fly-PAST
 Although they won’t fly today, they flew yesterday.
- (42) ksnumaidu ingaija iki. (Karimata)
 yesterday=too sea=ALLATIVE=TOPIC to.go-PAST
 ‘I went to the sea yesterday, too.’
- (43) ksno aminudu ffi / fftaz. (Karimata)
 yesterday=TOPIC rain=NOMINATIVE to.fall-PAST
 ‘Yesterday, it rained.’

6.2 The origins of *ari*-continuative forms

Ari-continuatives are also observed in the dialects of Okinawa Island. In the dialects of central and southern Okinawa Island, *ari*-continuatives function as non-conclusive predicates in compound sentences, but they are not used to form a variety of grammatical forms as in the Miyako language. In the Shuri dialect, the *ari*-continuative takes the shape of *numa:ni* or *numa:i*; according to the *Okinawago Jiten (A Dictionary of Okinawan*; National Institute for Japanese Language and Linguistics (ed.) 1963), *numa:i* is the older form.

The *ari*-continuatives of the dialects of Iheya and Izena seem to resemble that of Miyako the most. Like in Miyako, *ari*-continuative forms display degree of productivity in the Iheya and Izena dialects, being used not only as predicates in compound sentences, but also as elements in forming words and forms such as continuous aspect forms.

	‘to.write -CONTINUATIVE’	‘to.play -CONTINUATIVE’	‘to.get.up -CONTINUATIVE’	‘to.get.off -CONTINUATIVE’	‘to.wash -CONTINUATIVE’	‘to.resemble -CONTINUATIVE’
Shuri dialect	katʃa:i	ʔaʃiba:i	ʔukija:i	ʔurija:i	ʔaraja:i	nija:i
Iheya dialect	katʃe:	ʔaʃine:	ʔukije:	ʔurije:	ʔaraje:	nije:
Hirara dialect	kaki:	aspi:	uki:	uri:	arai:	ni:
Ishigaki dialect	kaki:	asʃbi:	uke:	ure:	araja:	nija:

Table 7. *Ari*-continuative forms in the dialects of Okinawa and the Miyako and Yaeyama languages.

- (44) ʔamaNdʒi ʔaʃine: hwa:.. (Gakiya, Iheya Village)
 over.there=LOCATIVE to.play-CONTINUATIVE to.come-IMPERATIVE (*asonde*)
 ‘Go play over there.’
- (45) ʔutuhe: hu:.. (Jitchaku, Izena Village)
to.drop-CONTINUATIVE to.come-IMPERATIVE (*otoshite*)
 ‘Go drop it.’
- (46) ʔwidʒe: watataN. (Shomi, Izena Village)
to.swim-CONTINUATIVE to.cross-PAST (*oyoide*)
 ‘I swam across.’
- (47) bo:ʃi hauje: ʔattʃuN. (Gakiya)
 hat to.put.on(headwear)-CONTINUATIVE to.walk-PERFECTIVE (*kabutte*)
 ‘I walk with a hat on.’
- (48) ʔnaNma ʔaminu hujo:N. (Shomi)
 now rain=NOMINATIVE to.fall-PROGRESSIVE (*futte iru*)
 ‘It’s raining now.’
- (49) ʔnama ʔami hujoN. (Shimajiri)
 now rain to.fall-PROGRESSIVE (*futte iru*)
 ‘It’s raining now.’
- (50) hunu ʔiʃi kije: Nri. (Gakiya)
 this stone to.kick-CONTINUATIVE to.see-IMPERATIVE (*kette miro*)
 ‘Try kicking this stone.’

In the dialects of Gakiya in Iheya Village, Noho, and Shimajiri, there are past tense forms such as *ʔafinaN* ‘to.play-PAST’, *sukunaN* ‘to.die-PAST’ (Gakiya and Shimajiri; cf. Shomi *ʔikudaN*), *nunaN* ‘to.drink-PAST’, and *junaN* ‘to.call-PAST’, which are thought to consist of *ari*-continuatives to which *ʔaN* ‘to.be(inanimate)-PAST’ has been attached. This type of past tense form has been displaced, however, by a type of past tense form deriving from *shite*-continuatives, such as *ʔafidaN* ‘to.play-PAST’.

The *ari*-continuatives of the dialects of Okinawa Island originated as *shi*-continuatives such as *numi* ‘to.drink-CONTINUATIVE’ combined with the existential verb *ʔai*, corresponding to Japanese *ari*, and are mostly used to express temporal ordering relations. In the *Omoro Sōshi*, a compilation of poems and songs whose first volume was compiled in 1531, these forms end in the *hiragana* corresponding to *-yari*. According to Toshizo Takahashi (1982), the *-yari* forms in the *Omoro Sōshi* consist of infinitive forms to which *-yari* has been attached, express perfect aspect, and are only used in a continuative usage.

- (51) *Toyomu Ōkimiya momoshima soroheyari mioyase.* (volume 176)
 to.resound-ADNOMINAL sovereign=TOPIC Momoshima to.gather-CONTINUATIVE
 to.present-IMPERATIVE
 ‘Gather the Momoshima Islands and present them to the renowned sovereign.’
- (52) *Ito nukiyari, nawa nukiyari,* (volume 632)
 thread put.through-CONTINUATIVE rope put.through-CONTINUATIVE
 Putting through threads, putting through ropes, and...’

The strong conjugation *ari*-continuatives of the Miyako language consist of base stems to which *-i* or *-i:* has been attached. Weak and mixed conjugation *ari*-continuatives, on the other hand, are homophonous with *shi*-continuatives (base stems). Although *shi*- and *ari*-continuatives of the strong conjugation also resemble each other, the final vowel of strong conjugation *shi*-continuatives as used for the stem portions of past tense forms derives from **-i*, while that of *ari*-continuatives derives from **-e*. The *ari*-continuatives of Miyako appear to derive from forms like the *ari*-continuatives of the Iheya dialect.

Supplementary note

The tense-aspect system of the dialects of Okinawa Island appears to derive from the ternary contrast system of the western Japanese languages. Continuous aspect forms consist of *shite*-continuatives combined and fused together with the animate existential verb, corresponding formally to western Japanese perfect aspect forms such as *ɛitoru* ‘to.do-STATIVE’. They differ from

western Japanese *ëitoru* in their aspectual meaning, however; they express a continuing action by the subject referent in the case of action verbs, while they express a continuing state resulting from a change in the subject referent in the case of inchoative verbs, similarly to the continuous aspect forms of the eastern Japanese languages and the Miyako language.

In the dialects of Yaeyama, too, there are forms combining the *ari*-continuative with *uN* ‘to be (animate)’, fused together phonetically, such as the Ishigaki dialect forms *numi: uN* > *numiN* ‘to.drink-PROGRESSIVE’, *uke: uN* > *uke:N* ‘to.get.up-STATIVE’, and *kaNgaja: uN* > *kaNgaja:N* ‘to.think-PROGRESSIVE’.

- (53) *utudo: guei numiN*. (continuing action)
 younger.brother=TOPIC liquor=ACCUSATIVE to.drink-PROGRESSIVE
 ‘My brother is having a drink.’
- (54) *aQpa:ja me: uke:N*. (continuing resultant state)
 mother=TOPIC already to.get.up-STATIVE
 ‘My mother is already up.’

Although the tense-aspect system of the southern dialects of Okinawa Island is similar to that of the western Japanese languages in that it has a ternary contrast of the type *suru-ëijoru-ëitoru*, its continuous aspect is used similarly to that of the eastern Japanese languages; it is thus a unique system. That of the Miyako language is similar to that of the eastern Japanese languages in that it has a binary contrast and its continuous aspect is used similarly, but it is a unique system in that its continuous aspect forms are formed differently from those of the eastern Japanese languages. It can therefore be concluded that the tense-aspect systems of the dialects of southern Okinawa Island, the Miyako language, the western Japanese languages, and the eastern Japanese languages all have similarities as well as differences, each being unique in their own way.

	Non-past	Past
Perfective	<i>ʔafibuN</i> ‘to.play-PERFECTIVE’, <i>ʃinuN</i> ‘to.die-PERFECTIVE’	<i>ʔafidaN</i> ‘to.play-PAST’, <i>ʃidzaN</i> ‘to.die-PAST’
		<i>ʔafibutaN</i> ‘to.play-PAST’, <i>ʃinutaN</i> ‘to.die-PAST’
Continuous	<i>ʔafido:N</i> ‘to.play-PROGRESSIVE’, <i>ʃidzo:N</i> ‘to.die-STATIVE’	<i>ʔafido:taN</i> ‘to.play-PROGRESSIVE-PAST’, <i>ʃidzo:taN</i> ‘to.die-STATIVE-PAST’

Table 8. Tense and aspect in the Agena dialect of Uruma City, Okinawa Island.

7 *Shite-continuative forms*

The *shite*-continuative of the Miyako language is used for predicates in compound sentences, functioning similarly to the *shite*-continuative of Japanese; it is formally similar to it, as well. It has no subordinate usages, however; it is not used in the formation of forms such as continuous aspect forms, forms expressing attempts, and benefactive verbs. In this respect, it is different from the *shite*-continuatives of Japanese and the Northern Ryukyuan languages.

- (55) oto:ja sakju: muteittei, mma: faumunu: muts. (Karimata)
 father=TOPIC liquor=ACCUSATIVE to.carry-CONTINUATIVE, mother=TOPIC
 food=ACCUSATIVE to.carry-PERFECTIVE (*motte*)
 ‘My father carries the liquor; my mother carries the food.’
- (56) mmaduŋnu tubittei, fa:duŋmai tubin^ja:n. (Karimata)
 parent.bird=NOMINATIVE to.fly-CONTINUATIVE little.bird=too to.fly-PAST (*tonde*)
 ‘The parent bird flew away, and the little bird flew away, too.’
- (57) fnju: kugitti unu atu jukui. (Kurima)
 boat=ACCUSATIVE to.row-CONTINUATIVE after.that to.rest-IMPERATIVE (*koide*)
 ‘Row the boat; then, take a rest.’
- (58) funju: kugittikara jukui. (Uruka)
 boat=ACCUSATIVE to.row-CONTINUATIVE=after to.rest-IMPERATIVE (*koide*)
 ‘Row the boat; then, take a rest.’
- (59) fʉsizzu numitti pja:pja:ti nivvi. (Uruka)
 medicine=ACCUSATIVE to.take-CONTINUATIVE to.be.early-INFINITIVE
 to.sleep-IMPERATIVE (*nonde*)
 ‘Take some medicine and go to bed early.’

The Bora dialect

Bora dialect *shite*-continuatives consist of *ari*-continuative forms to which *-ttei* has been attached. The sounds corresponding to *ti* in the other dialects have undergone affrication in the Bora dialect, becoming *tei*, as in *tei*: ‘hand’ and *teida* ‘the sun’; *-ttei* thus seems to derive from *-tti*.

Strong conjugation

- tubittei ‘to.fly-CONTINUATIVE’, kugittei ‘to.row-CONTINUATIVE’, ikittei
 ‘to.go-CONTINUATIVE’, ffittei ‘to.fall(e.g. rain)-CONTINUATIVE’, utueittei
 ‘to.drop-CONTINUATIVE’, kieittei ‘to.cut-CONTINUATIVE’, ftteittei ‘to.tie.up-CONTINUATIVE’,

purittei ‘to.dig-CONTINUATIVE’, idaeitei ‘to.put.out-CONTINUATIVE’, muteittei
 ‘to.carry-CONTINUATIVE’, kaittei ‘to.buy-CONTINUATIVE’, vvittei ‘to.sell-CONTINUATIVE’,
 numittei ‘to.drink-CONTINUATIVE’, faittei ‘to.eat-CONTINUATIVE’, asɿpittei ~ asɿbittei
 ‘to.play-CONTINUATIVE’, numittei ‘to.drink-CONTINUATIVE’, araittei ‘to.wash-CONTINUATIVE’,
 kavvittei ‘to.put.on(headwear)-CONTINUATIVE’, ffittei ‘to.close-CONTINUATIVE’, nivvttei
 ‘to.fall.asleep-CONTINUATIVE’, azzittei ‘to.say-CONTINUATIVE’, kirittei
 ‘to.kick-CONTINUATIVE’, kieittei ‘to.put.on(e.g. clothing)-CONTINUATIVE’, bizzittei
 ‘to.sit.down-CONTINUATIVE’, sɿnʲittei ‘to.die-CONTINUATIVE’

Mixed conjugation

- ukittei ‘to.get.up-CONTINUATIVE’, urittei ‘to.get.off-CONTINUATIVE’, uteittei
 ‘to.fall-CONTINUATIVE’, steittei ‘to.discard-CONTINUATIVE’, fi:ttei ‘to.give-CONTINUATIVE’,
 mi:ttei ‘to.see-CONTINUATIVE’, i:ttei ‘to.get-CONTINUATIVE’

Irregular conjugation

- kieittei ‘to.come-CONTINUATIVE’, ɕi:ttei ‘to.do-CONTINUATIVE’, arittei
 ‘to.be(inanimate)-CONTINUATIVE’, urittei ‘to.be(animate)-CONTINUATIVE’

The Uruka dialect

Uruka dialect *shite*-continuatives consist of *ari*-continuative forms to which *-tti* has been attached.

Strong conjugation

- tuvitti ‘to.fly-CONTINUATIVE’, asɿpitti ‘to.play-CONTINUATIVE’, numitti
 ‘to.drink-CONTINUATIVE’, kugittikara ‘to.row-CONTINUATIVE=ABLATIVE’, ikitti
 ‘to.go-CONTINUATIVE’, idaɸʲitti ‘to.put.out-CONTINUATIVE’, muɸʲitti ‘to.carry-CONTINUATIVE’,
 utueitti ‘to.drop-CONTINUATIVE’, ffitti ‘to.fall(e.g. rain)-CONTINUATIVE’, puritti
 ‘to.dig-CONTINUATIVE’, kɿɕeiti / kieeiti ‘to.cut-CONTINUATIVE’, ɕimaritti
 ‘to.tie.up-CONTINUATIVE’, kavvitti ‘to.put.on(headwear)-CONTINUATIVE’, araitti
 ‘to.wash-CONTINUATIVE’, kaitti ‘to.buy-CONTINUATIVE’, vitti ‘to.sell-CONTINUATIVE’,
 muraitti ‘to.receive-CONTINUATIVE’, faitti ‘to.eat-CONTINUATIVE’, bju:itti
 ‘to.get.drunk-CONTINUATIVE’
- kiritti ‘to.kick-CONTINUATIVE’

Mixed conjugation

- uritte ‘to.get.off-CONTINUATIVE’, utittii ‘to.fall-CONTINUATIVE’, ffitti
 ‘to.give-CONTINUATIVE’, stitti ‘to.discard-CONTINUATIVE’

Irregular conjugation

- kieṭṭi ‘to.come-CONTINUATIVE’

The Miyaguni dialect

Miyaguni dialect *shite*-continuatives consist of *ari*-continuative forms to which *-cci* has been attached. The suffix seems to have undergone affrication, as in the Bora dialect.

Strong conjugation

- kugicci ‘to.row-CONTINUATIVE’, ikṭccie ‘to.go-CONTINUATIVE’, ficci ‘to.fall(e.g. rain)-CONTINUATIVE’, utṣṭṭi ‘to.drop-CONTINUATIVE’, kṣṭṭe ‘to.cut-CONTINUATIVE’, pṣṭṭei ‘to.dig-CONTINUATIVE’, idaeṭei ‘to.put.out-CONTINUATIVE’, uvitṭei ‘to.sell-CONTINUATIVE’, nṣmitṭei ‘to.drink-CONTINUATIVE’, φaitṭei ‘to.eat-CONTINUATIVE’, asṣṭṭei ‘to.play-CONTINUATIVE’, araitṭei ‘to.wash-CONTINUATIVE’, nu:ricci ‘to.climb-CONTINUATIVE’, moraitṭei ‘to.receive-CONTINUATIVE’, bṭo:itṭei ‘to.get.drunk-CONTINUATIVE’

Mixed conjugation

- ucṭccci ‘to.fall-CONTINUATIVE’, sṭṭṭccci ‘to.discard-CONTINUATIVE’, φiitṭei ‘to.give-CONTINUATIVE’

Irregular conjugation

- kṣicci ‘to.come-CONTINUATIVE’

The Yonaha dialect

Yonaha dialect *shite*-continuatives consist of *ari*-continuative forms to which *-tti* has been attached.

Strong conjugation

- tubitti ‘to.fly-CONTINUATIVE’, kugitti: ‘to.row-CONTINUATIVE’, v:gitti ‘to.swim-CONTINUATIVE’, ikitti ‘to.go-CONTINUATIVE’, ffitti ‘to.fall(e.g. rain)-CONTINUATIVE’, utueitti ‘to.drop-CONTINUATIVE’, kṭeitti ‘to.cut-CONTINUATIVE’, sṣmaitti: ‘to.tie.up-CONTINUATIVE’, idasitti ‘to.put.out-CONTINUATIVE’, muteitti ‘to.carry-CONTINUATIVE’, kaitti ‘to.buy-CONTINUATIVE’, vvitti ‘to.sell-CONTINUATIVE’, numitti ‘to.drink-CONTINUATIVE’, fe:ti ‘to.eat-CONTINUATIVE’, appitti ‘to.play-CONTINUATIVE’, bju:itti ‘to.get.drunk-CONTINUATIVE’, are:tti ‘to.wash-CONTINUATIVE’, kiritti ‘to.kick-CONTINUATIVE’

Mixed conjugation

- *uritti* ‘to.get.off-CONTINUATIVE’, *utɛitti* ‘to.fall-CONTINUATIVE’, *sutitti*: ‘to.discard-CONTINUATIVE’, *fitti* ‘to.give-CONTINUATIVE’, *zzitti* ‘to.get-CONTINUATIVE’

Irregular conjugation

- *kɿɕɿtti* ‘to.come-CONTINUATIVE’

The Kurima dialect

Kurima dialect *shite*-continuatives consist of *ari*-continuative forms to which *-tti* has been attached.

Strong conjugation

- *tubitti* ‘to.fly-CONTINUATIVE’, *kugitti* ‘to.row-CONTINUATIVE’, *ikɿtti* ‘to.go-CONTINUATIVE’, *utɿɕɿtti* ‘to.drop-CONTINUATIVE’, *ffaɕɿtti* ‘to.cut-CONTINUATIVE’, *teɿɕɿtti* ‘to.cut-CONTINUATIVE’, *smaritti* ‘to.tie.up-CONTINUATIVE’, *ffaɿtti* ‘to.fall(e.g. rain)-CONTINUATIVE’, *idasɿtti* ‘to.put.out-CONTINUATIVE’, *vvitti* ‘to.sell-CONTINUATIVE’, *numitti* ‘to.drink-CONTINUATIVE’, *faitti* ‘to.eat-CONTINUATIVE’, *aspɿtti* ³⁸ ‘to.play-CONTINUATIVE’, *bju:itti* ‘to.get.drunk-CONTINUATIVE’, *araitti* ‘to.wash-CONTINUATIVE’, *kiritti* ‘to.kick-CONTINUATIVE’

Mixed conjugation

- *uritti* ‘to.get.off-CONTINUATIVE’, *utɿtti* ‘to.fall-CONTINUATIVE’, *stɿtti* ‘to.discard-CONTINUATIVE’, *fi:tti* ‘to.give-CONTINUATIVE’

Irregular conjugation

- *teɿɕɿtti* ‘to.come-CONTINUATIVE’

The Kugai dialect

In the Kugai dialect, *shite*-continuatives consisting of *ari*-continuative forms to which *-ɕɿtti* has been attached, such as *aspseɿtti* ‘to.play-CONTINUATIVE’ and *ukieɿtti* ‘to.get.up-CONTINUATIVE’, coexist with forms to which *-tti* has been attached, such as *kugitti* ‘to.row-CONTINUATIVE’ and *uritti* ‘to.get.off-CONTINUATIVE’³⁹. Further confirmation is necessary regarding whether this is due to individual differences between speakers or due to influence from the surrounding dialects.

³⁸ Differently from the other *shite*-continuative forms, this form consists of a *shi*-continuative form to which *-tti* has been attached. Further confirmation is necessary.

³⁹ I obtained forms ending in *-ɕɿtti* such as *purieɿtti* ‘to.dig-CONTINUATIVE’ and *ei:ɕɿtti* ‘to.do-CONTINUATIVE’ in a survey in December, 2011.

Strong conjugation

- *aspsẽjti* ‘to.play-CONTINUATIVE’, *kugitti* ‘to.row-CONTINUATIVE’, *numiẽjti* ‘to.drink-CONTINUATIVE’, *idaẽjti* ‘to.put.out-CONTINUATIVE’, *utaẽjti* ‘to.drop-CONTINUATIVE’, *muteiẽjti* ‘to.carry-CONTINUATIVE’, *puriẽjti* ‘to.dig-CONTINUATIVE’, *kjẽitti* ‘to.cut-CONTINUATIVE’, *s̃jmaritti* ‘to.tie.up-CONTINUATIVE’, *vviẽjti* ‘to.sell-CONTINUATIVE’, *kavviẽjti* ‘to.put.on(headwear)-CONTINUATIVE’, *ffiẽjti* ‘to.close-CONTINUATIVE’, *nivviẽjti* ‘to.fall.asleep-CONTINUATIVE’, *kaiẽjti* ‘to.buy-CONTINUATIVE’, *faiẽjti* ‘to.eat-CONTINUATIVE’, *bju:iẽjti* ‘to.get.drunk-CONTINUATIVE’, *araiẽjti* ‘to.wash-CONTINUATIVE’, *andziẽjti* ‘to.say-CONTINUATIVE’, *kiriti* ‘to.kick-CONTINUATIVE’, *sñiẽjti* ‘to.die-CONTINUATIVE’

Weak conjugation

- *ukiẽjti* ‘to.get.up-CONTINUATIVE’, *uritti* ‘to.get.off-CONTINUATIVE’, *ut̃jtti* ‘to.fall-CONTINUATIVE’, *s̃jtitti* ‘to.discard-CONTINUATIVE’, *fi:ē̃jti* ‘to.give-CONTINUATIVE’
- *mi:ē̃jti* ‘to.see-CONTINUATIVE’, *zziẽjti* ‘to.get-CONTINUATIVE’, *biziẽjti* ‘to.sit.down-CONTINUATIVE’, *kiciẽjti* ‘to.put.on(e.g. clothing)-CONTINUATIVE’

Irregular conjugation

- *k̃jẽittikara* / *kjẽittikara* ‘to.come-CONTINUATIVE=ABLATIVE’, *ei:ē̃jti* ‘to.do-CONTINUATIVE’, *ariẽjti* ‘to.be(inanimate)-CONTINUATIVE’, *uriẽjti* ‘to.be(animate)-CONTINUATIVE’

The Shimajiri dialect

Shimajiri dialect *shite*-continuatives, too, consist of *ari*-continuative forms to which *-cci* has been attached. The suffix seems to have undergone affrication, as in the Bora dialect.

Strong conjugation

- *tubittei* ‘to.fly-CONTINUATIVE’, *appittei* ‘to.play-CONTINUATIVE’, *numittei* ‘to.drink-CONTINUATIVE’, *kugittei* ‘to.row-CONTINUATIVE’, *idaeitei* ‘to.put.out-CONTINUATIVE’, *utueittei* ‘to.drop-CONTINUATIVE’, *muteittei* ‘to.carry-CONTINUATIVE’, *kieittei* ‘to.cut-CONTINUATIVE’, *purittei* ‘to.dig-CONTINUATIVE’, *ffittei* ‘to.fall(e.g. rain)-CONTINUATIVE’, *vvittei* ‘to.sell-CONTINUATIVE’, *kavvittei* ‘to.put.on(headwear)-CONTINUATIVE’, *ffittei* ‘to.close-CONTINUATIVE’, *nivvttei* ‘to.fall.asleep-CONTINUATIVE’, *kaittei* ‘to.buy-CONTINUATIVE’, *araittei* ‘to.wash-CONTINUATIVE’, *faittei* ‘to.eat-CONTINUATIVE’, *bju:ittei* ‘to.get.drunk-CONTINUATIVE’, *azzittei* ‘to.say-CONTINUATIVE’
- *kirittei* ‘to.kick-CONTINUATIVE’
- *bizittei* ‘to.sit.down-CONTINUATIVE’

Weak conjugation

- ukittei ‘to.get.up-CONTINUATIVE’, urittei ‘to.get.off-CONTINUATIVE’, uteittei ‘to.fall-CONTINUATIVE’, steittei ‘to.discard-CONTINUATIVE’, fi:ttei ‘to.give-CONTINUATIVE’, sn’ittei ‘to.die-CONTINUATIVE’
- mi:ttei ‘to.see-CONTINUATIVE’, eeittei ‘to.put.on(e.g. clothing)-CONTINUATIVE’, zzittei ‘to.get-CONTINUATIVE’

Irregular conjugation

- eeittei ‘to.come-CONTINUATIVE’, aeittei ‘to.do-CONTINUATIVE’, arittei ‘to.be(inanimate)-CONTINUATIVE’, urittei ‘to.be(animate)-CONTINUATIVE’

The Karimata dialect

Karimata dialect *shite*-continuatives consist of *ari*-continuative forms to which *-eiti* has been attached, as in the Kugai dialect.

Strong conjugation

- tubieiti ‘to.fly-CONTINUATIVE’, asbieiti ‘to.play-CONTINUATIVE’, kugieiti ‘to.row-CONTINUATIVE’, numieiti ‘to.drink-CONTINUATIVE’, ikieiti ‘to.go-CONTINUATIVE’, utaeiti ‘to.drop-CONTINUATIVE’, idaeieiti ‘to.put.out-CONTINUATIVE’, muteieiti ‘to.carry-CONTINUATIVE’, ffeeie ‘to.fall(e.g. rain)-CONTINUATIVE’, purieiti ‘to.dig-CONTINUATIVE’, kieieiti ‘to.cut-CONTINUATIVE’, vvvieiti ‘to.sell-CONTINUATIVE’, kavvieiti ‘to.put.on(headwear)-CONTINUATIVE’, ffeeiti ‘to.close-CONTINUATIVE’, nivvieiti ‘to.fall.asleep-CONTINUATIVE’, kaieiti ‘to.buy-CONTINUATIVE’, araeieiti ‘to.wash-CONTINUATIVE’, faieiti ‘to.eat-CONTINUATIVE’, azzieiti ‘to.say-CONTINUATIVE’, sn’ieiti ‘to.die-CONTINUATIVE’

Weak conjugation

- ukieie ‘to.get.up-CONTINUATIVE’, urieiti ‘to.get.off-CONTINUATIVE’, utieiti ‘to.fall-CONTINUATIVE’, eitieiti ‘to.discard-CONTINUATIVE’, fi:ieiti ‘to.give-CONTINUATIVE’, eimieiti ‘to.close-CONTINUATIVE’
- mi:ieiti ‘to.see-CONTINUATIVE’, izieiti ‘to.get-CONTINUATIVE’, kieieiti ‘to.put.on(e.g. clothing)-CONTINUATIVE’, bizieiti ‘to.sit.down-CONTINUATIVE’

Irregular conjugation

- kieieiti ‘to.come-CONTINUATIVE’, aeieiti ‘to.do-CONTINUATIVE’, arieiti ‘to.be(inanimate)-CONTINUATIVE’, urieiti ‘to.be(animate)-CONTINUATIVE’

The Ikema dialect

While the three forms given below are *shite*-continuatives, *ari*-continuatives are observed in almost all cases where one would expect a *shite*-continuative. The irregular verb form *titi* ‘to.come-CONTINUATIVE’, too, is homophonous with the *ari*-continuative. Further confirmation seems necessary regarding whether *shite*-continuatives are not used in the Ikema dialect or they could be obtained using a different survey method.

Strong conjugation

- *kugitti* ‘to.row-CONTINUATIVE’

Weak conjugation

- *sandzari:ti* ‘to.fall-CONTINUATIVE’

Irregular conjugation

- *titi* ‘to.come-CONTINUATIVE’

The Kuninaka dialect

As only a small number of examples were obtained for the Kuninaka dialect in the survey, not much can be said regarding its *shite*-continuative, but no examples have been obtained that can be said with certainty to be *shite*-continuative forms. In response to sentences intended to elicit *shite*-continuatives, the forms *alʒii* ‘to.say-CONTINUATIVE’, *niʔvii* ‘to.fall.asleep-CONTINUATIVE’, and *sʔnii* ‘to.die-CONTINUATIVE’ were obtained, while the forms *aʔzi:* ‘to.say-CONTINUATIVE’, *niʔvi:* ‘to.fall.asleep-CONTINUATIVE’, and *sʔni:* ‘to.die-CONTINUATIVE’ were obtained in response to sentences intended to elicit *ari*-continuatives; although they are different, a further survey is necessary to determine whether this is a significant difference.

Strong conjugation

- *kavvi:* ‘to.put.on(headwear)-CONTINUATIVE’, *niʔvii* ‘to.fall.asleep-CONTINUATIVE’, *alʒii* ‘to.say-CONTINUATIVE’
- *sʔnii* ‘to.die-CONTINUATIVE’
- *tei:* ‘to.put.on(e.g. clothing)-CONTINUATIVE’, *bizi:* ‘to.sit.down-CONTINUATIVE’

Weak conjugation

- *okii* ‘to.get.up-CONTINUATIVE’, *pʔkaii* ‘to.be.run.over-CONTINUATIVE’, *simii* ‘to.close-CONTINUATIVE’, *taskari* ‘to.be.saved-CONTINUATIVE’
- *mi:* ‘to.see-CONTINUATIVE’

Irregular conjugation

- *ei:* ‘to.do-CONTINUATIVE’, *arii* ‘to.be(inanimate)-CONTINUATIVE’, *ore:* ‘to.be(animate)-CONTINUATIVE’

It may seem like geminating *onbin* has occurred in the *shite*-continuatives of the dialects of Miyako, both in those like Uruka *uritti* ‘to.get.off-CONTINUATIVE’ and *utittii* ‘to.fall-CONTINUATIVE’ and in those like Bora *tubittēi* ‘to.fly-CONTINUATIVE’ and *kugittēi* ‘to.row-CONTINUATIVE’, which have undergone affrication. They are formed in the same way irrespective of verb type, however, in the strong, weak, mixed, and irregular conjugations; it therefore seems that this is not an *onbin* phenomenon.

In strong verb *shite*-continuatives, suffixes such as *-itti* and *-ittēi* are attached to consonant stems, while in weak verb *shite*-continuatives, suffixes such as *-tti* and *-ttēi* are attached to vowel stems. Both kinds of forms consist of *ari*-continuatives to which suffixes such as *-tti* and *-ttēi* are attached.

In forms such as Karimata *tubiēiti* ‘to.fly-CONTINUATIVE’ and *kugieiti* ‘to.row-CONTINUATIVE’ and Kugai *kaieiti* ‘to.buy-CONTINUATIVE’ and *fi:ēiti* ‘to.give-CONTINUATIVE’, a form like *ēiti* (corresponding either to Japanese *shite* ‘to.do-CONTINUATIVE’ or to Japanese *sute* ‘to.discard-CONTINUATIVE’) seems to have been suffixed to *ari*-continuative forms. Further research is needed regarding these forms.

There are *shite*-continuatives in which *-Qte* is suffixed to *ari*-continuative forms in the Ishigaki dialect of the Yaeyama language, too, such as *kakiQte* ‘to.write-CONTINUATIVE’, *uke:Qte* ‘to.get.up-CONTINUATIVE’, *mija:Qte* ‘to.see-CONTINUATIVE’, and *ēi:Qte* ‘to.do-CONTINUATIVE’.

8 Conclusion

As the survey was conducted within a limited period of time, the amount of data that was obtained is limited, as well. Furthermore, the survey was limited to only five verb conjugation forms, namely the perfective (corresponding to Japanese *suru* ‘to.do-PERFECTIVE’), negative (corresponding to Japanese *shinai* ‘to.do-NEGATIVE’), past tense (corresponding to Japanese *shita* ‘to.do-PAST’), *ari*-continuative, and *shite*-continuative forms. On the other hand, the survey was conducted at a balanced selection of sites, spread over Miyako: Bora, Uruka, Miyaguni, Yonaha, Kurimajima, Kugai, Shimajiri, Karimata, Ikemajima, and Kuninaka on Irabujima. Thanks to this, we were able to review the conjugation types and five conjugated forms of the Miyako language.

Further surveys covering a larger number of verbs at each site as well as more conjugation forms are needed. In addition, it is necessary to examine the dialects of Ōgamijima; Sawada and

Nagahama on Irabujima; Irabu and Nakachi on Irabujima; Taramajima; and so on, which we were unable to examine in this survey and which are known to have unique characteristics within the Miyako language.

Bibliography

- Izenajima Hōgen Jiten Henshū Iinkai (ed.). 2004. *Izenajima Hōgen Jiten*. Izena Village Board of Education.
- Karimata, Shigehisa. 1989. 'Ryūkyū Hōgen ni Okeru "Dai-San Chūshikei" ni Tsuite'. *Okinawa Gengo Kenkyū Sentā Shiryō No. 81 (Okinawa Center for Language Studies Materials No. 81)*.
- Karimata, Shigehisa. 1999. 'Miyako Sho-Hōgen no Dōshi "Shūshikei" no Seiritsu ni Tsuite'. *Nihon Tōyō Bunka Ronshū (Bulletin of the Faculty of Law and Letters, University of the Ryukyus)*, 5:27–51.
- Karimata, Shigehisa. 2009a. 'Miyakojima-Shi Gusukube-Aza Bora Hōgen no Dōshi no Shūshikei'. *Ryūkyūgo Sho-Hōgen no Dōshi, Keiyōshi no Keitairon ni Kansuru Chōsa/Kenkyū*. Research report, 2004–2007 JSPS KAKENHI Grant-in-Aid for Scientific Research (B), 1–28.
- Karimata, Shigehisa. 2009b. 'Miyakojima-Shi Gusukube-Aza Bora Hōgen no Dōshi no Ren'yōkei, Rentaikei, Jōkenkei'. *Ryūkyūgo Sho-Hōgen no Dōshi, Keiyōshi no Keitairon ni Kansuru Chōsa/Kenkyū*. Research report, 2004–2007 JSPS KAKENHI Grant-in-Aid for Scientific Research (B), 29–60.
- Karimata, Shigehisa. 2009c. 'Miyakojima-Shi Gusukube-Aza Bora Hōgen no Dōshi no Katachi-Zukuri'. *Ryūkyūgo Sho-Hōgen no Dōshi, Keiyōshi no Keitairon ni Kansuru Chōsa/Kenkyū*. Research report, 2004–2007 JSPS KAKENHI Grant-in-Aid for Scientific Research (B), 61–84.
- Karimata, Shigehisa. 2011. 'Ryūkyū Hōgen no Shōtenka Joshi to Bun no Tsūtatsuteki na Taipu'. *Nihongo no Kenkyū (Studies in the Japanese Language)*, 7(4):69–81.
- Motonaga, Moriyasu. 1973. 'Hirara Hōgen no Dōshi no Katsuyō'. *Ryūkyū Daigaku Kyōiku Gakubu Kiyō (Bulletin of the Faculty of Education, University of the Ryukyus)*, 17(1):27–41.
- Nakama, Mitsunari. 1982. 'Ryūkyū Miyako Hōgen no Dōshi no Setsuzokukei'. *Okinawa Bunka*, 58:48–64.
- Suzuki, Shigeyuki. 1972. *Nihongo Bunpō Keitairon*. Tokyo: Mugi Shobō.
- Takahashi, Toshizo. 1991b. *Omoro Sōshi no Dōshi no Kenkyū*. Tokyo: Musashinoshoin.
- Uemura, Yukio. 1963. 'Shuri Hōgen no Bunpō'. In: National Institute for Japanese Language and Linguistics (ed.), *Okinawago Jiten (Dictionary of Okinawan Language)*. Tokyo: Okurasho Insatsukyoku: 58–86.

4. Features of Miyako Ryūkyūan

Phonetic Realizations in the Miyako Dialects: A Preliminary Investigation

Toshio MATSUURA

1 Introduction

1.1 Research background and goals

In addition to intervocalic geminates such as those in (1a), the Miyako dialects have word-initial geminates such as those in (1b) and word-initial clusters of different consonants such as those in (1c) (in (1), dialects are indicated in parentheses).

- (1) a. [avva] ‘oil’ (Irabu, Kugai), [mizza] ‘garlic chive’ (Kugai)
- b. [ffa] ‘child’ (Kugai), [ssĩ] ‘nest’ (Kugai)
- c. [sta] ‘tongue’ (Irabu), [mta] ‘earth’ (Irabu, Kugai)

Pellard (2007) and Shimoji (2008) argue that geminates such as those in (1b) are segmented into two morae, as in (2a), to avoid violating the bimoraic Minimality Constraint in the Miyako dialect. It seems appropriate to assume that consonant clusters such as those in (1c) are likewise segmented as in (2b) to avoid violating this Minimality Constraint.

- (2) Segmentation avoiding Minimality Constraint violation
- a. [f.fa], [s.sĩ]
- b. [s.ta], [m.ta]

How are these consonants realized acoustically, though?

Firstly, (2) does indeed seem to be an appropriate phonological segmentation for word-initial geminates such as those in (1b). Does this mean, then, that there is a phonetic difference between word-initial geminates and single word-initial consonants? One would expect [ff] in [ffa] to be longer in duration than a single syllable-initial [f] (e.g. [fau]). The phonetic transcription does, of course, represent geminates as pronounced with a longer duration than single consonants, which matches auditory perception, as well. Moreover, it is not unreasonable to assume that the Miyako dialects are similar in this regard to Standard Japanese (the Tokyo dialect), to which they are closely related and for which the proportion of single consonants to geminates has been reported as being

around 1:2–3 (Han 1962, among others)¹. It would seem worthwhile, however, to confirm that this is in fact the case.

Next, word-initial consonant clusters such as [m.ta] do not exist in mainland Japanese, with the exception of words with devoiced vowels, and there are as yet no data on their acoustic-phonetic realization. Among others, Shimoji (2008) argues that the first vowel in such a cluster by itself constitutes one mora. If this is the case, it seems not unlikely that [m] in [m.ta] differs acoustically from a single syllable-initial [m]. According to Sato (1993), syllable-final [n], [m], and so on (moraic nasals) are longer in duration than syllable-initial [n], [m], and so on in Japanese, while almost no such difference is observed in English and Korean, for example. Sato (1993) attributes this difference to differences in rhythmic structure among languages, Japanese having a moraic rhythm, English a stress rhythm, and Korean a syllabic rhythm; applying this to the Miyako dialects would lead us to expect a result similar to that for Japanese, assuming that the Miyako dialects have a moraic rhythm, as well.

Lastly, voiced obstruent geminates such as those in (1a) are observed only in Western loans such as *beddo* ‘bed’ and *kiddzu* ‘kids’ in Standard Japanese². Moreover, as will be shown in Section 2.2, the acoustic-phonetic realization of this type of geminate in Standard Japanese cannot be described as the mere lengthening of a single consonant. Are voiced obstruent geminates realized just as they are in Standard Japanese, then, in the Miyako dialects?

In this chapter, I will investigate these kinds of issues related to temporal control and vocal fold vibration based on recorded materials from the joint survey. Data from the Irabu³ and Kugai dialects are used, although I will also touch upon other dialects where necessary.

1.2 Method of analysis

I will use materials recorded during the joint survey of the National Institute for Japanese Language and Linguistics. I performed a spectrographic analysis on the recorded materials using *Praat* (Boersma & Weenink 2009), labeling segments by visual inspection and measuring segment durations with a self-written script. The identification of segments was largely based on formants, voice bars, noise components, and the like. There were, however, cases where identification was difficult, such as utterance-final vowels. In these cases, I set the dynamic range of the spectrogram

¹ It has been reported, however, that in syllabeme dialects such as those of Akita and Kagoshima, geminates are not as long in proportion to single consonants as in Standard Japanese.

² When we take Japanese dialects into consideration, they are also observed in Chinese loans and native words in the Hachijōjima (Mase 1961) and Antō (Nitta 2011) dialects, as well as in a significant part of the Kyūshū region (the Kagoshima (Kamimura 1957) and Saga (Fujita 2003) dialects as well as that of Kuchinotsu in Nagasaki Prefecture (Minami 1959)), among others.

³ Strictly speaking, it is the dialect of the Irabu district of Irabujima, but I will use the term ‘Irabu dialect’ in this chapter.

to 30 dB and designated those parts in which there was a clear energy component in the 2000–3000 Hz range as vowels.

The details of the speakers of the two dialects are given in (3).

(3) Speaker details

- a. Irabu dialect: male, b. 1924
- b. Kugai dialect: male, b. 1926

When measuring consonant durations, and especially when comparing those of geminates and single consonants, it is desirable to also measure the duration of the vowels following them and the proportion between consonant and vowel durations (the normalized duration), but there were cases in the data where the length of these vowels was difficult to determine accurately because they were utterance-final. For this reason, I will consider only absolute consonant duration in this chapter. In addition, when performing an analysis of this kind, it is desirable to use averages of data consisting of a large number of utterances from multiple speakers, but as I only had data of one speaker per dialect, the analysis is in many cases based on a single recording. In this respect, this chapter constitutes a preliminary investigation; further research is therefore necessary, including in regard to reproducibility.

2 Geminates

In this section, I will examine the durations of different types of geminate in the Miyako dialects, distinguishing between intervocalic and word-initial geminates and further subcategorizing the former into voiceless and voiced intervocalic geminates. Below, I will first analyze the durations of [t] and [tt], as well as of [ts] and [tts]. Next, I will analyze voiced obstruent geminates such as [vv] and [zz], focusing on their durations, noise components, and voice bars. As regards [vv], I will also take dialects other than those of Irabu and Kugai into consideration.

2.1 Voiceless intervocalic geminates

2.1.1 [t] and [tt]

In the Irabu dialect, [bata] ‘belly’ and [batta] ‘armpit’ form a minimal pair for [t] and [tt]. Waveforms and spectrograms of these words are given in Figure 1.

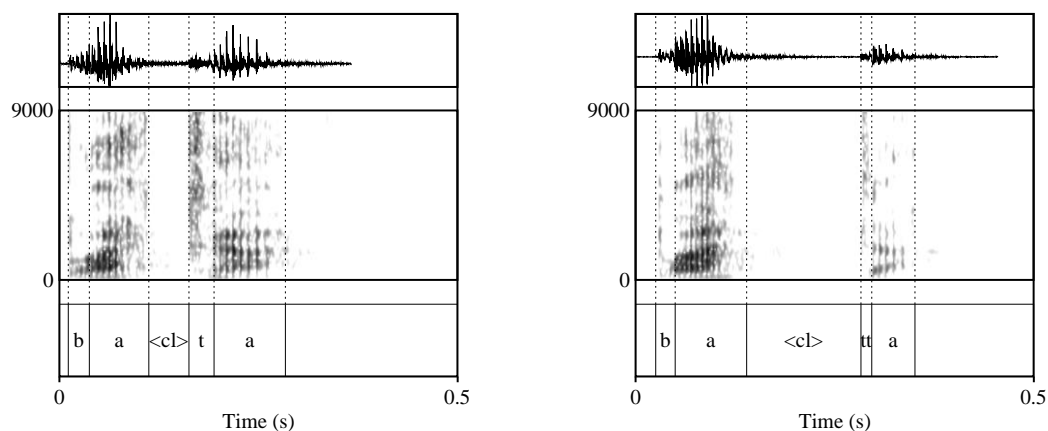


Figure 1. Waveforms and spectrograms of [bata] and [batta] (Irabu).

As is clear from Figure 1, a large difference between [t] and [tt] lies in the durations of the consonant portions. The durations of the closure portions (indicated by <cl> in Figure 1) were 50 ms for [t] and 143 ms for [tt] (a ratio of 1:2.86). Figure 1 also shows a difference in length between the following vowels (89 ms for [bata] and 54 ms for [batta]), but this is not observed in other words. Although they do not form a minimal pair, let us examine the pair of [budzati] ‘uncles’ and [asatti] ‘the day after tomorrow’. Waveforms and spectrograms of these words are given in Figure 2.

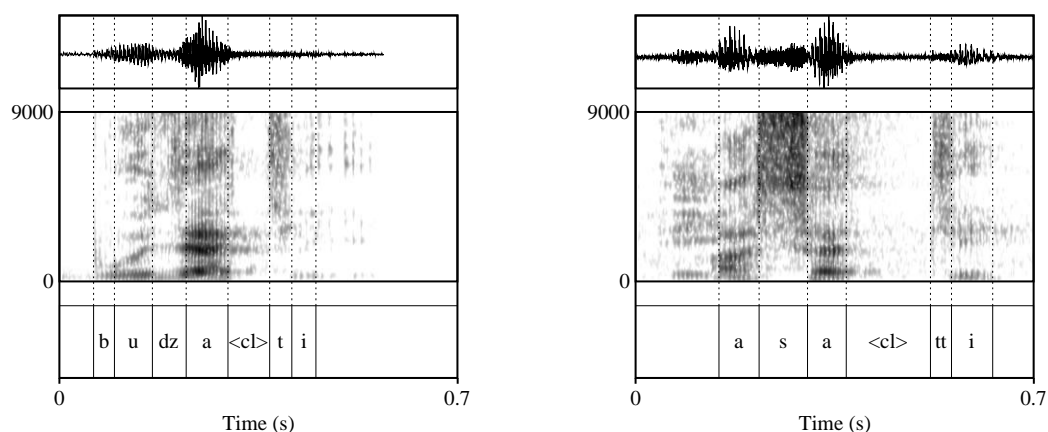


Figure 2. Waveforms and spectrograms of [budzati] and [asatti] (Irabu).

As is clear from Figure 2, the most conspicuous difference between [t] and [tt] is again the difference in duration between their consonant portions, the durations being 73 ms for [t] and 148 ms for [tt] (a ratio of 1:2.02). The duration of the following vowel was 42 ms for [budzati] and 72 ms for [asatti], however, which is the reverse of the pattern we saw for [bata] and [batta]. It therefore seems

best to view the shortening of the vowel following a geminate seen above as exceptional or incidental.

2.1.2 [ts] and [tts]

The Kugai dialect has the pair of [itsa] ‘board’ and [attsa] ‘tomorrow’. Waveforms and spectrograms of these words are given in Figure 3.

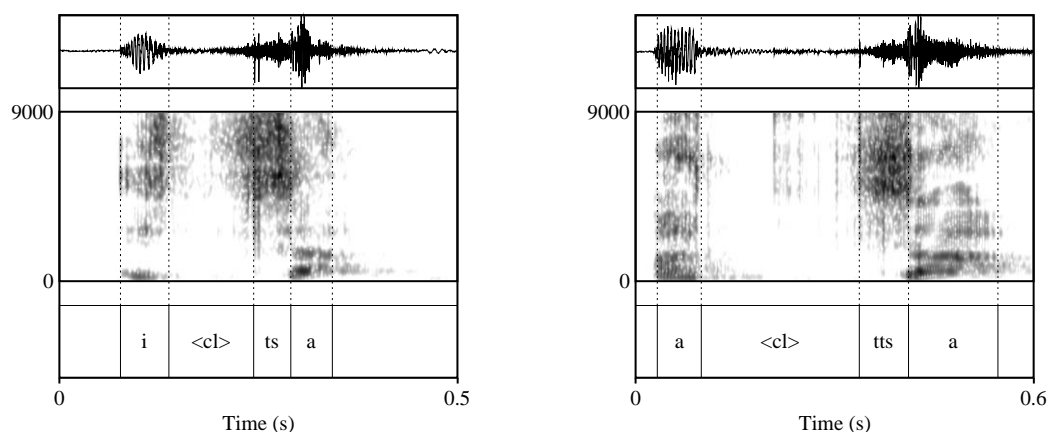


Figure 3. Waveforms and spectrograms of [itsa] and [attsa] (Kugai).

As is clear from Figure 3, the most conspicuous difference between [ts] and [tts] is the difference between their closure durations. The duration of the closure portion was 96 ms (SD = 9; n = 2) for [ts], while it was 238 ms for [tts] (a ratio of 1:2.47).

2.2 Voiced intervocalic geminates

In the Miyako dialects, voiced obstruent geminates such as [zz] and [vv] are also observed in what seem to be native words. In Western loans, they are observed in mainland Japanese, as well. Because they have the two properties in (4), however, the voiced obstruent geminates of mainland Japanese cannot strictly be described as the mere lengthening of a single consonant.

- (4) a. There are no voiced fricative geminates. Even if a sound is realized as a fricative when used as a single consonant, it becomes an affricate ([dz]) or a plosive ([b, g]) when used as a geminate.
- b. Vocal fold vibration is observed in the first half of the closure portion only.

Firstly, as regards (4a), while e.g. /z/ is often realized as a fricative when it appears as a single consonant in the Tokyo dialect of Japanese, such as in *kizu* ‘wound’⁴, it is realized as an affricate with a long closure in the case of a geminate, such as in *kiddzu* ‘kids’. Waveforms and spectrograms of these words are given in Figure 4 (the recordings are of a male speaker of the Tokyo dialect in his thirties).

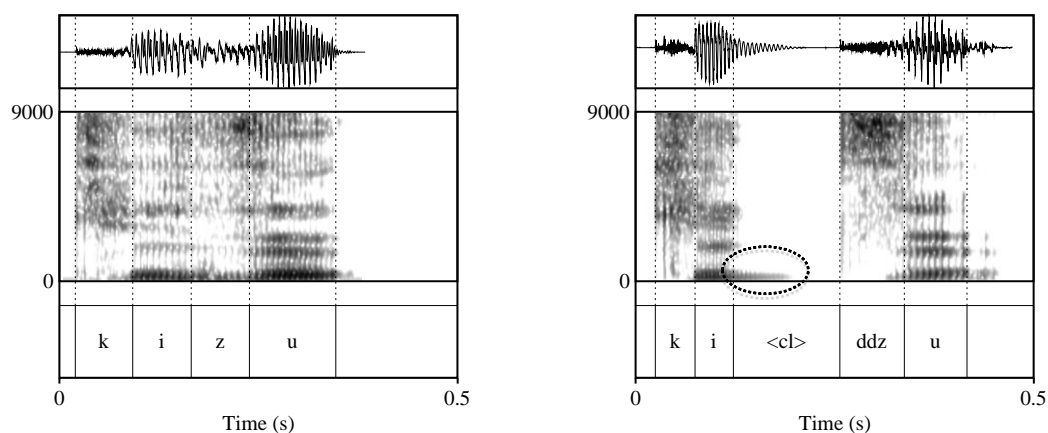


Figure 4. Waveforms and spectrograms of *kizu* ‘wound’ (left) and *kiddzu* ‘kids’ (right).

Next, as regards (4b), vocal fold vibration is often observed not over the whole consonant portion of voiced obstruent geminates in the Tokyo dialect, but only in the first half (Kawahara 2006, among others). In the right-hand part of Figure 4, too, a voice bar (energy in the low frequency region, circled) can be seen in the first half of the closure portion only.

In addition to their durations, I will examine below whether the properties in (4) can also be observed in [zz] and [vv].

2.2.1 [z] and [zz]

The Kugai dialect has an example which which intervocalic [z] and [zz] contrast such as [a:za] ‘father’ and [mizza] ‘garlic chive’. Waveforms and spectrograms of these words are given in Figure 5.

⁴ While this description cannot strictly be said to be accurate, I have described it in this way in the interest of clarity. The reader is referred to Maekawa 2010a and 2010b for details on the phonetic realization of voiced obstruents in mainland Japanese.

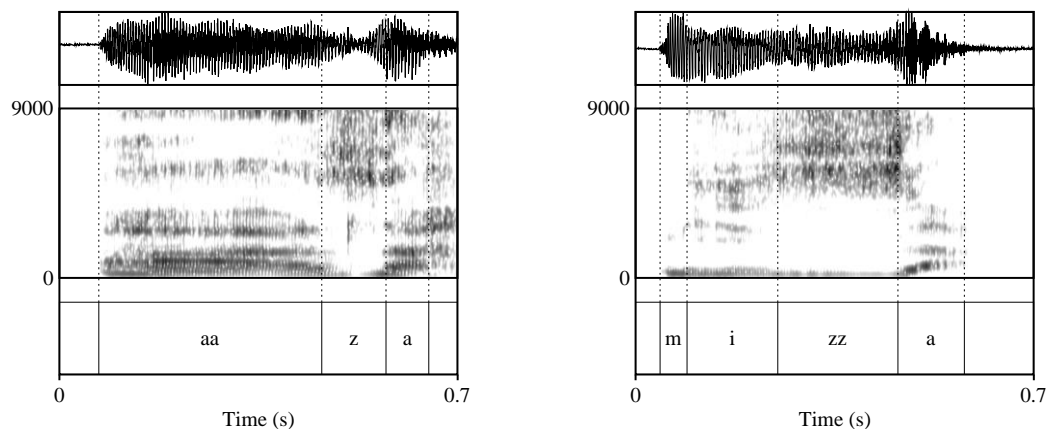


Figure 5. Waveforms and spectrograms of [a:za] and [mizza] (Kugai).

As is clear from Figure 5, the most conspicuous difference between [z] and [zz] is the difference in duration between their consonant portions. This duration was 74 ms for [z], while it was 173 ms (SD = 29; n = 3) for [zz], which gives us a ratio of 1:2.33.

Next, let us consider the noise components and voice bars. High-frequency noise components can be seen even in [zz], indicating that friction continued throughout the geminate. In addition, a voice bar is observed throughout the geminate, indicating that the vocal folds vibrated throughout its pronunciation, unlike how they vibrate only during the first half of the geminate in mainland Japanese.

2.2.2 [vv]

The Miyako dialects have the sound [vv], which does not appear in Standard Japanese. Examples of words in which it appears are [avva] ‘oil’ and [kuvva] ‘calf (of the leg)’. In the following discussion, I will consider not only the Irabu and Kugai dialects, but also those of Ikema and Bora. I will not examine duration in this section, as there are no instances of [v] contrasting with [vv] in the survey data.

Firstly, waveforms and spectrograms of [avva] and [kuvva] in the Irabu dialect are given in Figure 6.

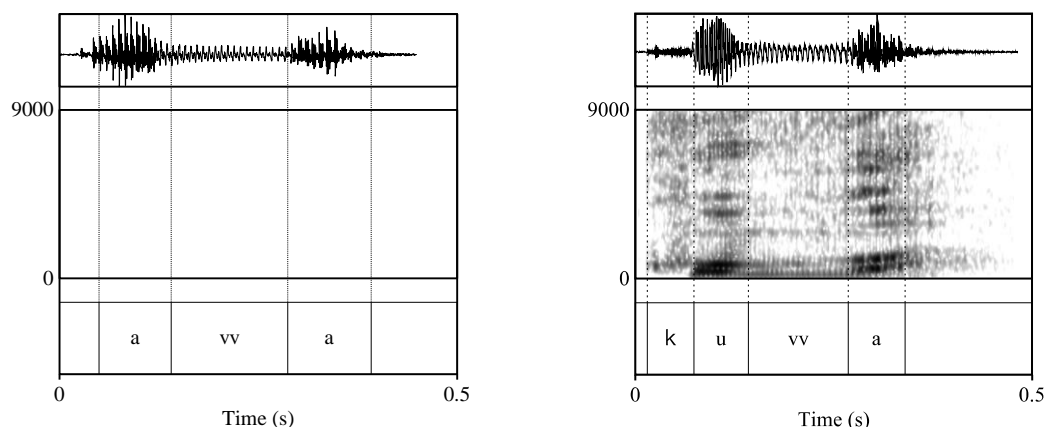


Figure 6. Waveforms and spectrograms of [avva] (left) and [kuvva] (right) in the Irabu dialect.

When looking at the friction noise components in Figure 6, they appear weak in [avva], while they appear stronger in [kuvva], indicating that friction continued. In addition, voice bars are observed throughout the consonant portion in both words, indicating that the vocal folds vibrated throughout its pronunciation.

Waveforms and spectrograms of [avva] and [kuvva] in the Kugai dialect are given in Figure 7.

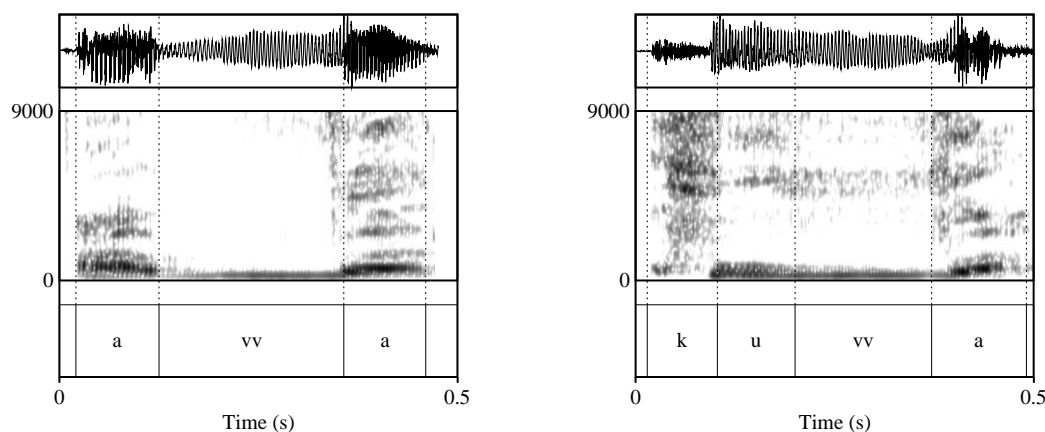


Figure 7. Waveforms and spectrograms of [avva] and [kuvva] in the Kugai dialect.

When looking at the friction noise components in Figure 7, they appear weak in [avva], while they appear stronger in [kuvva], indicating that friction continued. In addition, voice bars are observed throughout the consonant portion in both words, indicating that the vocal folds vibrated throughout its pronunciation.

Waveforms and spectrograms of [avva] and [kuvva] in the Ikema dialect are given in Figure 8.

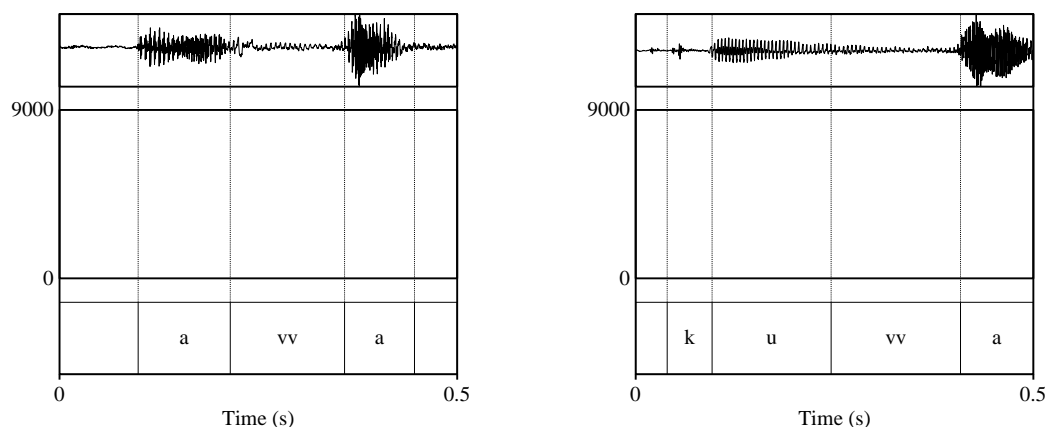


Figure 8. Waveforms and spectrograms of [avva] and [kuvva] in the Ikema dialect.

When looking at the friction noise components in Figure 8, they appear quite weak in both [avva] and [kuvva]. Voice bars, on the other hand, are observed throughout the consonant portion in both words.

Waveforms and spectrograms of [avva] and [kuvva] in the Bora dialect are given in Figure 9.

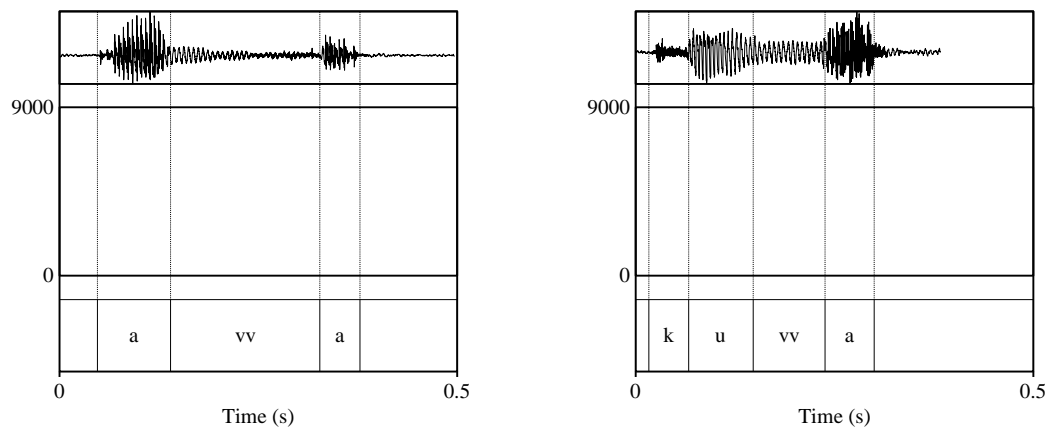


Figure 9. Waveforms and spectrograms of [avva] and [kuvva] in the Bora dialect.

When looking at the friction noise components in Figure 9, they appear strong in both words. As regards voice bars, on the other hand, one is observed throughout the consonant portion in [kuvva], while the one in [avva] weakens in the second half. This can be observed more distinctly in utterances of the word [avvamtsu] ‘grease miso’. There are three instances of [avvamtsu] in the data; the waveforms and spectrograms of all of them are given in Figure 10.

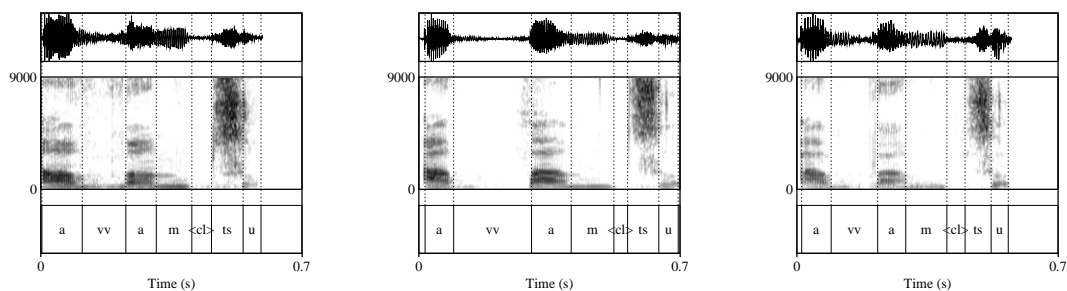


Figure 10. Waveforms and spectrograms of [avvamtsu] in the Bora dialect
(left: first recording; middle: second recording; right: third recording).

Firstly, when looking at the friction noise components, the friction appears quite weak in all three instances. Next, when looking at the voice bars, one is observed throughout the consonant portion of the first instance, but the ones in the second and third instances disappear in the second half. In auditory perception, too, the geminate in the second instance sounds like [vf]. The duration of the first instance was 116 ms, that of the second one 208 ms, and that of the third one 124 ms, so the second instance also has a longer duration; the disappearance of the voice bar could be connected to this. Further research is needed, however, to determine whether this is an idiosyncrasy of the speaker or a regional characteristic.

The above observations are summarized in (5).

- (5) a. The friction is continuous in all of the dialects; fricatives do not become affricates or plosives.
- b. In the Irabu, Kugai, and Ikema dialects, the vocal folds vibrate throughout the consonant portion.
- c. In the Bora dialect, vocal fold vibration sometimes disappears in the second half of the consonant portion.

Noise components are thus more or less consistently observed, while vocal fold vibration (voice bars) sometimes disappears in the second half of the consonant portion in the Bora dialect.

2.3 Word-initial geminates

In the Miyako dialects, there are words with word-initial geminates, such as [ffa] and [vva]. To what degree does the length of these geminates differ from that of single consonants? This question would also seem central to considering the isochrony of syllables or morae; that is, rhythm. Below, I will discuss [nn], [ff], [ss], and [vv].

2.3.1 [n] and [nn]

[nada] ‘tear’ and [nnami] ‘now’ are an example of [n] and [nn] contrasting word-initially in the Irabu dialect. Waveforms and spectrograms are given in Figure 11.

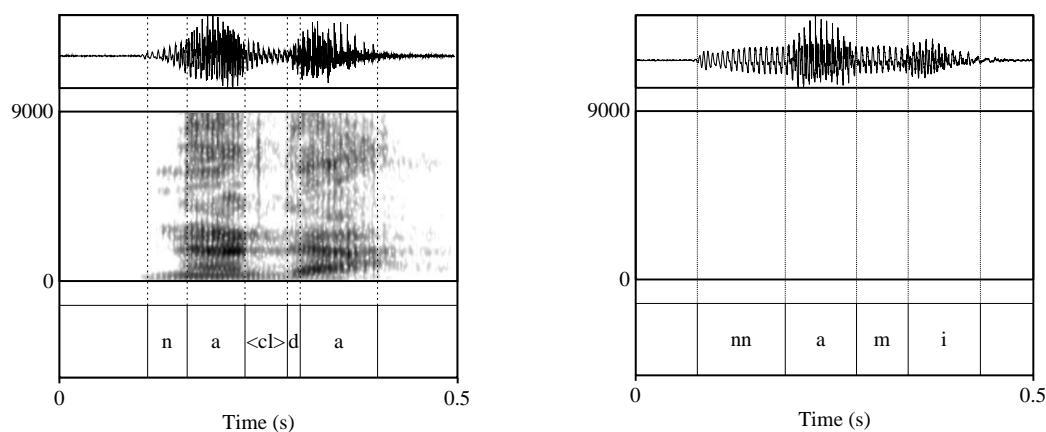


Figure 11. Waveforms and spectrograms of [nada] and [nnami] (Irabu).

As is clear from Figure 11, [nn] was realized with a longer duration than that of [n]. The duration of [n] was 49 ms, while that of [nn] was 110 ms (a ratio of 1:2.24).

2.3.2 [f] and [ff]

[funi] ‘ship’ and [ffa] ‘child’ are an example of [f] and [ff] contrasting word-initially. Waveforms and spectrograms are given in Figure 12.

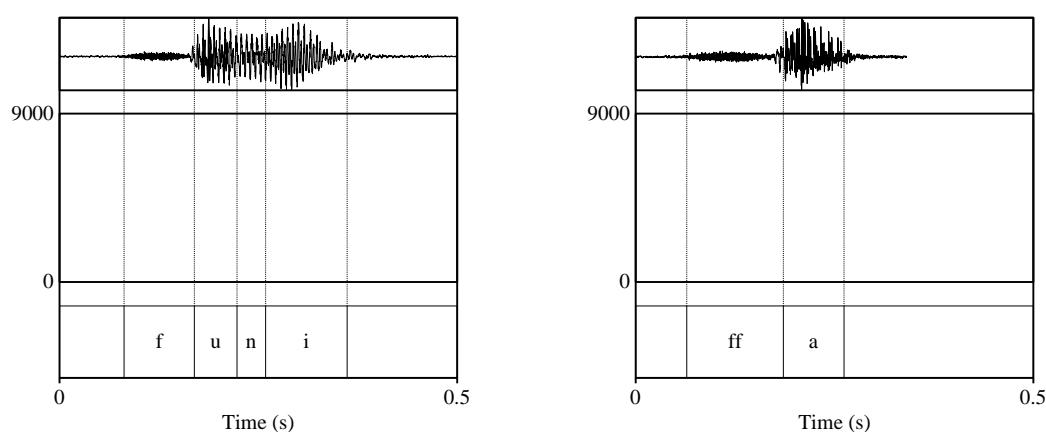


Figure 12. Waveforms and spectrograms of [funi] and [ffa] (Irabu).

As is clear from Figure 12, [ff] was realized with a longer duration than that of [f]. The duration of [f] was 92 ms (SD = 4.5; n = 2; Irabu) or 108 ms (Kugai), while that of [ff] was 135 ms (Irabu) or

143 ms (Kugai), giving us a ratio of 1:1.45 (Irabu) or 1:1.32 (Kugai) between single consonants and geminates. It is worth remarking that this difference in duration is smaller than that between [n] and [nn] and that between single intervocalic consonants and intervocalic geminates.

2.3.3 [s] and [ss]

[sĩba] ‘lip’ and [ssĩ] ‘nest’ are an example of [s] and [ss] contrasting word-initially in the Kugai dialect. Waveforms and spectrograms are given in Figure 13.

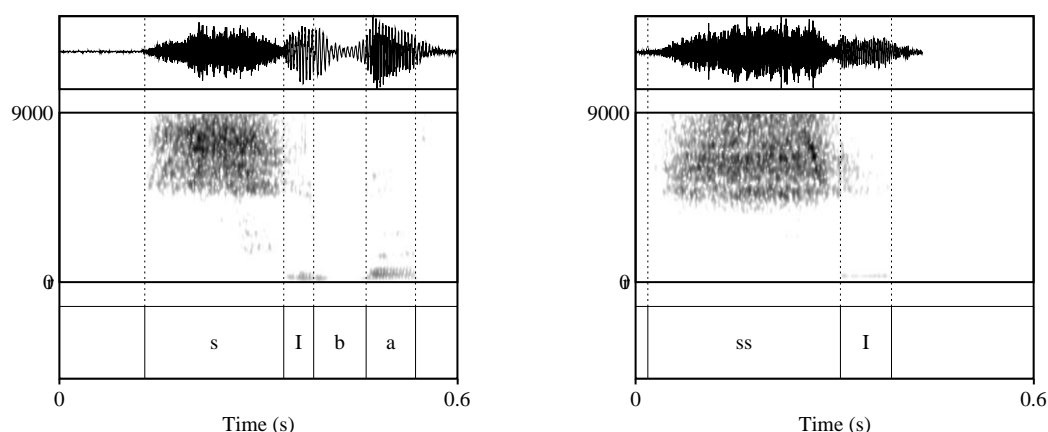


Figure 13. Waveforms and spectrograms of [sĩba] and [ssĩ] (Kugai).

As is clear from Figure 13, [ss] was realized with a longer duration than that of [s]. The duration of [s] was 190.3 ms (SD = 16.93; n = 3), while that of [ss] was 289 ms (a ratio of 1:1.51).

2.3.4 [v] and [vv]

The Kugai dialect has a pair of examples which contrasts [v] and [vv] such as [vaa] ‘pig’ and [vva] ‘you’. Waveforms and spectrograms are given in Figure 14.

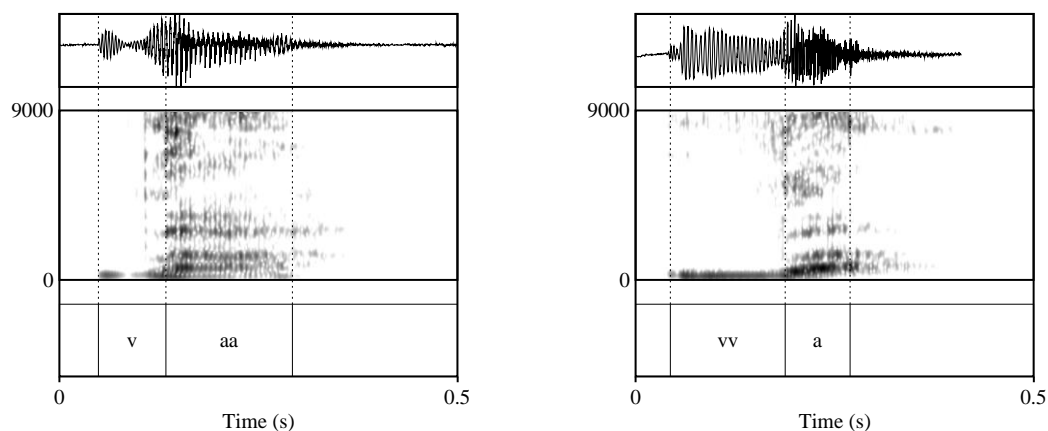


Figure 14. Waveforms and spectrograms of [vaa] and [vva] (Kugai).

As is clear from Figure 14, [vv] was realized with a longer duration than that of [v]. The duration of [v] was 84 ms (SD = 0.00; n = 2), while that of [vv] was 143 ms (a ratio of 1:1.70).

To summarize the above, each of the geminates was realized with a longer duration than the corresponding single consonant, but while the ratio was 1:2.24 for [n] and [nn], the difference in duration was smaller for [ff], [ss], and [vv], with ratios between 1:1.3 and 1:1.7. When the difference in duration between a single consonant and a geminate is small, other aspects, such as the length of the following vowel, may need to be adjusted to avoid perceptual confusion. Further research is needed to determine whether such adjustments in fact occur.

3 Consonant clusters

In the Miyako dialects, there are words with initial consonant clusters, such as [mta]. Which syllable position does [m] occupy in this word? Is it an onset like [t], a coda, or a nucleus? In order to determine this, it is necessary to consider (morpho-)phonological alternations. It seems not unlikely, however, that there are also acoustic-phonetic cues. In this section, I will consider this question by comparing occurrences of [m] in consonant clusters with occurrences as a single onset or coda consonant.

Examples from the survey data of words in which an initial [m] is followed by another consonant are given in (6).

(6) Word-initial [m]+consonant clusters (Irabu)

- a. Words in which [m] is followed by a voiceless obstruent⁵:

mkiiN, mta, msu

- b. Words in which [m] is followed by [n]:

mmna, mmni, mnii, mni, mnapskaĩ

In words in which [m] is followed by [n], likewise a nasal, double articulation sometimes occurs, making measurement of the duration of [m] difficult. For this reason, I will limit analysis and discussion to words in which [m] is followed by a voiceless obstruent in this section.

Waveforms and spectrograms of [maʋkja:] ‘front’ and [mta] ‘earth’ in the Irabu dialect are given in Figure 15.

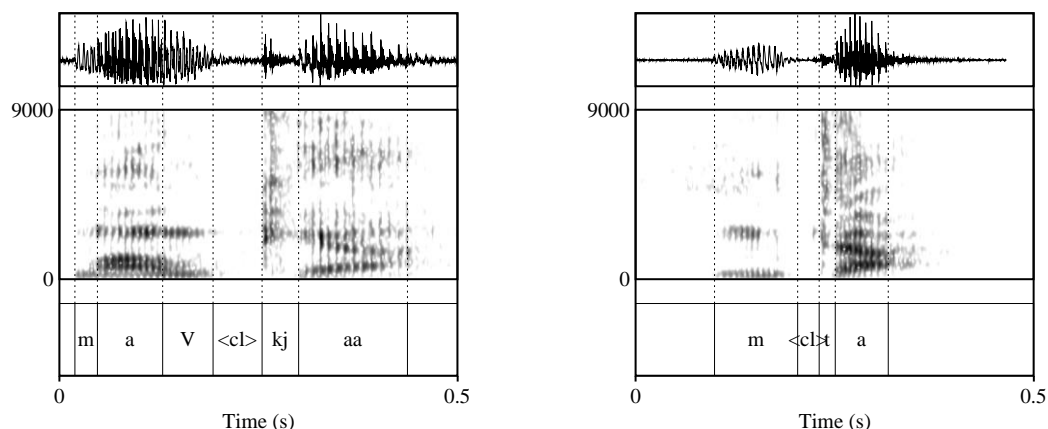


Figure 15. Waveforms and spectrograms of [maʋkja:] and [mta] (Irabu).

As is clear from Figure 15, [m] was realized with a longer duration in a consonant cluster than it was as a single consonant. In order to confirm whether this is a systematic difference, let us compare the words containing an [m] that are present in the data of which I have labeled the segments, classified according to its position within the syllable. The words to be considered are given in (7).

(7) Words from the survey data

- a. Consonant cluster: [msu], [mta], [mkiiN]
- b. Syllable onset: [amambuni], [maxaĩ], [umatsĩ], [nnami], [nufumunu], [ɕɕanamunu], [mizza], [midzi], [maʋkja:]
- c. Syllable coda: [amambuni], [avvamtsu], [umku]

⁵ [mmtsI] is an example of a word in which [m] is used as a geminate and is moreover followed by [ts], but it will not be considered here.

The durations of [m] in these words are given in (8)⁶.

(8) Durations of [m]

Position	Mean (SD)	Max. value	Min. value	Sample size
Consonant cluster	77.8 (4.3)	100.3	73.5	3
Syllable onset	51.4 (15.9)	81.6	28.2	12
Syllable coda	86.7 (18.7)	114.4	57.7	6

According to this table, the duration increases in the order onset < consonant cluster < coda. When comparing the differences, that between consonant clusters and codas is smaller at 8.9 ms than that between consonant clusters and onsets, which is 26.4 ms. As the sample is small and the standard deviations are large, definitive conclusions cannot be drawn, but at this stage, the data suggest that interpreting [m] in consonant clusters as belonging to a different syllable from the following consonant is appropriate.

4 Conclusion

In this chapter, I have examined temporal control in the Miyako dialects. As a result, it has become clear that geminates are longer in duration than single consonants. The duration ratios between geminates and single consonants are summarized in (9).

⁶ There was one instance of [mizza] with a duration of 177 ms, but as this exceeds the mean + 2SD, I have excluded it from consideration.

(9) Duration ratios between single consonants and geminates

a. Intervocalic

Consonants	Ratio
[t] and [tt]	1:2.02–2.86 (Irabu)
[ts] and [tts]	1.2.47 (Kugai)
[z] and [zz]	1.2.33 (Kugai)

b. Word-initial

Consonants	Ratio
[n] and [nn]	1.2.24 (Irabu)
[f] and [ff]	1.1.45 (Irabu) 1.1.32 (Kugai)
[s] and [ss]	1.1.51 (Kugai)
[v] and [vv]	1:1.70 (Kugai)

It can be gleaned from these results that there is a tendency for the difference in duration between single consonants and geminates to be smaller word-initially than intervocalically. Further research is needed to determine how stable this difference is.

Moreover, it has become clear that differently from Standard Japanese, friction continues and vocal fold vibration is maintained throughout intervocalic voiced obstruent geminates such as [zz] and [vv].

Further, consonants were realized with a longer duration in consonant clusters than as single consonants. The duration ratio is given in (10).

(10) Duration ratio between single consonants and consonants in consonant clusters

Consonant	Ratio
[m]	1:1.42 (Irabu)

Further research based on a larger data set is required to confirm these results, especially considering the fact that as noted in Section 1, the recorded data used in the present analysis consist almost entirely of single utterances, which are furthermore utterances of words in isolation rather than embedded in sentences. Consequently, improvements on these fronts are required in order to further elucidate the details of not only duration, but also articulatory dynamics. In addition, while I have focused on analyzing durations at the segmental level in this chapter, it is necessary to

investigate whether the rhythmic unit in the Miyako dialects is the mora by examining, for example, durations at the word level.

Acknowledgements

I would like to take this opportunity to thank Michinori Shimoji for the valuable advice he gave me during the writing of this chapter. I was not able to incorporate all of his advice; it goes without saying that I am responsible for any errors and misunderstandings. This research constitutes part of the results of the research project *An Empirical Study on Adaption of Standard Japanese Sound in Two-Pattern Dialects of Kyushu Japanese*, JSPS KAKENHI Grant-in-Aid for Young Scientists (B) Grant Number JP22720164.

Bibliography

- Aoi, Hayato. 2012. 'Minami-Ryūkyū Miyako Hōgen no On'in Kōzō'. In: Makoto Minegishi, Osamu Hieda, Emiko Hayatsu, Yuji Kawaguchi (eds.), *Kōpasu ni Motozuku Gengogaku Kyōiku Kenkyū Hōkoku*, 8:99–113.
- Boersma, Paul & David Weenink. 2009. *Praat: Doing Phonetics by Computer*, version 5.1.11. Computer program (<http://www.praat.org/>).
- Fujita, Masayoshi. 2003. *Saga-Ken no Kotoba*. Meiji Shoin.
- Kamimura, Takaji. 1957. 'Minami-Kyūshū Hōgen'on no Bunpu o Chūshin ni: Naihaon-/Bionka Sono Ta'. *Bunken Hōkoku*, 6.
- Han, Mieko S. 1962. 'The Feature of Duration in Japanese'. *The Study of Sounds*, 10:65–79.
- Kawahara, Shigeto. 2012 (forthcoming). 'The Phonetics of Obstruent Geminates, *Sokuon*'. Draft to appear in *The Mouton Handbook of Japanese Language and Linguistics*.
- Kubozono, Haruo & Francis Michinao Matsui. 2003. 'Phonetic vs. Phonological Control of Speech: Closed Syllable Vowel Shortening in Japanese Dialects'. In: *Proceedings of the 15th International Conference on Phonetic Sciences*, Barcelona.
- Maekawa, Kikuo. 1984. 'Akita Hōgen Sokuon no Jizoku Jikan: "Sunzumari" no Jittai to Seiin'. *Hōgen Kenkyū Nenpō (Annual Report of Dialectology)*, 27:231–247. Hiroshima Hōgen Kenkyūsho.
- Maekawa, Kikuo. 2010a. 'Coarticulatory Reinterpretation of Allophonic Variation: Corpus-Based Analysis of /z/ in Spontaneous Japanese'. *Journal of Phonetics*, 38(3):360–374.
- Maekawa, Kikuo. 2010b. 'Nihongo Yūsei Haretsuon ni Okeru Heisa Chōon no Jakka'. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 14(2):1–15.
- Mase, Yoshio. 1961. 'Hachijōjima Hōgen no On'in Bunseki'. *Kokugogaku (Studies in the Japanese Language)*, 43.

- Minami, Fujio. 1959. 'Nagasaki-Ken Kuchinotsu Hōgen no On'in Taikai'. *Kokugogaku (Studies in the Japanese Language)*, 36.
- Nitta, Tetsuo. 2011. 'Fukui-Ken Mikuni-Chō Antō Hōgen ni Okeru Maffa "Makura" Tō no Jūshiin ni Tsuite'. *Onsei Kenkyū (Journal of the Phonetic Society of Japan)*, 15(1):6–15.
- Pellard, Thomas. 2007. 'Miyako Shohōgen no On'in no Mondaiten'. Unpublished presentation materials for *The Second Research Workshop on Ryukyuan*, held at Kyoto University on September 9, 2007.
- Sato, Yumiko. 1993. 'The Durations of Syllable-Final Nasals and the Mora Hypothesis in Japanese'. *Phonetica*, 50:44–67.
- Shimoji, Michinori. 2008. *A Grammar of Irabu, a Southern Ryukyuan Language*. Doctoral dissertation, Australian National University.

The State of Dialect Speech Perception in the Younger Generation of the Miyako Islands

Yumi NAKAJIMA, Akiko TOKUNAGA & Daigo MOROOKA

1. Introduction

As of this writing, there have been many reports and analyses regarding a number of unusual speech sounds that are heard often on the Miyako Islands. Among them, a vowel, corresponding to **i* in the mainland dialects, that is accompanied by a distinct friction noise due to the tip of the tongue approaching the alveolar ridge has especially garnered attention. The questions of how to define this vowel phonetically and how to describe it phonologically have also been raised, and attempts have been made at analyzing it using experimental phonetics. Through the use of a standardized survey sheet, the joint survey conducted as part of the present project (henceforth: ‘the joint survey’) has provided us with new, somewhat comprehensive phonetic data, which has made it easier to perform an analysis that takes all aspects of the Miyako dialects into account, and it is against the background sketched above that we decided to utilize this data in a survey on the linguistic behavior of the younger generation that we had been conducting. Although it is still just an experimental attempt at this stage, and the methodology and the like must be tested, we hope that it will be of use in grasping the state of dialect speech perception in the younger generation in the interest of the preservation and passing on of these endangered dialects.

Yumi Nakajima and her students at the Faculty of Social Sciences of Hitotsubashi University have been conducting a continuous survey on the state of everyday language use on Miyakojima and Irabujima since 2008. Although, for purposes of comparison, it is also partly a survey of the older generation, it mostly focuses on the younger generation, high school students in particular. We have been trying different ways of combining questionnaires and interviews, but while we have always been interested in how the younger generation perceives those phonetic characteristics that are different not only from those of mainland Japanese, but also from those of Okinawa Island, we had not been able to settle on a methodology for investigating this.

With the above in mind, we decided to seek a way forward by including speech recognition items in a small questionnaire conducted in November 2011, which formed the beginning of an experimental attempt at using the data obtained in the joint survey. Based on the results of that questionnaire, we conducted a somewhat larger-scale survey specifically tailored to speech recognition in March 2012. In this chapter, we will report on the results obtained thus far, on the basis of which we plan to determine the direction in which to proceed with this research.

2. Survey overview

- A. Survey 1 on the state of Miyakojima dialect speech recognition in the younger generation
- B. Survey 2 on the state of Miyakojima dialect speech recognition in the younger generation

2.1 Survey 1 and Survey 2

Survey 1 was conducted in November 2011 with the cooperation of two of the prefectural high schools in Miyakojima City, as part of a survey on the state of everyday language use by high school students. The survey combined a questionnaire with interviews; for the questionnaire, five items that included unusual speech sounds were selected from among the phonetic data collected in the joint survey and played back for the high school students, who were asked, (1) ‘What does it sound like?’ (Japanese kana were specified as the means to write down the answer, the choice between katakana and hiragana being up to the student), and (2) ‘Do you know what it means?’ Additionally, for purposes of comparison, a questionnaire on the same items was conducted in March 2012 with the cooperation of a high school in central Okinawa Island. The two high schools in Miyakojima City will be referred to as ‘high school A’ and ‘high school B’, while the third high school, located in Urasoe City, will be referred to as ‘high school C’¹. Combined, 130 students at these schools participated in the survey, 79 male and 51 female.

Survey 2 was conducted in March 2012, again at the high schools in Miyakojima City. A somewhat larger-scale survey specifically tailored to speech recognition based on the results of Survey 1, it contained fifty items, again selected from among the data collected in the joint survey. As the task of transcribing fifty items is quite a lot more demanding of the students than an ordinary questionnaire, we asked the schools to enlist volunteers; we were able to secure the cooperation of seventeen students, two male and fifteen female. We will give an overview of the above two surveys in the following section.

2.2 On the survey contents

The items used for Survey 1 were the four words and one sentence given in Table 1. They were selected

Table 1. Survey 1 speech recognition items

	Item	Recording site
1	'head'	Irabu
2	'liver'	Kugai
3	'earthworm'	Bora
4	'rice ball'	Irabu
5	'A child is born.'	Yonaha

because they contain unusual speech sounds that deviate markedly from the sounds of Standard Japanese; that is, (1) a central vowel that is accompanied by friction noise, (2) a group of consonants ([m], [l], and the like; henceforth referred to simply as ‘syllabic m’, ‘syllabic l’, and so on), and (3) another group of unusual consonants ([f], [v], and the like). Recordings of a high quality with a clear pronunciation were

¹ The three schools that cooperated with these surveys were Okinawa Prefectural Miyako High School and Okinawa Prefectural Irabu High School in Miyakojima City and Okinawa Prefectural Urasoe Industrial High School in Urasoe City. We would like to take this opportunity to thank these three schools for their cooperation. Survey 1 was jointly conducted by fourteen undergraduate and one graduate student studying under Yumi Nakajima at the Faculty of Social Sciences of Hitotsubashi University as well as three undergraduate students at Shigakukan University in Kagoshima. Survey 2 was jointly conducted by Yumi Nakajima and two of her graduate students, the coauthors of this chapter.

Table 2. Survey 2 word items.							
Sites	Miyakojima			Kurima-jima	Irabujima		No. of sites
	Kugai	Bora	Miyaguni	Kurima	Irabu	Kuninaka	
'head'	○	—	—	—	○	○	3
'liver'	○	—	—	—	○	○	3
'sugar cane'	○	○	—	—	○	—	3
'breath'	○	—	—	○	—	—	2
'lightning'	○	○	—	—	—	—	2
'you'	○	—	—	—	—	○	2
'sickle'	○	—	—	—	○	—	2
'fog'	○	○	—	—	—	—	2
'fist'	—	○	—	—	○	—	2
'fish'	○	—	—	—	○	—	2
'person'	○	—	—	—	○	—	2
'everyone'	○	—	—	—	○	—	2
'niece'	—	○	—	—	—	○	2
'grease miso'	—	○	—	—	—	—	1
'ant'	—	—	—	—	—	○	1
'sea'	—	○	—	—	—	—	1
'mirror'	—	—	—	—	○	—	1
'mouth'	—	—	—	—	—	○	1
'night-scented lily'	—	○	—	—	—	—	1
'child'	○	—	—	—	—	—	1
'anyone'	—	—	○	—	—	—	1
'the moon'	○	—	—	—	—	—	1
'the east'	○	—	—	—	—	—	1
'daytime'	○	—	—	—	—	—	1
'all together'	—	—	○	—	—	—	1
'elderly person'	○	—	—	—	—	—	1
No. of word items	16	8	2	1	9	6	42

Table 3. Survey 2 sentence items.		
	Item	Recording
1	'A child is born.'	Irabu
2	'I went to the sea.'	Kurima
3	'Cockroaches don't die easily.'	Bora
4	'High school students wear uniforms.'	Bora
5	'Yesterday, the principal sat.'	Bora
6	'I just drank tea.'	Uruka
7	'Yesterday, I played with my cousin.'	Uruka
8	'I went to the sea yesterday, too.'	Bora

selected from among the data collected in the vocabulary modules of the joint survey. The single sentence was also obtained in the vocabulary module of the joint survey, as an example sentence. At this stage, we did not give particular consideration to regional differences in speech sounds.

In Survey 2, the number of items was increased to fifty. The selection criteria were generally the same as those used in Survey 1, but in cases where regional differences had been identified in the joint survey, we strove to select a sample for each feature when the quality of the recordings permitted this. For example, even among just the survey sites of the joint survey, what appear to be three variants of the sound corresponding to *-ri in the mainland dialects were identified: that

of southwestern Miyakojima, including Kugai, which is accompanied by a distinct friction noise; that of Karimata, Ikema, and the like, which is more vowel-like; and that of Irabujima, Kuninaka, and the like, which sounds like a syllabic l. In order to determine how high school students perceived these regional differences, we selected recordings from the three recording sites of Kugai, Kuninaka, and

Irabu for the item 'head', which contains the sound corresponding to *-ri. For each survey site, however, there were either no recordings of certain items or only recordings that were unusable due to their quality, so it was not possible to make an exhaustive selection of recordings. Including words added in order to examine other seemingly unusual speech sounds and semantic comprehension, 42 word items were selected and arranged to avoid consecutive words that either have the same meaning or were recorded at the same site. Furthermore, eight short sentences from the grammar module of the joint survey were added. This was done in order to find out how dialect perception differs between words and sentences, but the phonetic criteria given above for the word items were also taken into account in their selection.

In the survey, each of the recordings was played back three times in direct succession for the high school

students, who were asked to transcribe them. As in Survey 1, the answers were to be written down using kana, the choice between katakana and hiragana being up to the student. All the different word items and the sites whose recordings were selected for them are given in Table 2 on the previous page, while the sentence items and their recording sites are given in Table 3. Additionally, distribution maps indicating the regional differences are given in Figures 1–8.

2.3 On the treatment of the different phonetic characteristics

We focused on regional variants in Survey 2 because we thought that their differences might be reflected to a significant degree in the high school students' perception. We hoped that we would be able to attain a more concrete understanding of speech perception in the younger generation if we compared how they would process each variant—how they would react to different sounds appearing in similar words. Our classification of these variants was geared towards this purpose; it was not based on a comprehensive understanding of geographic distributions among the different areas of Miyakojima. The joint survey was not originally aimed at investigating distributions, nor have the documentation formats of the different researchers been standardized. We therefore decided to classify the variants on the basis of the sound recordings, using the documentation by the researchers as a reference. There were cases where the recording quality and the like made classification difficult; we made the final judgments ourselves ².

2.4 Regarding the survey participants

Survey 1

The numbers of students participating in the survey at each of the three schools, broken down by sex, are given in Table 4 on the next page. There were first-year as well as second-year students among them, but as there were no noticeable differences between them in the survey results, grades have not been indicated. While there was no large difference in number between male and female participants at high school A, there were relatively fewer female participants at high schools B and C. A breakdown of the birthplaces and places of residence of the students at the two schools in Miyakojima City (School A, B) is given in Tables 5 and 6 on the next page. Although there were four students born outside Okinawa Prefecture at high school A and five at high school B, for a total of nine, their survey results have not been excluded from the data. The birthplaces and places of residence of the students at high school C are given separately in Tables 7 and 8.

Survey 2

As was mentioned above, this survey was conducted with the cooperation of a total of seventeen high school students; three first-year students and fourteen second-year students, or fifteen female and two male students. Fourteen of the students were born on Miyakojima (none on Irabujima) and three outside Okinawa Prefecture (Kagoshima, Aichi,

² There were also cases where the informant would pronounce a word with a strong friction sound at first, but then pronounce it slowly with a vowel instead upon the researcher asking them to repeat it. While it is an interesting question what this reveals about the informant's internal phonology, we have used both forms in these cases. Although vowels were realized in various ways, as well, such as more to the front or more to the back, we did not distinguish between these different pronunciations.

and Tokyo). They all currently live on Miyakojima, twelve of them in the Hirara area (including Shimozato, Nishizato, and Higashi-Nakasone, among others), two in Kugai, one in Uruka, and one in Gusukube; the exact place of residence of one of the students is unclear. Among the students who had experience living outside the island, twelve had lived on Miyakojima for sixteen years or more, but among the remaining five, two students had not lived there for more than five years. Because the whole classes who are the objects of our regular surveys do not exclusively consist of students who were born and raised in the areas in question, either, we have chosen not to differentiate between these groups of participants. As regards their parents, both of them are from Miyakojima in the case of eleven students, one of them in the case of four students, and neither in the case of two students.

Table 4. Number of participating high school students by sex				
High school	A	B	C	Total
Male	20	21	38	79
Female	27	9	15	51
Total	47	30	53	130

Table 5. Birthplace (high school A & high school B).			
High school	A	B	Total
Within the Miyako Islands	41	23	64
Within Okinawa Prefecture	2	2	4
Outside Okinawa Prefecture	4	5	9
Total	47	30	77

Table 6. Place of residence (high school A & high school B).			
Highschool	A	B	Total
Hirara	36	1	37
Gusukube	4	0	4
Ueno	3	0	3
Shimoji	2	0	2
Sarahama	0	13	13
Irabu	0	10	10
Unknown	2	6	8
Total	47	30	77

Table 7. Birthplace (high school C).	
Urasoe/Ginowan	35
Northern/central Okinawa Island (other)	6
Southern Okinawa Island	7
Outside Okinawa Island; within Okinawa Prefecture;	1
Outside Okinawa Prefecture	3
Unknown	1
Total	53

Table 8. Place of residence (high school C).	
Urasoe/Ginowan	39
Northern/central Okinawa Island (other)	5
Southern Okinawa Island	9
Total	53

3. Survey results

3.1 Survey 1: speech perception and semantic comprehension

3.1.1 'Head'

For 'head', a recording from Irabu on Irabujima (transcribed as 'k^hanama' in the joint survey documentation) was used. At the Kuninaka survey site, also on Irabujima, there is a clear syllabic *l* at the end of this word; in Irabu the sound is more vowel-like than that, but it sounds more lateral than in Karimata on Miyakojima, for example. It thus sounds like an intermediate pronunciation.

Among the 121 students who transcribed this item, there were only twelve who used something other than 'カ' (*ka*)³ for the beginning of this word (see Table 9 on the next page); everyone else used 'カ', and the transcriptions of more than half of them matched the recording up to 'カナマ' (*kanama*). Among the answers that matched it up to 'カ

3 As was indicated above, both hiragana and katakana were used for the answers, but as no one used a mixture of them to transcribe a single item, we use katakana to represent both here.

Table 9. Answers beginning with something other than カ.

	タ (ta)	ハ (ha)
High school A	1	1
High school B	1	4
High school C	5	—
Total	7	5

Table 10. What followed ‘カナマ’.

	イ (i)	ウ (u)	エ (e)	ズ (zu)	ル (ru)	ア / ー (a)	ヌ (nu)	ン (n)	Ø
High school A	6	5	1	3	3	—	2	3	2
High school B	22	3	—	—	—	2	—	—	—
High school C	—	—	1	—	2	1	—	2	1
Total	28	8	2	3	5	3	2	5	3

ナマ’, we looked at how the students transcribed the following sound (see Table 10). Vowels were most numerous; in all, only five student used ‘ル’ (ru), presumably to represent a syllabic *l*. Among the vowels, ‘イ’ (i) was the most numerous, followed by ‘ウ’ (u)⁴. Interestingly, of the students of high school B who live on Irabujima, where one can hear the syllabic *l* being used by the older generation as in Kuninaka, none used ‘ル’. It may be that it is precisely

Table 11. What followed ‘カナ X’ (‘X’ signifying one or two arbitrary kana).

カナ X +	ン (n)	イ (i)	エ (e)	リ (ri)	ア (a)
High school A	6	3	2	2	1
High school B	—	1	—	—	—
High school C	15	—	1	—	1
Total	21	4	3	2	2

Table 12. Examples of answers that matched the recording up to ‘カナ’.

カナムアイ	‘kanamuai’	カナウマン	‘kanauman’
カナムイ	‘kanamui’	かなむあん	‘kanamuan’
かなもい	‘kanamoi’	カナムアン	‘kanamuan’
かなんまい	‘kananmai’	カナムウン	‘kanamuun’
カナゴエ	‘kanagoe’	カナムン	‘kanamun’
カナゴエ	‘kanagoe’	かなむん	‘kanamun’
カナモエ	‘kanamoe’	カナモエン	‘kanamoen’
かなんまり	‘kananmari’	カナワン	‘kanawan’
かなうあん	‘kanauan’	かなわん	‘kanawan’

because they were used to hearing this dialect sound that they did not expressly transcribe it as such, but this is conjecture.

Next, among the answers that matched the recording up to ‘カナ’ (kana), ‘ン’ (n) was used most often to transcribe the final sound (see Table 11). On the whole, when comparing these answers to those that matched it up to ‘カナマ’, these students’ perception of the word-final sounds was less consistent. Furthermore, considering how multiple students transcribed it as ‘かなむん’ (kanamun; five students) at high school A and as ‘かなわん’ (kanawan; six students) at high school C, it may be that some of the students having trouble determining what sounds followed ‘カナ’ reasoned their way towards a straightforward word form.

While we have considered the answers that were close to the dialect form above, there were many considerably different answers, as well, such as ‘カラマル’ (kamaru) and ‘ツナマヨ’ (tsunamayo). Incidentally, while the degree of semantic comprehension was on the whole low, that of ‘head’ was highest among the five items (see Table 13),

Table 13. The meaning of ‘head’

	Students answering ‘head’
High school A	5
High school B	9
High school C	—
Total	14

Table 14. The connection between semantic comprehension and form (how the students who answered the meaning correctly transcribed the form).

‘Head’	カナマイ (kanamai)	カナムアイ (kanamuai)	カナマウ / ウ (kanamaui)	カナマル (kanamaru)	カナム (kanamu)
High school A	2	—	1	1	1
High school B	5	1	3	—	—

⁴ After pronouncing a word once with a syllabic *l* or a friction noise, one sometimes hears the older generation use an *i* when pronouncing it again slowly; it is unclear if there is a connection.

but there cannot be said to be a correlation between the actual transcription and semantic comprehension (see Table 14).

3.1.2 ‘Liver’

For ‘liver’, a recording from Kugai on Miyakojima, where it is pronounced with a strong friction noise (‘k^{sz}imu’ in the joint survey documentation), was used. How did the students perceive such a marked friction noise? Not counting the students who were unable to give an answer, everyone used ‘ク’ (*ku*) for the beginning of the word. We consider either ‘ス’ (*su*) or ‘ツ’ (*tsu*) following this ‘ク’ to be a likely reflection of the friction noise. If this is correct, it turns out that the students of Okinawa Island (School C) were more responsive to this sound. While, similarly to ‘head’ above, the students of Miyakojima (School A, B) only have a marginal familiarity with this word in regard to semantic comprehension, they might be able to recognize the sound it contains as a ‘regional’ or ‘natural’ sound. Incidentally, ‘ス’

Table 15. ‘Liver’: is the word-initial ク followed by ス or ツ?			
High school	Yes	No	Total
A	9	38	47
B	—	29	29
C	20	25	45
Total	29	92	121

Table 16. ‘Liver’: transcriptions following ク that are thought to reflect the friction noise.				
High school	ス (<i>su</i>)	セ (<i>se</i>)	ツ (<i>tsu</i>)	Total
A	9	—	—	9
B	—	—	—	0
C	18	1	1	20
Total	27	1	1	29

was by far the most commonly used of the transcriptions thought to reflect the friction noise, as can be seen in Table 16.

Next, we will look at how the transcriptions were structured on the whole, both those that did and those that did not include an element thought to reflect the friction noise. Answers consisting of two *kana* in which ‘ク’ is followed by ‘ヌ’ (*nu*), ‘ン’ (*n*), or ‘ム’ (*mu*) were most numerous (75 students), but *kana* representing an M sound ⁵, such as ‘ム’, accounted for only six of these; ‘ヌ’ and ‘ン’ were more common choices at all three schools. This could mean that the students’ ability to perceive word-final *-m* is low, or perhaps that that they chose transcriptions representing *n*

Table 17. Answers that did not include an element thought to reflect the friction noise						
	Two- <i>kana</i> forms	Other				Total
	Final nasal	Total	KNC	KNN	KvN	
High school A	<i>n</i>	28	5	3	2	38
	<i>m</i>	2	—	—	—	2
High school B	<i>n</i>	24	3	—	0	27
	<i>m</i>	0	—	—	—	0
High school C	<i>n</i>	17	3	—	—	20
	<i>m</i>	4	1	—	—	5
Total		75	12	3	2	92
	E.g.	くぬ (<i>kunu</i>) くん (<i>kun</i>) クム (<i>kumu</i>) クム (<i>kumu</i>)	くぬっ (<i>kunutsu</i>) くんっ (<i>kuntsu</i>) クモツ (<i>kumotsu</i>)	クヌン (<i>kunun</i>)	くうぬ (<i>kūnu</i>)	

(‘v’ represents vowels; a lowercase ‘v’ is used to distinguish them from consonants).

⁵ As regards *kana* used to represent the word-final nasal, we use the term ‘n sound’ for *kana* such as ‘ヌ’ and ‘ン’, and ‘m sound’ for *kana* such as ‘ム’ and ‘ム’.

Table 18. Answers that did include an element thought to reflect the friction noise.							
	Three-kana forms	Other	Total				
	Final nasal	Total	KSNC	KSNv	KSNN	NSKN	
High school A	<i>n</i>	6	—	—	—	1	7
	<i>m</i>	—	—	—	—	—	0
High school B	<i>n</i>	—	1	—	—	—	1
	<i>m</i>	0	—	—	—	—	0
High school C	<i>n</i>	10	—	—	—	—	10
	<i>m</i>	8	1	1	1	—	11
Total		24	2	1	1	1	29
E.g.		クスム (<i>kusumu</i>) くすん (<i>kusun</i>) クセム (<i>kusemu</i>) クスミ (<i>kusumi</i>)	くすむっ (<i>kusumutsu</i>)	クスモア (<i>kusumoa</i>)	クスムン (<i>kusumun</i>)	ンクスヌ (<i>nkusunu</i>)	

(‘v’ represents vowels; a lowercase ‘v’ is used to distinguish them from consonants).

sounds regardless of an awareness of this sound as a dialect sound. Among the 27 answers including an element thought to reflect the friction noise, on the other hand, answers consisting of three kana were most numerous at 24, sixteen of them representing the word-final nasal as an *n* sound and eight as an *m* sound; answers representing it as an *m* sound were thus relatively slightly more common than among answers consisting of two *kana*. While the sample size is very small, it may be that the students who perceived the friction noise as a peculiar sound were also more responsive to the word-final *-m*. As was the case with ‘head’, these answers were more common at high school C; this could perhaps be said to be reflective of a single tendency.

Incidentally, while we had expected the younger generation to be relatively more familiar with the word for ‘liver’, as it is used in various idioms, only two students gave a meaning for this word, their answers being ‘these two people’ and ‘yesterday’.

3.1.3 ‘Earthworm’

A recording obtained in Bora (‘mimɕɿ’ in the documentation) was used. Our intention was to find out how the students would perceive syllabic *m*, which is used often in the Miyako dialects, as in *m*: ‘sweet potato’, for instance. Contrary to our expectations that due to the relatively simple structure, it would be easy to perceive as a dialect sound, the answers were quite rich in variety. Not counting the students who were unable to give an answer (one at high school A and five at high school C), 96 students used ‘ミ’ (*mi*) for the beginning of the word, but there were also 27 students who used ‘ニ’ (*ni*). With the exception of ‘びんず’ (*binzu*), which occurred once, the remainder of the answers all started with a nasal, as well, such as ‘みゆんず’ (*myunzu*) and ‘ネンムズ’ (*nenmuzu*). Furthermore, all answers ended in ‘ズ’ (*zu*), with the exception of two answers ending in ‘ツ’ (*tsu*). The majority of the answers thus took the form ‘ミ/ニ ズ’, so we looked at what kana were used for the syllabic *m* in the middle of the word. Overviews of forms beginning with ‘ニ’ and ‘ミ’ are given in Tables 19 and 20 on the next page, respectively, on the next page. In both cases ‘ン’ (*n*) was by far the most common; occurrences of ‘ム’ (*mu*) thought to represent the syllabic *m* were rare. Moreover, the majority of those who used the latter were Okinawa Island high school students (School C). In comparison to a central vowel accompanied by a friction noise, it would seem that syllabic consonants such as *m* and *l* would not sound too strange to

Table 19. Kana used for the middle of the word in answers beginning with ニ .					
High school	ン (n)	ンツ (ntsu)	ンム (nmu)	ム (mu)	Total
A	8	1	1	1	11
B	—	—	—	—	0
C	9	—	5	2	16
Total	17	1	6	3	27
Eg.	ニンズ (ninzu)	にんっず (nintsuzu)	ニンムズ (ninmuzu)	ニムズ (nimuzu)	

Table 20. Kana used for the middle of the word in answers beginning with ‘ミ’ .										
High school	ン (n)	ンツ (ntsu)	ンム (nmu)	ウン (un)	ム (mu)	ミ (mi)	ニ (ni)	ンムン (nmun)	Ø	Total
A	32	—	2	1	—	1	—	—	—	36
B	28	1	—	—	—	—	—	—	—	29
C	18	—	1	—	3	4	1	1	2	30
Total	78	1	3	1	3	5	1	1	2	95
Eg.	ミンズ (minzu)	ミンツズ (mintsuzu)	ミンムズ (minmuzu)	みうんず (miunzu)	ミムズ (mimuzu)	ミミズ (mimizu)	ミニズ (minizu)	ミエンムンズ (myenmunzu)		

the younger generation of today, accustomed as they are to the sounds of foreign languages, but it nevertheless appears that they are not perceived in particular as dialect sounds. Although these unusual dialect sounds may sound peculiar to the younger generation, the sound system of Standard Japanese having become their frame

Table 21. How students having trouble identifying the sounds transcribed ‘rice ball’.						
	マジムン 'majimun'	マヨネーズ 'mayonēzu'	マイブーム 'maibūmu'	マンガフ 'mangufu'	ワームン 'wāmun'	ワンヌ 'wannu'
High school A	3	—	1	1	—	—
High school B	21	—	—	—	—	—
High school C	1	1	—	—	1	1
Total	25	1	1	1	1	1

Table 22. The meaning of ‘rice ball’.					
	‘monster’	‘ghost’	‘cooked rice’	‘to taste good’	‘my hobby’
High school A	—	1	—	—	—
High school B	11	3	1	1	1
High school C	—	—	—	—	—

of reference, it appears that they do not particularly stand out to them.

3.1.4 ‘Rice ball’

In one of the vocabulary modules of the joint survey, the word for ‘rice ball’ was recorded at a number of research sites as a related vocabulary item for ‘(cooked) rice’. We used a recording from Yonaha (‘maʔnuʔ’ in the documentation). How

Table 23. Examples of transcriptions for ‘rice ball’.

マイゲン	‘maigun’
マイブウ	‘maibwu’
まいぶ	‘maibu’
マイブーム	‘maibūmu’
マイフン	‘maifun’
マンガ	‘mangu’
まんぐ	‘mangu’
まうぐー	‘maugū’
マイム	‘maimu’
マンガフ	‘mangufu’
マゲン	‘magun’
マゲーウ	‘magūu’
マイム	‘maimu’
まいむ	‘maimu’
マイヌ	‘mainu’
マイヴン	‘maivun’
マジムン	‘majimun’
まぐ	‘magu’
まんず	‘manzu’
まいみ	‘maimi’
マイヌー	‘mainū’
らいぐ	‘raigu’
まじむん	‘majimun’
マイムン	‘maimun’
まる	‘maru’

did the high school students react to these peculiar sounds? Almost all of the answers either were very different from how the recording actually sounded or seemed to have been attempts at somehow connecting the form with a given meaning. As can be seen in Tables 21–23 on the previous page, 25 students transcribed it as ‘マジムン’ (*majimun*, used to mean ‘ghost’ or ‘monster’ in the Miyako area), and there were even answers such as ‘マイブーム’ (*maibūmu* ‘my boom’, used for things one has recently taken a liking to) and ‘マヨネーズ’ (*mayonēzu* ‘mayonnaise’); it appears that, having trouble identifying the sounds used in the word, the students reasoned their way towards these answers. In any case, it is difficult to offer a more detailed analysis than to just state that the degree of comprehension was low for this word.

3.1.5 ‘A child is born.’

As above, we used a recording obtained in Yonaha as an example sentence in one of the vocabulary modules of the joint survey ([*ffanudu mmari*!]; the consonant in the particle *nu* sounds close to *-r-*). We included a sentence item in order to examine whether words and sentences differ in terms of, for example, difficulty in perception and degrees of semantic comprehension.

The answers can be broadly divided into two groups: 44 answers beginning with ‘ファ’ (*fa*) and 47 beginning with ‘パ’ (*pa*). It can be surmised that whichever they chose, the students in the Miyako area (School A, B) are familiar with both ‘ファ’ and ‘パ’ as dialect sounds and naturally chose one of these *kana* when they heard a sound that approximated it. In the two groups of answers beginning with ‘ファ’ and ‘パ’, the first part of the recording, corresponding to ‘a child’, is transcribed in a way that can be represented schematically as ‘FARD’ or ‘PARD’ in more than half of the answers (see Tables 24 and 25). Although the ‘D’ represents several different *kana* used by the students, such as ‘ド’ (*do*), ‘ドン’ (*don*), and ‘ドウ’ (*du*), these all appear to be the result of the accurate perception of the particle in the recording. Taking both groups together, then, it can be concluded that 52 students, or around 40%, perceived the first part of the sentence more or less accurately. It therefore seems reasonable to state that the phonetic perception of sentences is not necessarily more difficult than that of words. This conclusion, however, does not seem to hold for the students of Okinawa Island (School C), who gave many answers such as ‘はなづまり’ (*hana(d)zumari* ‘nasal congestion’), ‘たなのまわり’ (*tana no mawari* ‘around the shelf’), ‘バリどまり’ (*Bari-domari*, the meaning is not

Table 24. ‘A child is born’: answers of which the first part began with ファ (roughly divided into groups represented schematically by uppercase letters).

	FARD	FARN	FARNT	FAID	FAIB	FAIT	FAIND	FANG	FARG/K	FANZ	Total
High school A	11	1	1	—	1	—	—	—	4	1	19
High school B	9	—	—	—	—	—	—	—	—	—	9
High school C	4	—	—	2	—	7	2	1	—	—	16
Total	24	1	1	2	1	7	2	1	4	1	44

Table 25. ‘A child is born’: answers of which the first part began with パ

	PARD	PANG	PAND	PARG	PARK	PART	PAFUN	BARD	HAND	HARB	HANZ	Total
High school A	18	—	—	2	2	—	1	—	—	—	—	23
High school B	1	—	—	—	—	—	—	—	—	2	—	3
High school C	9	3	5	—	—	1	—	1	1	—	1	21
Total	28	3	5	2	2	1	1	1	1	2	1	47

clear), and even ‘ファイトマネー’ (*faito manē* ‘fight money’). This result is the inverse of what we saw above, which seems to suggest a difference in perception between words and sentences.

3.1.6 Survey 1 summary

The results discussed above can be summarized as follows:

- 1) Although we cannot easily draw conclusions from a survey on just five items, there clearly cannot be said to be a high level of comprehension ability regarding dialectal speech sounds in the younger generation on the Miyako Islands, even though it is claimed that its dialects have been preserved relatively well among those of the Ryukyu Islands. They appear to be unable to associate forms with meanings even for frequently used vocabulary items.
- 2) The proportion of students who attempted to transcribe sounds such as the friction noise was larger at the Okinawa Island high school than at the Miyakojima City high schools. One possibility to consider is that the fact that they did not understand the meanings of the words at all could be what caused them to try to capture them objectively as sounds. It may be that the stranger the sounds sounded to them, the more they felt the need to proactively distinguish between them in their transcriptions. As dialect use is still relatively prevalent among the middle-aged and elderly generations in Miyakojima City, it may be that the high school students there are at least familiar with the sounds of these dialects, so that they have an awareness of them as a ‘peculiar kind of pronunciation’ even as they are unable to understand them or reproduce them themselves; because of this, they might not perceive them as unusual sounds, reinterpreting them in their own way along the lines of Standard Japanese, instead.
- 3) On the Miyako Islands, there is a special system for transcribing unusual sounds, *Miyako-gana*, which is widely used locally for compiling dictionaries, the lyrics of traditional songs, publicity campaigns using dialect, and so on. The only apparent attempts at using *Miyako-gana*, however, were two occurrences of ‘コ⁹’; it can thus clearly hardly be said to be in general use among the younger generation. The students did, however, devise a variety of their own transcriptions. The use of small kana, not only for vowels and geminates, but also for ‘ス’ (*su*), ‘ン’ (*n*), and the like, seems to be one way in which they tried to reproduce their impressions of the sounds in question.
- 4) Contrary to our expectation that sentences would be more difficult to perceive accurately than words, it appears to be easier to obtain a response to a complete message in the form of a sentence than to an isolated word. It is possible that the sentence was perceived as being easier to understand the gist of and as containing more material on which to base one’s judgment. This can only be said, however, of the students at the Miyakojima City high schools; in contrast to them, the students at the Okinawa Island high school, who did respond to the ‘peculiar sounds’ in the words, had trouble dealing with the sentence. The fact that the students at the Miyakojima City high schools are familiar with the dialect speech of the older generation appears to be a factor here, but it could also suggest a difference in perception between words and sentences.

3.2 Survey 2: speech perception and semantic comprehension

With seventeen students participating, the sample size in Survey 2 was small, so a quantitative analysis is not possible; it is possible, on the other hand, to closely examine how each of the students dealt with the data. In the following, we will take this perspective in considering a number of cases.

3.2.1 ‘Head’, ‘the east’, and ‘lightning’: responses to sounds corresponding to *ri

Table 26. ‘Head’: all seventeen students’ transcriptions for all sites.			
Site	Kugai	Kuninaka	Irabu
Form	k ^h anamazɪ	kanamaɭ	k ^h anamaɿ
1	カナマズ (kanamazu)	カナアマル (kanaamaru)	(no answer)
2	カナマヅ (kanama(d)zu)	カナマル (kanamaru)	タナモエ (tanamoe)
3	カナマズ (kanamazu)	カナマル (kanamaru)	カナマル (kanamaru)
4	カナマズ (kanamazu)	カナマル (kanamaru)	カナマル (kanamaru)
5	カナマズ (kanamazu)	カナーマル (kanāmaru)	タナマス (tanamasu)
6	カナマズ (kanamazu)	カナマル (kanamaru)	カナムル (kanamuru)
7	カナマズル (kanamazuru)	カナアマル (kanaamaru)	カナンマ (kananma)
8	カナマズ (kanamazu)	カナマル (kanamaru)	カナモエ (kanamoe)
9	カナマツ (kanamatsu)	カナーマル (kanāmaru)	カナモア (kanamoa)
10	カナマズ (kanamazu)	カナーマル (kanāmaru)	カナム (kanamu)
11	カナマズ (kanamazu)	カナマズ (kanamazu)	タナグエ (tanagwe)
12	カナンマズイリ (kananmazuiiri)	カナアマル (kanaamaru)	カナンムウ (kananmuu)
13	カナマズ (kanamazu)	カナマル (kanamaru)	カナム (kanamu)
14	カナマズ (kanamazu)	カナマズ (kanamazu)	カナマズ (kanamazu)
15	カナマツ (kanamatsu)	カナマズ (kanamazu)	(no answer)
16	カナマズ (kanamazu)	カナマル (kanamaru)	カナムウ (kanamuu)
17	カナマアズ (kanamaazu)	カナーマル (kanāmaru)	タナム (tanamu)

First, we will consider words containing sounds that correspond to *ri. All the data that was obtained in response to recordings of words for ‘head’ (surmised to derive from *kanamari based on sound correspondences) are given in Table 26. All of the students transcribed the recordings from Kugai and Kuninaka quite accurately, almost all of their transcriptions matching them up to ‘カナマ’ (kanama). In the case of Irabu, on the other hand, there was on the whole quite a lot of variety, including two students who did not give an answer. When focusing on the end of the word, we can clearly distinguish between three groups of answers. As regards the recording from Kugai, the students can be considered to have recognized the friction sound, seeing how they all used either a fricative such as ‘ズ’ (zu) or ‘ス’ (su) or one of the affricates ‘ツ’ (tsu) and ‘ヅ’ ((d)zu). As for Kuninaka, it is clear that the students were aware of the consonant, as many as fourteen students using either a normal-sized or a small ‘ル’ (ru), while only three students used ‘ズ’. Answers making distinctions such as ‘Kugai: “カナマズル” (kanamazuru)/Kuninaka: “カナマル” (kanamaru)’ can be seen as examples of this. When we look at the correlations between the answers and the three recording sites, it is clear that a majority of the students accurately perceived the contrast between the Kugai and Kuninaka recordings (see Table 27 on the next page). As we had arranged the words to avoid instances of the same word appearing in succession, students could not directly compare these recordings while listening. Compared to the recording from Irabu, also used in Survey 1, those from Kugai and Kuninaka appear to have been relatively easy to perceive accurately for the high school

Table 27. 'Head':
how the end of the word was transcribed.

Site	Kugai	Kuninaka	Irabu
Form	k ^h anamaz̥i	kanamaɭ	k ^h anamaɿ
ズ (zu)	10	3	1
ズ̥ (zu)	1	—	—
ヅ̥ ((d)zu)	1	—	—
ツ (tsu)	2	—	—
ス (su)	—	—	1
ズル (zuru) / ズイリ (zuirī)	2	—	—
ル (ru)	—	13	2
ル (ru)	—	1	1
エ (e)/ エ (e)	—	—	3
ウ (u)	—	—	2
ア (a)	—	—	1
Ø	—	—	4
Total	16	17	15

Table 28. 'Head': the correlations among the three sites

Kugai	Kuninaka	Irabu		
-Z	-L	-I	4	12
-Z	-L	-L	3	
-Z	-L	-Z	1	
-Z	-L	-Ø	3	
-Z	-L	(no answer)	1	
-ZL	-L	-I	2	3
-ZL	-L	-Ø	1	
-Z	-L	-Z	1	3
-Z	-L	(no answer)	1	
-Z	-L	-I	1	

(roughly divided into groups represented schematic-ally by uppercase letters; 'Z' signifies a friction noise, 'L' a syllabic l, and 'I' a vowel).

students; almost all of them made a distinction between them. As regards that from Irabu, on the other hand, transcription appears to have been difficult for the students. In addition to the two students mentioned above who did not give an answer, there were also students who transcribed it as ' カナマ ', stopping after the first three morae; it is likely that they stopped writing halfway through, unable to decide how to transcribe the end of the word.

Let us consider this from the viewpoint of the correlations between the answers and the three recording sites again. Among the twelve students who made a z/l-distinction between the Kugai and Kuninaka recordings, four students used a vowel and three students used ' ル ' for the Irabu recording; of the five remaining students, one used ' ズ ', while the rest did not transcribe the end of the word. When compared to the recording from Karimata mentioned above ([kanamaɯ ~ k^hanamaɿ] according to the documentation; additionally, aha is used as a synonym), the pronunciation in Irabu does sound like the tongue approaches the alveolar ridge quite closely. It would seem that high school students who do not know what the word means would have quite a hard time transcribing it. Furthermore, only two students gave an answer regarding the meaning of the word; one of them only gave the correct answer for the recording from Kuninaka, being unable to give an accurate meaning for the other two sites.

All the data for 'lightning' are given in Table 29 on the next page. When focusing on the end of the word, we see that all students used ' ズ ' for the recording from Kugai, with the exception of one student that used ' ヅ '. For the recording from Bora, on the other hand, only one student used ' ズ '; among the rest, answers were diverse, eleven students using ' ル ', two using ' ド ウ ' or ' ヅ ', and two using ' ウ ' (u), for example. There is a marked friction noise in both the Kugai and the Bora sound recordings, but as is also clear from the different transcriptions used by the researchers in the documentation, it appears that it is weaker in that from Bora, and that the tongue does not approach the alveolar ridge as closely and for as long as in that from Kugai. It would seem reasonable to view the fact that the high school students were divided in how they transcribed the sound in the recording from Bora while they uniformly used ' ズ ' for the clear friction sound in the Kugai recording as resulting from their reactions to this subtle difference. An overview of the kinds of sounds the students used for the final part of the word is given in Table 30 on the next page. When these

Table 29. ‘Lightning’: all seventeen students’ transcriptions.

Site	Kugai	Bora
Form	m:napskaz	nnapskaʔ
1	ンナプカズ (nnapukazu)	ンナピカル (nnapikaru)
2	ンナツカズ (nnatsukazu)	ンナツカル (nnatsukaru)
3	ンナプスカズ (nnapusukazu)	ンナピカル (nnapikaru)
4	ンナプスカズ (nnapusukazu)	ンナップスカドウ (nnappusukadu)
5	ンナプウカズ (nnapwukazu)	ンア ピィカル (n’a piikaru)
6	ンナプスカズ (nnapusukazu)	ナプスカル (napusukaru)
7	ンナプスカズ (nnapusukazu)	ンナプカル (nnapukaru)
8	ンナピカズ (nnapikazu)	ンナピカ (nnapika)
9	ンナプツカズ (nnaputsukazu)	ンナピカウ (nnapikau)
10	ンナスプカアズ (nnasupukaazu)	ンナクスカル (nnakusukaru)
11	ンナプツカアズ (nnaputsukaazu)	ンナプカーズ (nnapukāzu)
12	ンナプウカズ (nnapwukazu)	ンナアピカル (nnapikaru)
13	ンナプスカズ (nnapusukazu)	ンブスカウ (npusukau)
14	ウンナツカズ (unnatsukazu)	ウナプカル (unapukaru)
15	ンナピカヅ (nnapika(d)zu)	ンナピカヅ (nnapika(d)zu)
16	ンナプクスカズ (nnapukusukazu)	ナプスカル (napusukaru)
17	ンナッピカズ (nnapikazu)	ンナムピィカアル (nnamupiikaaru)

Table 30. ‘Lightning’: the correlations between the end of the word and the recording site

Kugai		Bora	
Z	17	L	11
		Z	2
		D	1
		U	2
		Ø	1

(roughly divided into groups represented schematically by uppercase letters).

Table 31. ‘Lightning’, ‘the east’, and ‘head’: responses to the Kugai sound corresponding to *ri. Table 32. ‘Liver’: all seventeen students’ transcriptions for all sites.

‘lightning’	‘the east’	‘head’	
Z	Z	Z	10
Z	ZN	Z	2
Z	Z	ZL	2
Z	Z	C	2
Z	SN	Z	1

sounds are classified broadly, we see that only two students used a vowel for the recording from Bora with its weak friction noise, the majority using a consonant.

As there was also an instance of the word for ‘the east’ among the recordings from Kugai, an overview of how each student reacted to different recordings of this sound from Kugai is given in Table 31. When ‘ズ’ and ‘ヅ’ are taken together, it becomes clear that as many as ten students recognized the friction sound in all three words, while there were no students who did not recognize

it in any of them. The friction noise in the recordings from Kugai seems to be perceived quite consistently, and it appears to be recognized as involving an independent consonant [z], which matches the documentation by the researchers.

Furthermore, the *Miyako-gana* ‘ズ’ was used twice, as was ‘ク[○]’, which appears to be modeled on *Miyako-gana*. The sound represented by the latter is usually written as ‘クス’ (*kusu*); this should be viewed as an indication of how there is no general awareness of *Miyako-gana* among the younger generation, as was also argued in the summary of Survey 1.

3.2.2 ‘Liver’, ‘fog’, ‘the moon’, and ‘breath’: responses to sounds corresponding to *ki

We will now consider four words containing sounds corresponding to *ki, representing cases of voiceless consonants followed by central vowels. In the case of ‘liver’, for which recordings from three sites were chosen, many students used ‘ク’ (*ku*) followed by ‘ス’ or ‘ス’ (*su*) for the recording from Kugai; if we include answers beginning with ‘プ’ (*pu*), ten students can be considered to have perceived a word-initial consonant followed by some kind of friction noise (see Table 32 on the next page). In the documentation of the joint survey, the transcription of the recording from Kugai has a central vowel preceded by both a voiceless and a voiced friction noise, which would seem to be intended

Table 32. ‘Liver’: all seventeen students’ transcriptions for all sites.

Site	Kugai	Kuninaka	Irabu
Form	k ^{sz} i ^u mu	tsimu	tsɿmu
1	クスム (<i>kusumu</i>)	ツム (<i>tsumu</i>)	セム (<i>semu</i>)
2	ツヌ (<i>tsunu</i>)	ツム (<i>tsumu</i>)	スム (<i>sumu</i>)
3	プスム (<i>pusumu</i>)	ツム (<i>tsumu</i>)	スム (<i>sumu</i>)
4	プスム (<i>pusumu</i>)	ツン (<i>tsun</i>)	セム (<i>semu</i>)
5	クズ (<i>kuzu</i>)	ツム (<i>tsumu</i>)	セム (<i>semu</i>)
6	ツクニ (<i>tsukuni</i>)	ツン (<i>tsun</i>)	セム (<i>semu</i>)
7	クウシニ (<i>kwushini</i>)	ツウム (<i>tsuwumu</i>)	スイミ (<i>simi</i>)
8	ティニ (<i>tini</i>)	ツムウ (<i>tsumuu</i>)	シイミ (<i>shiimi</i>)
9	クスリ (<i>kusuri</i>)	ツエム (<i>tsemu</i>)	セム (<i>semu</i>)
10	クスヌツ (<i>kusunutsu</i>)	ツム (<i>tsumu</i>)	セム (<i>semu</i>)
11	クスヌ (<i>kusunu</i>)	ツム (<i>tsumu</i>)	シム (<i>shimu</i>)
12	クンミ (<i>kunmi</i>)	ツム (<i>tsumu</i>)	スイミ (<i>simi</i>)
13	クスムツ (<i>kusumutsu</i>)	ツム (<i>tsumu</i>)	ツイミ (<i>tsimi</i>)
14	ツニ (<i>tsuni</i>)	ツム (<i>tsumu</i>)	セム (<i>semu</i>)
15	クム (<i>kumu</i>)	ツム (<i>tsumu</i>)	シム (<i>shimu</i>)
16	クスミ (<i>kusumi</i>)	ツム (<i>tsumu</i>)	セヌ (<i>senu</i>)
17	クム (<i>kumu</i>)	ツム (<i>tsumu</i>)	セム (<i>semu</i>)

Table 33. ‘Liver’: the correlations among the three sites.

Site	Kugai	Kuninaka	Irabu	Total
a	KS	C	S	7
b	KS	C	C	1
c	K	C	S	3
d	C	C	S	2
e	PS	C	S	2
f	CK	C	S	1
g	T	C	S	1
				17

Table 34. ‘Fog’: all seventeen students’ transcriptions.

Site	Kugai	Bora
Form	ksĩ	k ^s ɿ:
1	クス (<i>kusu</i>)	クス (<i>kusu</i>)
2	クス (<i>kusu</i>)	クス (<i>kusu</i>)
3	プス (<i>pusu</i>)	クス (<i>kusu</i>)
4	プス (<i>pusu</i>)	クフ (<i>kufu</i>)
5	プス (<i>pusu</i>)	クスウ (<i>kuswu</i>)
6	プス (<i>pusu</i>)	クス (<i>kusu</i>)
7	クス (<i>kusu</i>)	クウス (<i>kwusu</i>)
8	クウス (<i>kwusu</i>)	クズツ (<i>kuzutsu</i>)
9	クス (<i>kusu</i>)	クス (<i>kusu</i>)
10	クス (<i>kusu</i>)	クスウ (<i>kuswu</i>)
11	クス (<i>kusu</i>)	グス (<i>gusu</i>)
12	クスウ (<i>kuswu</i>)	クスウ (<i>kuswu</i>)
13	クス (<i>kusu</i>)	クス (<i>kusu</i>)
14	クス (<i>kusu</i>)	クスウ (<i>kuswu</i>)
15	クス (<i>kusu</i>)	クウ (<i>kwu</i>)
16	プス (<i>pusu</i>)	クス (<i>kusu</i>)
17	プス (<i>pusu</i>)	クス (<i>kusu</i>)

Table 35. ‘Fog’: the correlations between the two sites (lowercase ‘i’ indicates an arbitrary vowel).

Sites	Kugai	Bora	Total
a	KS	KS	7
b	KS	Ki	1
c	KS	KiS	1
d	PS	KS	4
e	PS	KZ	2
f	PS	KF	1
g	KiS	KZ	1
			17

to indicate the strength and length of the friction sound; the high school students seem to have responded similarly to this strong friction sound. In their transcriptions of both the Irabu and the Kuninaka recording, too, the researchers give an affricate followed by a central vowel. They were transcribed by different researchers, so the transcriptions differ as well, but when the sound recordings are compared, the affricate appears to be stronger in the recording from Kuninaka, while the plosive portion in that from Irabu seems a little weaker. Moreover, the beginning of the word has high pitch in the recording from Kuninaka ([tsi]mu), while the end of the word has high pitch in the recording from Irabu (tsɿ[mu]). The high school students overwhelmingly used kana including an s-sound, such as ‘サ’ (*sa*), ‘セ’ (*se*), and ‘シ’ (*shi*), for the recording from Irabu, while only one of them used an affricate; it is likely that it is not only because of the weakness of the plosive portion, but also because of the pitch accent that they had difficulty perceiving the first syllable. An overview of these correlations is given in Table 33.

As is the case with ‘liver’, the word for ‘fog’ also begins with a sound corresponding to **ki*⁶; we used recordings from the two sites of Kugai and Bora. The word is pronounced with a marked friction noise in both recordings, but while the researchers of the joint survey have transcribed the recording from Kugai using an independent consonant [s],

6 Although the forms *k^hiri* and *kçⁱuri* were reported for Irabu and Uechi, respectively, in the joint survey, we have considered the forms reported for the other sites, including Kugai and Bora, as corresponding to a form in which the second half of **kiri* was lost.

Site	Kugai	Kurima
Form	ik ^h i	i ^h sī
1	イクズ (<i>ikuzu</i>)	イス (<i>isu</i>)
2	イツ (<i>itsu</i>)	イス (<i>isu</i>)
3	イッブウ (<i>itsupwu</i>)	イス (<i>isu</i>)
4	イフ (<i>ifu</i>)	イス (<i>isu</i>)
5	イク (<i>iku</i>)	イス (<i>isu</i>)
6	イプク (<i>ipuku</i>)	イス (<i>isu</i>)
7	イク (<i>iku</i>)	イス (<i>isu</i>)
8	イクウ (<i>ikwu</i>)	イス (<i>isu</i>)
9	イク (<i>iku</i>)	イス (<i>isu</i>)
10	イクウ (<i>ikwu</i>)	イス (<i>isu</i>)
11	イク (<i>iku</i>)	イス (<i>isu</i>)
12	イユク (<i>iyuku</i>)	インス (<i>insu</i>)
13	イクズ (<i>ikuzu</i>)	イス (<i>isu</i>)
14	イク (<i>iku</i>)	イス (<i>isu</i>)
15	ユツウ (<i>yutswu</i>)	リス (<i>risu</i>)
16	イプウ (<i>ipuu</i>)	イス (<i>isu</i>)
17	イクウン (<i>ikwun</i>)	イス (<i>isu</i>)

Site	Kugai
Form	tskssu
1	ツンクス (<i>tsunkusu</i>)
2	ツクス (<i>tsukusu</i>)
3	ツクス (<i>tsukusu</i>)
4	ツクスウ (<i>tsukuswu</i>)
5	ツチャスウ (<i>tsutyaswu</i>)
6	ツクス (<i>tsukusu</i>)
7	ツウクス (<i>tsuwukusu</i>)
8	ツウクスウ (<i>tsuwukuswu</i>)
9	ツクス (<i>tsukusu</i>)
10	ツクツクスウ (<i>tsukutsukuswu</i>)
11	(no answer)
12	ツクスウ (<i>tsukuswu</i>)
13	ツクスオ (<i>tsukuswo</i>)
14	ツクス (<i>tsukusu</i>)
15	ツウクスウ (<i>tsuwukuswu</i>)
16	ツツス (<i>tsutsusu</i>)
17	ツクス (<i>tsukusu</i>)

Table 38. How each of the seventeen students transcribed the Kugai sounds corresponding to *ki.

	'liver'	'fog'	'the moon'	'breath'
	Word-initial		Word-final	
1	クス (<i>kusu</i>)	クス (<i>kusu</i>)	クス (<i>kusu</i>)	クズ (<i>kuzu</i>)
2	ツ (<i>tsu</i>)	クス (<i>kusu</i>)	クス (<i>kusu</i>)	ツ (<i>tsu</i>)
3	プス (<i>pusu</i>)	プス (<i>pusu</i>)	クス (<i>kusu</i>)	ッブウ (<i>tsupwu</i>)
4	プス (<i>pusu</i>)	プス (<i>pusu</i>)	クスウ (<i>kuswu</i>)	フ (<i>fu</i>)
5	ク ^o (<i>ku</i>)	プス (<i>pusu</i>)	スウ (<i>swu</i>)	ク (<i>ku</i>)
6	ツク (<i>tsuku</i>)	プス (<i>pusu</i>)	クスツ (<i>kusutsu</i>)	プク (<i>puku</i>)
7	クウ (<i>kwu</i>)	クス (<i>kusu</i>)	クス (<i>kusu</i>)	ク (<i>ku</i>)
8	ティ (<i>ti</i>)	クウス (<i>kwusu</i>)	クスウ (<i>kuswu</i>)	クウ (<i>kwu</i>)
9	クス (<i>kusu</i>)	クス (<i>kusu</i>)	クス (<i>kusu</i>)	ク (<i>ku</i>)
10	クス (<i>kusu</i>)	クス (<i>kusu</i>)	クスウ (<i>kuswu</i>)	クウ (<i>kwu</i>)
11	クス (<i>kusu</i>)	クス (<i>kusu</i>)	(no answer)	ク (<i>ku</i>)
12	ク (<i>ku</i>)	クスウ (<i>kuswu</i>)	クスウ (<i>kuswu</i>)	ユク (<i>yuku</i>)
13	クス (<i>kusu</i>)	クス (<i>kusu</i>)	クスオ (<i>kuswo</i>)	クズ (<i>kuzu</i>)
14	ツ (<i>tsu</i>)	クス (<i>kusu</i>)	クス (<i>kusu</i>)	ク (<i>ku</i>)
15	ク (<i>ku</i>)	プス (<i>pusu</i>)	クスウ (<i>kuswu</i>)	ツウ (<i>tsuwu</i>)
16	クス (<i>kusu</i>)	プス (<i>pusu</i>)	ツス (<i>tsusu</i>)	プウ (<i>puu</i>)
17	ク (<i>ku</i>)	プス (<i>pusu</i>)	クス (<i>kusu</i>)	クウン (<i>kwun</i>)

Table 39. Kugai sounds corresponding to *ki: whether the friction noise was transcribed

	'liver'	'fog'	'the moon'	'breath'
Yes	13	17	16	6
No	4	0	1	11

(affricates are also regarded as containing fricativity).

a vowel accompanied by a friction noise is used for that from Bora. Interestingly, nearly all of the high school students, too, used 'クス' (*kusu*) or something similar for the recording from Kugai; if we include answers beginning with 'プ' (*pu*), all answers can be considered to be of the same kind. As the students were asked to use kana, it is unclear how they perceived the vowel following the s, but compared to the recording from Bora, it is likely that their attention was aimed mostly at the strength of the friction sound. While there was only one student who expressly wrote a small 'ウ' (*u*) at the end of the word for the Kugai recording, the number of instances of *kana* such as 'ウ' and 'ツ' (*tsu*) is higher for the recording from Bora, and there were also transcriptions such as 'ス^oウ' ⁷. Possibly, these students, while hearing a friction

⁷ A small 'ウ' is frequently used in Miyako to indicate rounded vowels in contrast to central vowels (e.g. 'がんずう' (*ganzuu* 'healthy')). In

noise, did get the impression that the word did not simply end after the consonant. This is all the more interesting when considered in the connection with the joint survey documentation.

Next, we will consider the words for ‘the moon’ and ‘breath’, in which the sounds corresponding to **ki* appear in the second syllable. Although we have chosen recordings from the two sites of Kugai and Kurima for ‘breath’, we have chosen only a recording from Kugai for ‘the moon’.

There are recordings of two informants from Kurima for ‘breath’; of the two, we have used the one with the weaker plosive (see Table 36 on the previous page). The high school students did not perceive the plosive portion of this pronunciation, all of them using ‘ス’ in their answers.

The reason we have used so many recordings from Kugai in this survey is that we were especially interested in how friction noises would be perceived. An overview of the transcriptions given for the recordings of the four words from Kugai is given in Table 38 on the previous page. The use of ‘ス’, ‘ツ’, and the like seems to be a reflection of the strong friction noises in the recordings from Kugai, which is especially clear for ‘fog’ and ‘the moon’. While the perception of these sounds appears to be influenced by aspects such as their position in the word and the pitch accent, and the sample size is too small to draw any conclusions, it is likely that the high school students perceived them as an independent consonant. We hope to be able to pursue this point further, also in light of the correlation with the documentation by the researchers.

3.2.3 ‘Person’, ‘daytime’, ‘lightning’: responses to sounds corresponding to **hi*

Next, we will consider sounds that correspond to **hi*.

For the word for ‘person’, we used recordings from the two sites of Kugai and Irabu (see Table 40). Although the Irabu and Kugai recordings are transcribed the same way in the documentation of the joint survey, the friction noise in that from Kugai sounds much sharper when the sound recordings are compared. When ‘ピ’ (*pi*) and ‘プ’ (*pu*) are taken together, the friction noise that follows *p*- was reflected well in the high school students’ transcriptions of the Kugai recording; there is only a single exception, in which ‘ツ’ (*tsu*) was used. Either ‘トウ’ (*tu*) or ‘ト’ (*to*) was used for the second half of the word in the majority of the answers. For the recording from Irabu, on the other hand, answers were more diverse: seven students used ‘ツ’ for the first half of the word, eight students used ‘ピ’, ‘プ’,

and the like, and one student used ‘ト’. Moreover, there was a variety of transcriptions for the second half of the word, as well: in addition to the ten students who used either ‘ト’ or ‘トウ’, some students used *kana* such as ‘テ’ (*te*) or ‘タ’ (*ta*). Incidentally, when looking at the transcriptions of the second half of the word, a small ‘ウ’ (*u*) was added at

the case of a central vowel, ‘ス’, ‘ズ’ (*zu*), and the like are used without ‘ウ’.

Site	Kugai	Irabu
Form	pstu	pstu
1	プストウ (<i>pusutu</i>)	プスト (<i>pusutu</i>)
2	ピツ (<i>pitsu</i>)	ピツ (<i>pitsu</i>)
3	ピストウ (<i>pisutu</i>)	プスタ (<i>pusuta</i>)
4	プストウ (<i>pusutu</i>)	プストウ (<i>pusutu</i>)
5	ピストウ (<i>pisutu</i>)	ピトウ (<i>pitu</i>)
6	プスト (<i>pusuto</i>)	ツトウ (<i>tsutu</i>)
7	プストウ (<i>pusutu</i>)	トウク (<i>tuku</i>)
8	ピストウ (<i>pisutu</i>)	ツトウ (<i>tsutu</i>)
9	プストウ (<i>pusutu</i>)	ツテ (<i>tsute</i>)
10	ピストウ (<i>pisutu</i>)	ピストウ (<i>pisutu</i>)
11	ピトウ (<i>pitu</i>)	(no answer)
12	プストウ (<i>pusutu</i>)	ピュストウ (<i>pyusutu</i>)
13	プスト (<i>pusuto</i>)	プスト (<i>pusuto</i>)
14	プストウ (<i>pusutu</i>)	ツトウ (<i>tsutu</i>)
15	ピトウ (<i>pitu</i>)	(no answer)
16	ピウス (<i>piusu</i>)	ツタ (<i>tsuta</i>)
17	ツウトツ (<i>tswutots</i>)	ツトウ (<i>tsutu</i>)

Table 41. ‘Person’: transcriptions of the beginning of the word.

	ピス (pisu)	プス (pusu)	ピツ (pitsu)	ツ (tsu)	No answer
Kugai	5	8	1	1	0
Irabu	2	4	1	6	2

Table 43. Whether the friction noises in the Kugai sounds corresponding to *hi were transcribed.

	‘person’	‘daytime’	‘elderly person’	‘lightning’	No. of answers
a	○	○	○	○	7
b	○	○	○	×	5
c	×	○	×	○	2
d	○	○	×	×	1
e	×	○	○	×	1
f	×	○	×	×	1

Table 42. How each of the seventeen students transcribed the Kugai sounds corresponding to *hi.

Form	Word-initial		Word-final	
	‘person’	‘daytime’	‘elderly person’	‘lightning’
	pstu	psima	uipstu	m:napskaz
1	プストウ (pusutu)	プスマ (pusuma)	ウミプトウス (umiputusu)	ンナブカズ (nnapukazu)
2	ピツ (pitsu)	プスマ (pusuma)	ウイピトウ (uipitu)	ンナツカズ (nnatsukazu)
3	ピストウ (pisutu)	プスマ (pusuma)	ウリピスト (uripisuto)	ンナブスカズ (nnapusukazu)
4	プストウ (pusutu)	プスマ (pusuma)	ウィップストウ (wippisutu)	ンナブスカズ (nnapusukazu)
5	ピストウ (pisutu)	プスマ (pusuma)	ウイプストウ (uipusutu)	ンナブウカズ (nnapwukazu)
6	プスト (pusuto)	プスマ (pusuma)	ウィプスト (wipusuto)	ンナブスカズ (nnapusukazu)
7	プストウ (pusutu)	プスマ (pusuma)	ウミプストウ (umipusutu)	ンナブスカズ (nnapusukazu)
8	ピストウ (pisutu)	ピスマ (pisima)	ウィピストウ (wipisutu)	ンナピカズ (nnapikazu)
9	プストウ (pusutu)	プスマ (pusuma)	ウィプスト (wipusuto)	ンナブツカズ (nnaputsukazu)
10	ピストウ (pisutu)	プスマ (pusuma)	ウィピストウ (wipisutu)	ンナナス プカアズ (nnasupukaazu)
11	ピトウ (pitu)	プスマ (pusuma)	ウミピト (umipityu)	ンナブツカア (nnaputsukaazu)
12	プストウ (pusutu)	プスマ (pusuma)	ウイピストウ (uipisutu)	ンナブウカズ (nnapwukazu)
13	プスト (pusuto)	プスマ (pusuma)	ウミプスト (umipusuto)	ンナブスカズ (nnapusukazu)
14	プストウ (pusutu)	プスマ (pusuma)	ウイプウト (uipwuto)	ウンナツカズ (unnatsukazu)
15	ピトウ (pitu)	プスマ (pusuma)	ウイピト (uipitu)	ンナピカ (nnapika)
16	ピウス (piusu)	プスマ (pusuma)	ウグイクス (ugwikusu)	ンナブクスカズ (nnapukusukazu)
17	ツウトツ (tsutotsu)	ピスマ (pisuma)	ウウィップスト (uwippusuto)	ンナッピカズ (nnappikazu)

the end by twelve out of the seventeen students for the recording from Kugai, as well as by eight students for that from Irabu, regardless of the diversity in transcriptions for the latter; it can be surmised from this that the students perceived the rounded vowel u clearly.

Other words containing sounds that correspond to *hi are the words for ‘daytime’, ‘elderly person’, and ‘lightning’. An overview of the transcriptions given for the recordings from Kugai, in which the friction noises are particularly marked, is given in Table 42. Close to half of the students gave transcriptions containing what appear to be reflections of the friction noises for the recordings of all four words (seven students; see ‘a’ in Table 43). Although the variety in ‘c’ and below seems to be idiosyncratic, the fact that there were five students

among whose transcriptions that of the word for ‘lightning’ was the only one to lack a reflection of the friction noise, as seen in ‘b’, may be due to some kind of difference in its phonetic environment.

3.2.4 Consonant perception

In the previous section, the initial syllabic m given in the joint survey documentation for the word for ‘lightning’ was transcribed using ‘ン’ (n) by all the students. An overview of the students’ transcriptions of recordings of words for ‘everyone’ (partly ‘all together’) from the three sites we selected are given in Table 44 on the next page. ‘ム’ (mu)

Table 44. 'Everyone': all seventeen students' transcriptions.			
Site	Kugai	Irabu	Miyaguni
	'everyone'	'everyone'	'all together'
Form	m:na	m:na	mʔnaçi
1	ウムナ (<i>umunna</i>)	ンナ (<i>nna</i>)	ブンナシ (<i>punnashi</i>)
2	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ピンナシ (<i>pinnashi</i>)
3	ンツナ (<i>ntsuna</i>)	ンナ (<i>nna</i>)	ピツナシ (<i>pitsunashi</i>)
4	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	インナシイ (<i>innashii</i>)
5	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
6	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
7	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ピンナシ (<i>pinnashi</i>)
8	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
9	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
10	ンナツ (<i>nnatsu</i>)	ンナア (<i>nnaa</i>)	ンナシ (<i>nnashi</i>)
11	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシイ (<i>nnashii</i>)
12	ンナツ (<i>nnatsu</i>)	ンナア (<i>nnaa</i>)	ンナシユ (<i>nnashu</i>)
13	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
14	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
15	ンナ (<i>nna</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)
16	ンナア (<i>nnaa</i>)	ンナ (<i>nna</i>)	インナシ (<i>innashi</i>)
17	ンナシ (<i>nnashi</i>)	ンナ (<i>nna</i>)	ンナシ (<i>nnashi</i>)

Table 45. 'Sea': all seventeen students' transcriptions.	
Site	Bora
Form	im
1	イン (<i>in</i>)
2	イン (<i>in</i>)
3	イン (<i>in</i>)
4	イヌ (<i>inu</i>)
5	イム (<i>imu</i>)
6	イン (<i>in</i>)
7	イン (<i>in</i>)
8	イン (<i>in</i>)
9	イン (<i>in</i>)
10	イツ (<i>itsu</i>)
11	イン (<i>in</i>)
12	ンユ (<i>n'yu</i>)
13	イム (<i>imu</i>)
14	イン (<i>in</i>)
15	ビュ (<i>byu</i>)
16	イン (<i>in</i>)
17	イン (<i>in</i>)

was only used in one transcription of the recording of the word for 'everyone' from Kugai; 'ン' was used in all the other answers for the two sites of Irabu and Kugai. In the case of the recording from Miyaguni, there is an audible interruption in the form of a glottal closure; it is difficult to identify any particular reaction to this, but compared to the transcriptions of the Irabu and Kugai recordings, the students can be seen to have come up with a variety of ways to describe the first part of the word. The fact that four students began their answers with *p*- may indicate that they perceived the bilabial *m* as a voiceless stop due to a reinforced articulation caused by the interruption in the form of the glottal closure following it. Answers such as 'ピツナシ' (*piʔnashi*) could be seen as providing evidence for this. As it is possible that the younger generation in the Miyakojima area is able to perceive this *m* accurately but cannot think of a way to transcribe it other than to use 'ン' as in Standard Japanese, it is unclear how they actually perceived the sound. The results for the word for 'sea' (only a recording from Bora was used) were mostly the same in this regard.

In the above, we have reported on the results regarding words containing sounds that appear to correspond to **ri*, **ki*, or **hi*, as well as syllabic *m*. While we have also obtained data regarding the perception of the voiced consonant *g*- followed by a central vowel, as well as of sounds that appear to correspond to **i*, the answers were considerably more diverse than those reported here for **ki* and **hi*, apparently indicating that these sounds were more difficult for the high school students to perceive accurately. For example, the students used a variety of word-initial consonants, the overall shape of the words becoming quite far removed from the recordings, and they inserted 'イ' (*i*) before consonants even in cases where there was a distinct friction noise, as in the recordings from Kugai; there were therefore some striking tendencies that were not observed in the case of voiceless consonants.

The degree of comprehension was on the whole extremely low; the only words for which meanings were given were those for 'head' (two correct answers), 'sugar cane' (two correct answers), 'you' (four correct answers), 'person'

(including ‘elderly person’; five correct answers), and ‘everyone/all together’ (four correct answers). There was only one case in which a student gave the correct meaning of a word for all the recordings from multiple sites: one student gave the correct meaning for the word for ‘head’ for each of the used recordings.

3.2.5 Speech perception results for the sentence items

In the discussion regarding Survey 1, we mentioned how the Miyakojima City high school students, at least, performed better than expected in transcribing the sentence items, which we had thought would be more difficult to perceive accurately; in Survey 2, too, the transcriptions of the sentence items matched the sound recordings more closely than expected. Setting aside whether the answers were correct, it especially catches the eye that meanings were given for the sentences more often than was the case with the word items. We thought that we might be able to examine the degree of comprehension regarding the predicates of the sentences if we managed to get the students

to give meanings for more sentences to begin with, by intentionally choosing sentence items containing familiar words that might be easy to understand quickly even for the younger generation, such as words for ‘high school student’, ‘(school) uniform’, ‘principal’, and ‘tea’. Below, we give the answers for two of the items for which particularly many students gave meanings.

Although the students’ transcriptions of the predicates are quite varied, one gets the sense from the above that the students were quite eager to comprehend the semantic content of the sentences, taking the associations ‘uniform—put on’ and ‘tea—drink’ as a starting point, even if their phonetic forms were difficult to perceive accurately. It can be assumed that the younger generation of the Miyakojima area, at least, also does this naturally in their interactions with the older generation, which still actively uses the dialects. If only the parts corresponding to ‘to put on’ and ‘to drink’ had been played back for the students, semantic comprehension would perhaps have been lower, as it was for the other word items. They grasped the gist of the sentences, not only in regard to the predicates, but also including particles and adverbs such as that for ‘now’; the younger generation can be surmised to encounter these kinds of elements in their interactions with the older generation, as well.

Table 46. ‘Sugar cane’: all seventeen students’ transcriptions for all three sites.

Site	Kugai	Bora	Irabu
Form	bu:gʔi	bʊ:gʔ ~ bʊ:ɕʔ	bu:ɕʔ
1	ウーズ (uuzu)	プーグ (puugu)	ブーズ (buuzu)
2	ウーヅ (uuzi)	ブーク (buuku)	ブーズ (buuzu)
3	ウオーイズン (wooizun)	ドーク (duuku)	プーグ (puutsugu)
4	ウージン (uujin)	ドーク (duugu)	ブーブ (buubwu)
5	ウーズ (uuzu)	ウーク (uuku)	ブーズ (vuuzwu)
6	ウィズン (wizun)	ドーク (dopuuku)	プーグ (puuguzu)
7	ウーイズ (uuzi)	ドーク (duugu)	ブーグ (buuguzu)
8	ブーズ (vuuzu)	ドーク (duugwutsu)	ブーグ (pwuuzwu)
9	ウーイズ (uuzi)	ドーク (duuku)	ブーグ (buuguzu)
10	ボーイズ (bōizu)	ブーク (buuku)	ブーグ (bwuguzu)
11	ウーイズ (uuzi)	ドーク (duugu)	ブーグ (buugu)
12	ウーズ (wuzu)	プーグ (puunkwu)	ブーグ (puunguzwu)
13	ウーズ (uuzu)	ブーグ (buuguzu)	ブーグ (buuguzu)
14	ウーズ (uuzu)	ドーク (duugu)	ブーズ (buuzu)
15	(no answer)	ドーク (dumuku)	ドーク (duuwa)
16	ウグイズ (uguzwu)	ドーク (duuugu)	ウーズ (uuzu)
17	ウーズ (wūzu)	ブーグ (buugu)	ブーグ (buuguzu)

Table 47. 'High school students wear uniforms'(Bora): all seventeen students' transcriptions.			
Form	ko:ko:ɕeija ɕeifku:du kʰ:	Meaning given	Transcription of kʰ:
1	コーコセイヤー セイフクヲド プスー (kookoseiya seifuku(w)odo pusuu)	'The high school students are wearing	プスー (pusuu)
2	コウコウセイヤー セイフクヲトオ ツー (koukouseiya seifuku(w)otoo tsuu)	'The high school students are wearing	ツー (tsuu)
3	コウコウセイヤー セイフクトウ プスー (koukouseiya seifukutu pusuu)	(no answer)	プスー (pusuu)
4	コウコウセイヤー セイフクオトウ クスー (koukouseiya seifukuotu kusuu)	(no answer)	クスー (kusuu)
5	コウコウセイヤー セイフクヲドウ キヌウ (koukouseiya seifuku(w)odu kinuu)	'The high school students are wearing uniforms.	キヌウ (kinuu)
6	コーコーセイヤー シェイフクウナ ツー (kookoseiya sheifukwana tsuu)	'High school students, put on uniforms.'	ツー (tsuu)
7	コーコーセイヤー セーフクヲトウ ツヅ (kookosei ya seefuku(w)otuu tsu(d)zu)	'High school students wear uniforms.'	ツヅ (tsu(d)zu)
8	コーコーセイヤー セーフクヲトウ ツユー (kookoseiyā seifuku(w)otuu tsuyuu)	'High school students wear uniforms.'	ツユー (tsuyuu)
9	コーコーセイヤー セーフクドゥプスー (kookooseeya seifukudupusuu)	(no answer)	プスー (pusuu)
10	(no answer)	(no answer)	(no answer)
11	コウコウセイヤー セーフクヲドウ、クスー (koukouseiyā seifuku(w)oduu, kusuu)	'High school students wear uniforms.'	クスー (kusuu)
12	ホウホウセイヤー シェイフクウナ クスー (houhouseiya sheifukwana kusuu)	'High school students wear uniforms.'	クスー (kusuu)
13	コウコウセイヤー セーフクヲドウ クスー (koukouseiya seifuku(w)odu kusuu)	(no answer)	クスー (kusuu)
14	コウコウセイヤー セーフクヲトウ ピスー (koukouseiya seifuku(w)otu pisuu)	'High school students wear uniforms.'	ピスー (pisuu)
15	コウコウセイヤーセーフクヲトウスー (koukouseiyaseifuku(w)otokusuu)	'High school students wear uniforms.'	クスー (kusuu)
16	コーコーセイヤー セーフク トウオ スー (kookoseiyā seifuku tuo suu)	(no answer)	スー (suu)
17	コーコーセイヤーセーフクトウスー (kookoseiyaseifukutopusuu)	(no answer)	プスー (pusuu)

4 Conclusion

Among the dialects of the Ryukyu Islands, those of the Miyakojima area are considered to have been relatively well preserved. The perception of them as unusual among the dialects of Okinawa Prefecture is also well established. It has also become clear in our surveys that the younger generation of Miyakojima themselves, too, have an awareness of the unusual character of their local dialects. Nevertheless, the results of these surveys do seem to indicate that there are many issues to be overcome in passing on their phonological systems. The fact that high school students can get a sense of what a sentence means on the basis of, for example, some of the elements within it and the context, even if their ability to perceive the individual sounds accurately is lacking, would seem to be due their daily experiences in interacting with, for example, their grandparents.

In this way, close interaction between the younger and older generations would seem to be an important factor to consider in regard to the passing on of these dialects. In the 2011 high school survey, we asked the students whether they lived together with their grandparents; the results are given in Table 49 on the next page. Although there is a large regional difference between Miyakojima and Irabujima, an average of more than thirty percent live with their

Form	ŋa:ja nnamadu numtaʔi	Meaning given	Transcription of 'numtaʔi'
1	チャーヤ ンナマズヌンタン (chaaya nnamazununtan)	(no answer)	ヌンタン (nuntan)
2	チャーヤ、ンナマド ノンター (chaaya, nnamado nontaa)	'That person was drinking until now.'	ノンター (nontaa)
3	チャーヤ ナマズヌンタル (chaaya namazununtaru)	(no answer)	ヌンタル (nuntaru)
4	チャーヤンナマドウ ヌンタ (chaayannamadu nunta)	(no answer)	ヌンタ (nunta)
5	チャーヤ イツフトウ アスピタア *(chaaya itsufutu asupitaa)	(no answer)	アスピタア *(asupitaa)
6	キヤーヤ ナマデ ヌンタル (kyaaya namade nuntaru)	'The tea is lukewarm!'	ヌンタル (nuntaru)
7	チャーヤ ンナマドウ ヌンタウ (chaaya nnamadu nuntau)	(no answer)	ヌンタウ (nuntau)
8	チャー ヤンナンマドウ ヌンタウ (chaa yannanmadu nuntau)	'I was drinking tea until now.'	ヌンタウ (nuntau)
9	チャーヤ ンナマドウ ヌントウン (chaaya nnamadu nuntun)	(no answer)	ヌントウン (nuntun)
10	(no answer)	'You were drinking liquor until now, or something?'	(no answer)
11	チャーヤ、ンナマドウ ヌンタウ (chaaya, nnamadu nuntau)	'Now...'(now)	ヌンタウ (nuntau)
12	チャーアアヤ ナマド ヌウンタウン (chaaaaya namado nwuntaun)	(no answer)	ヌウンタウン (nwuntaun)
13	チャーヤ ンナマドウ ヌンタヴ (chaaya nnamadu nuntau)	'I was drinking tea until now.'	ヌンタヴ (nuntau)
14	チャーヤ ンナマドゥー ヌーター (chaaya nnamaduu nuutaa)	'I was drinking tea until now.'	ヌーター (nuutaa)
15	チャーヤンナマドウヌンタ (chaayannamadununta)	'I was drinking tea until now.'	ヌンタ (nunta)
16	チャーヤ ナマズ ヌンタン (chaaya namazu nuntan)	(no answer)	ヌンタン (nuntan)
17	チャーヤナマドウヌンタウ (chaayanamadununtau)	(no answer)	ヌンタウ (nuntau)

(the answer marked with '*' appears to have been mixed up with that for another item)

grandparents, which means that there are still plenty of opportunities for contact. According to the high school students, the dialects are still used widely by the generation of their grandparents, but the use of Standard Japanese or what could be called 'intermediate dialects' is more widespread in the generation of their parents. They say that while their parents understand the dialects spoken by their grandparents and are able to use them as well, they hardly use the dialects when speaking to their children. On the Miyako islands, too, core families are becoming increasingly prevalent; especially in urbanized areas such as Hirara, collective housing in the form of apartment buildings and the like has been increasing, as well, causing family configurations to change swiftly. We may still be hopeful in regard to the passing on of the dialects if an interest in their phonological systems can be cultivated while the younger generation is still able to grasp the gist of

High school	Do not live together	Live close by	Live together	Used to live together	No answer etc.
A (Miyako)	71.43%	1.79%	16.07%	3.57%	7.14%
B (Irabu)	46.67%	3.33%	46.67%	3.33%	0.00%
Mean	59.05%	2.56%	31.37%	3.45%	4.65%

(the survey was conducted in November 2011 with 130 participants; no distinction was made between paternal and maternal grandparents).

what is said using them. It is also for this reason that an orthography that is suitable for general use is needed.

In these surveys, we have attempted to utilize the raw sound recordings of the older generation obtained in the joint survey. As a result, the recordings were not of the best possible quality; on the other hand, one could say that they approached the daily environment of the younger generation closely. Against this background, the fact that they could make distinctions between regional variants based on the recordings and tried to come up with their own transcriptions leads us to conclude that their interest in the dialects has itself not waned, and that given the right policies, the passing on of these dialects may still be possible.

Bibliography

- Aoi, Hayato. 2012. 'Minami-Ryūkyū Miyako Hōgen no On'in Kōzō'. In: Makoto Minegishi, Osamu Hieda, Emiko Hayatsu, Yuji Kawaguchi (eds.), *Kōpasu ni Motozuku Gengogaku Kyōiku Kenkyū Hōkoku*, 8:99–113.
- Ogawa, Shinji. 2011. 'Kore kara no Ryūkyūgo ni Hitsuyō na Hyōkihō wa Dono Yō na Mono ka?' *Nihongo no Kenkyū (Studies in the Japanese Language)*, 7(4):99–111.

Additional samples: distribution maps of some characteristic sounds
(roughly divided into groups represented schematically by uppercase letters)

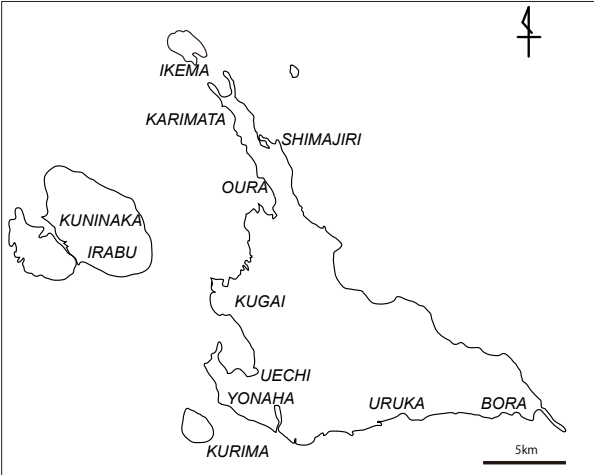


Figure 1. Vocabulary module reseach sites

Ikema	Uechi	Kuninaka
Karimata	Yonaha	Irabu
Shimajiri	Kurima	
Oura	Uruka	
Kugai	Bora	

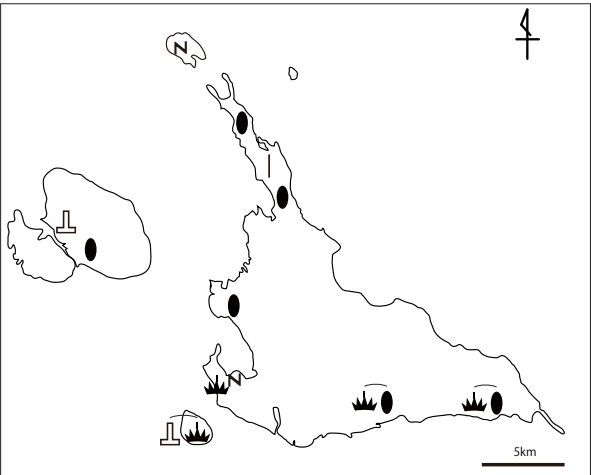


Figure 2. 'Head'

	Friction noise	KANAMAZ
	No friction noise	KANAMAI
	Syllabic consonant	KANAMAL
	Different word form	
	No data	

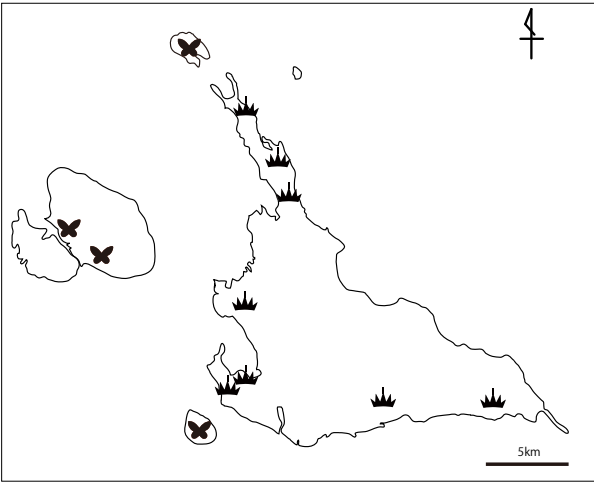


Figure 3. 'Liver (heart)'

	Friction noise	KSIMU
	Affricate	CIMU

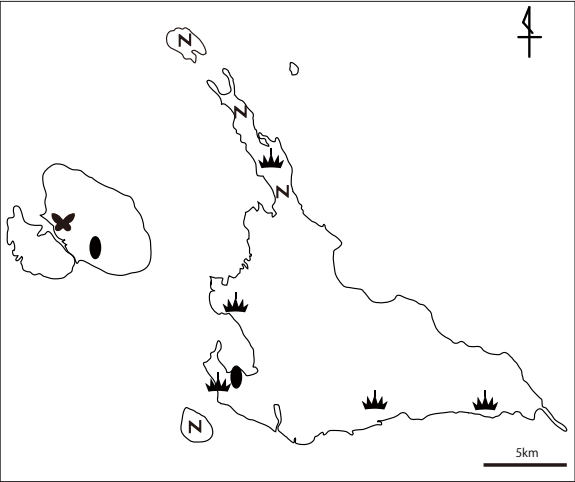


Figure 4. 'Fog'

	Friction noise	KS1:
	No friction noise	KIRI
	Syllabic consonant	CI:
	No data	

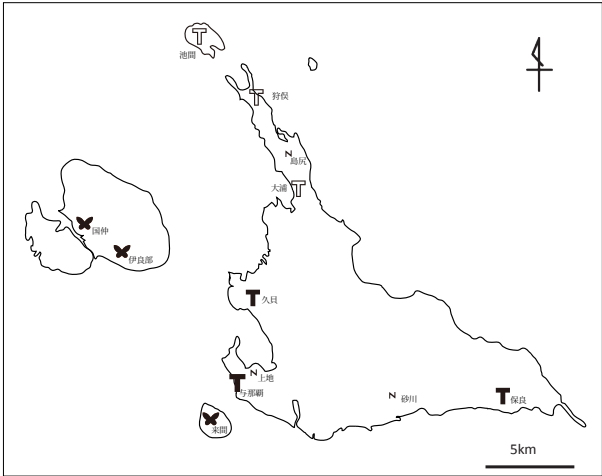


Figure 5. 'Breath'.

T	Frikcion noise	IKSI
T	No friction noise	IKI
🦋	Affricate	ICI
N	No data	

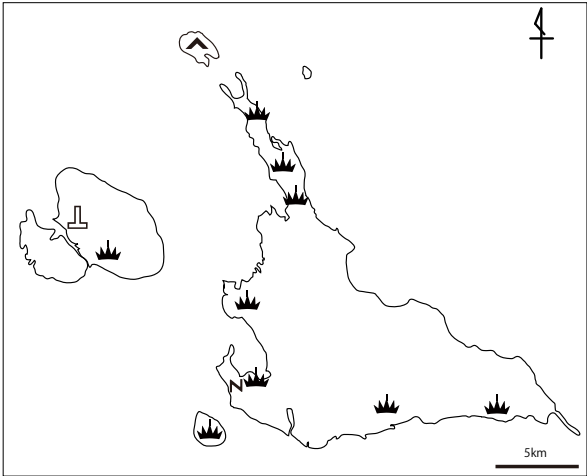


Figure 6. 'Daytime'

👑	Frikcion noise	PSIMA
🕒	No friction noise	PI:MA
⌋	Syllabic consonants	PILMA
▲	HI:MA	
N	No data	

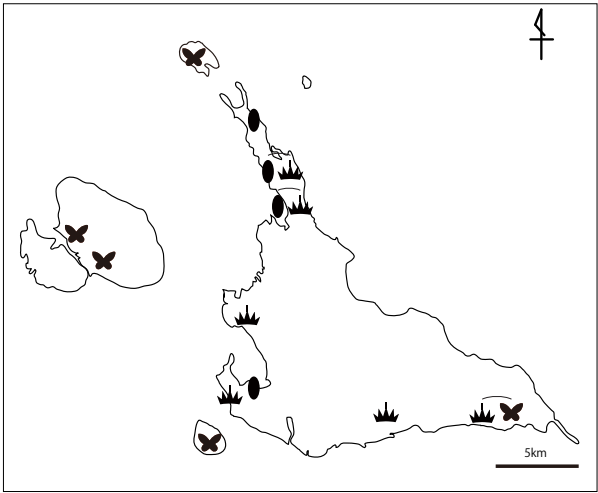


Figure 7. 'Sugar cane'..

👑	Frikcion noise	BU:GZI
🕒	No friction noise	BU:GI
🦋	Affricate	BU:DZI

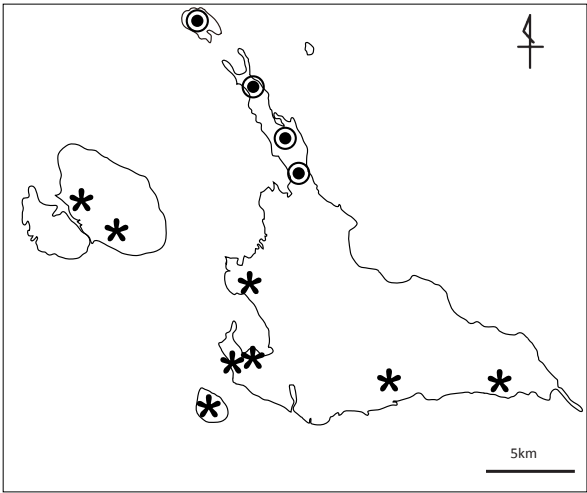


Figure 8. 'Sea'

*	IM
⊙	IN

5. Research Data

Regarding Notation and Transcription

Nobuko KIBE

1 Basic transcription policy

The survey data of the ‘Basic vocabulary *a*’, ‘Basic vocabulary *b*’, and ‘Grammar’ modules of the 2011 Miyako dialect survey are given in this chapter. The reader is referred to Chapter 2, ‘Survey Overview’, for the contents and survey methods of each of these modules. In this section, I will explain the method used for transcribing the survey data. The transcription policy is as follows.

- (1) Word forms are transcribed using the International Phonetic Alphabet. There is, however, a variety of views regarding the interpretation of the sounds of the Miyako dialects. Consequently, there is also a variety of transcription methods. We have chosen not to adopt a single standard in this report, opting instead to present the data using the transcription with which the researchers working at each site have reported them.
- (2) Accent is not transcribed, with the exception of the Karimata area data of the ‘Basic vocabulary *b*’ module, in which accent markings are included as reported by the researchers. In these data, the locus of rising pitch is indicated with ‘[’ and that of falling pitch with ‘]’.
- (3) In cases where a single speaker gave multiple word forms, these are given together separated by ‘/’. In cases where the pronunciation of a single speaker fluctuated, the different pronunciations are given connected with ‘~’. In cases where different speakers gave different word forms, these are given separated by ‘//’, and an uppercase letter indicating the speaker is added after each in brackets ‘[]’. For example, [A] and [B] indicate utterances by Ms. Kawamitsu and Ms. Tamashiro, respectively, in the case of data recorded at Kurima. In cases where a speaker reported a regional difference, the names of the regions are given in brackets ‘[]’, as well. Examples of this are ‘[Bora]’ and ‘[Aragusuku]’.
- (4) In cases where the pronunciation of a grammar item fluctuated or multiple word forms were given for it, the pronunciations or word forms in question are given enclosed in braces ‘{ }’. For example, ‘N-155B-2: Ikema: kju:ja {teŋkinu / suranu} baikai_aba tubimunumai tuban (today-TOPIC weather-SUBJECT to.be.bad-because plane-TOPIC to.fly-NEGATIVE)’ indicates that the two word forms *teŋkinu* and *suranu* were given for ‘weather-SUBJECT’. In cases where multiple complete sentences were given, these are

given separated by ‘||’. For example, ‘N-155B-2: Kurima: kʲu:ja tintsʲnu baʒkariba ɕiko:kʲa: tubaŋ || kʲu:ja va:tstsʲnu janakariba ɕiko:kʲa: tubaŋ’ indicates that two sentences were given for ‘today-TOPIC weather-SUBJECT to.be.bad-because plane-TOPIC to.fly-NEGATIVE’.

- (5) Other information regarding word forms is given in parentheses ‘()’, while related forms are introduced by ‘<cf.>’.
- (6) ‘[new]’ and ‘[old]’ indicate new and old word forms, while [elicited] indicates that the word form in question was elicited after suggestion by a researcher.

2 Differences in transcription among researchers

As indicated in (1) above, there is a variety of views regarding the interpretation and transcription of the sounds of the Miyako dialects. We have chosen not to adopt a single standard in this report, opting instead to give the transcription with which the researchers working at each site have reported the data without change. What is known as the ‘central vowel’, too, is transcribed using the symbol with which each group of researchers has reported the data. When the transcription of this ‘central vowel’ differs among survey sites, therefore, this difference does not necessarily imply a regional difference in pronunciation. It may, after all, also be the case that an identical pronunciation is interpreted differently phonologically by different researchers. Furthermore, speakers and researchers differ for the first, middle, and last subsets of the grammar items, as indicated in Chapter 2, ‘Survey Overview’. Consequently, there are cases where the transcription of this ‘central vowel’ differs among the first, middle, and last subsets. In these cases, too, the difference in transcription does not necessarily imply a difference in pronunciation among speakers, as it may also result from a difference in phonological interpretation among researchers. The reader is asked to keep this in mind when using this report. The symbol used for this ‘central vowel’ by each of the groups of researchers is given in Table 1.

Table 1. Different symbols for what is called the ‘central vowel’.

<i>Module</i>	<i>Site</i>	<i>Researchers</i>	<i>Symbol</i>
Basic vocabulary <i>a</i>	Ikema	Lawrence, Ogino, Hirako, Aoi	ĩ
	Karimata	Lawrence, Nakazawa	ĩ
	Shimajiri	Shirata, Pellard	ɿ
	Ōura	Hayashi, Takemura	ɿ
	Kugai	Lawrence, Nakahara, Kawase, Kubozono	ĩ
	Yonaha	Shirata, Ogawa	ɿ
	Uechi	Nitta, Inoue, Kawase	ɨ

	Kurima	Lawrence, Hirako	ĩ
	Uruka	Karimata, Kibe, Hirayama, Takemura	ɿ
	Bora	Shirata, Tokunaga, Pellard	ɿ
	Irabu	Pellard, Takemura	ɿ
	Kuninaka	Nitta, Nakazawa	ĩ
Basic vocabulary <i>b</i>	Ikema	Nitta, Hirayama, Matsuura, Kawase	ɿ
	Karimata	Nakajima, Takeda	ĩ
	Shimajiri	Shimoji, Hayashi	ɿ
	Ōura	Hirako, Kubozono	ɿ
	Nobaru	Nohara, Tokunaga, Matayoshi, Hirayama	ɿ
	Bora	Nitta, Hirako, Nakazawa	ɿ
	Irabu	Kibe, H. Nakama, Toyama	ɿ
	Kuninaka	Morooka, Tokunaga	ĩ
Grammar (first)	Ikema	Nohara, Nakahara, Davis, Utsumi	ĩ
Grammar (last)	Ikema	Matayoshi, Yamada, Shirata, Toyama	ɿ
Grammar (first)	Karimata	Nakahara, Matsumoto	ĩ
(middle)	Karimata	K. Nakama, Davis, Utsumi	ɿ
Grammar (first)	Kugai	Nohara, Hayashi, H. Nakama, Matsumoto	ɿ
Grammar (first)	Yonaha	Shimoji	ɿ
(middle)	Yonaha	Hayashi	ɿ
Grammar (first)	Kurima	Karimata, Utsumi, Davis	ɿ
(middle)	Kurima	Kaneda, Inoue, Takeda	ɿ
Grammar (first)	Miyaguni	Kaneda, Takeda	ĩ/ɿ
(middle)	Miyaguni	Takubo, Nakajima	ĩ
Grammar (first)	Uruka	K. Nakama, Inoue, Ogino	ɿ
(middle)	Uruka	Nishioka, Utsumi, Davis	ĩ
Grammar (first)	Bora	Karimata, Toyama	ɿ
(middle)	Bora	Shimoji, Morooka	ɿ
(last)	Bora	Karimata, Kaneda, Yamada, Morooka	ɿ
Grammar (last)	Kuninaka	Nakajima	ɿ

Representative examples of the above, taken from ‘Basic vocabulary *a*’ and Basic vocabulary *b*’, are given in Table 2. As regards the grammar items, the researchers’ initials have been provided in the rightmost column of the ‘Miyako Dialect Grammar Items: Data’ section. The reader is referred to Table 1 above for the corresponding names.

Table 2. Words containing what is called the ‘central vowel’.

Basic vocabulary a

Consonant	p	p,b	p,b	m	m
Number	a155	a169	a016	a087	a104
Site	‘daytime’	‘to be cold (to the touch)’	‘beard; mustache/hair’	‘meat (of sea urchins and the like)’	‘garlic chive’
Ikema	hi:ma	higurumunu	higi	mi:	mi:na
Karimata	psm̥a	bzguw	bzguw ~ bzgĩ ~ biḡĩ	mĩ:	mizza
Shimajiri	p ^ɕ inaχa / p ^ɕ ma	b ^ɕ iguru	b ^ɕ igi	mi ^ɕ ɿ	mi ^ɕ ɿna
Ōura	p ^ɕ ma	b ^ɕ igurukan	p ^ɕ igi ~ piḡi	miɿ	miɿna
Kugai	psima	psigurumunu	psgi	kaɕaˈsanumiz	mizza
Yonaha	p ^ɕ ma	p ^ɕ iguro:nu	p ^ɕ igi	m ^ɕ ɿ:	m ^ɕ ɿ:na
Uechi	p ^ɕ ima	p ^ɕ isa ~ p ^ɕ isa	p ^ɕ igi	mi:	miḡla ~ milna
Kurima	pssima	pzguro:	psgi	mĩ:	mĩ:na
Uruka	p ^ɕ ɿ:ma	psguru:psguru	psgi ~ p ^ɕ igi	mɕ:	n ^ɕ ira / mizna ~ miɿna
Bora	p ^ɕ ɿ:ma	p ^ɕ iguro:nu	p ^ɕ igi	m ^ɕ ɿ:	sɿna ~ sɿna
Irabu	p ^ɕ ɿ:ma	p ^ɕ igurumunu	p ^ɕ igi / fɿtsɿp ^ɕ igi	miɿ	nubiɿ
Kuninaka	p ^h il:ma	p ^h igurumunu	p ^h igi	mi:	miɿna

Consonant	s	s	s	s	ts,s
Number	a003	a007	a008	a014	a032
Site	‘comb’	‘lip’	‘tongue’	‘gum (of the teeth)’	‘knee’
Ikema	fɿçɿ	fɿtsĩ	çta	haɕisĩ	sĩgusĩ
Karimata	fɿsĩ = f ^w sĩ	sĩba	çta	p ^h abasĩ	tsĩgasĩ / p ^h ĩɕa
Shimajiri	ssɿ	ɿba	ɿda	p ^h abas(ɿ)	tugusɿ ~ tugasɿ
Ōura	s: ~ sɿ:	NR	ɿda ~ ɿda	p ^h a:nuni:	sugasɿ
Kugai	fsĩ	sĩba	sĩda	p ^h asĩ ~ p ^h asĩ	tsĩgusĩ
Yonaha	f ^s ɿ	s ^ɕ ɿba	s ^ɕ ɿda	pazɿɿ	tsɿgusɿ
Uechi	fu (or ‘ff?’)	siba	sida	pasi:si	tsigusi
Kurima	fɿsĩ	sĩba	sĩda	p ^h asĩ:sĩ	tsĩgusĩ
Uruka	fɿ ~ fɿɿ ~ fɿsɿ	sɿa ~ spa	sɿda ~ sɿda	pabasɿ ~ pabas	tsigusɿ ~ tsɿgusɿ
Bora	fɿsɿ	sɿba	sɿda	p ^h apasɿ ~ p ^h abasɿ	tsɿgusɿ
Irabu	fɿsɿ	sɿba	sta	p ^h asɿ:sɿ	tsɿgusɿ
Kuninaka	fsu	sibaya	sĩta (or ‘sta?’)	–	tsigusi

Consonant	ɖ	ɖ,g	ɖ,g	ɖ,g	ɖ,g
Number	a127	a091	a118	a116	a033
Site	‘water’	‘sugar cane’	‘nail; spike; peg’	‘saw’	‘leg’
Ikema	miɖi	bu:ɖi	kanifuɖi	nukuɖi	haɖi
Karimata	mi ^(d) zi	bu:gi	fugi ~ fugu	nukagi	p ^h agu
Shimajiri	miɖɭ	bu:gɭ ~ bu:gʒɭ	fugʒɭ	nukagʒɭ	p ^h agɭ ~ p ^h agʒɭ
Ōura	miɖɭ	bu:gɭ ~ bu:gʒɭ	k ^h anifugɭ	nukagʒɭ	p ^h agɭ ~ p ^h agʒɭ
Kugai	miɖi	bu:gʒi	k ^h anifugz / fugz	nukugz	p ^h aɖi
Yonaha	mi ^d zɭ	bu:gʒɭ	fugʒɭ	nukugʒɭ	p ^h agʒɭ
Uechi	miɖi	bu:gi	fugi	nukugi ~ nufugi	pagi
Kurima	miɖi	bu:ɖi	fɖi / k ^h anfuɖi	nukuɖi	p ^h aɖi
Uruka	miɖɭ	bu:gʒ	fgʒ	nukugʒ	pagʒ
Bora	mi ^d zɭ	bu:gʒɭ ~ bu:ɖɭ	fugʒɭ	nukugʒɭ	p ^h a ^d zɭ ~ p ^h agʒɭ
Irabu	mi ^d zɭ	bu:ɖɭ	fɖɭ	nuk ^h aɖɭ:	p ^h aɖɭ
Kuninaka	miɖi	bɸ:ɖi	kanifuɖi / fɖi	nɸkɸɖi	pazi (or ‘paz’?)

Consonant	ɖ,g,b,ts	ɖ,g,b	ts	ts	ts
Number	a010	a122	a006	a025	a031
Site	‘yawn’	‘sash; belt’	‘mouth’	‘blood’	‘mother’s milk; breast’
Ikema	afɖi	sɸku: ~ si ^h ku:	fɸtsi	akatsi	tsi:
Karimata	afu	si ^h ugu	fɸtsi	ha:tsi	tzii:
Shimajiri	afkʒɭ ~ afk ^s ɭ	safugʒɭ ~ sapugʒɭ	ftsɭ	aχatsɭ	tssɭ
Ōura	NR	subagɭ	fɸtsɭ	ha:tsɭ	tsɭ
Kugai	afugʒi	si ^h pugz	ftsɪ	akatsi	tsi·
Yonaha	afukʒɭ	s ^s ɸpugʒɭ	fɸtsɭ	ak ^h ʌtsɭ	tsɭ:
Uechi	akubi	supugwu (or ‘supigi’?)	fɸtsi	aχʌtsi ~ akʌtsi	tsi
Kurima	afɖi	si ^h pudɖi	ftsɪ	akatsi // a ^k xatsi	tsi // tssi
Uruka	akubi ~ akɸbi	ʃpugz	fɪts ~ ftsɭ	akʌtsɭ ~ akʌtsɭ	tsɭ:
Bora	afutsɭ	spu ^d zɭ	fɸtsɭ	ak ^h ʌtsɭ	tssɭ
Irabu	akuo	sɭkubʒɭ	fɸtsɭ	aχʌtsɭ ~ ahatsɭ	tsɭ:
Kuninaka	afɸtsi (or ‘aftsi’?)	sɸkɸbʒi ~ sɸkɸbi	fɸtsi (or ‘ftsi’?)	ak ^h ʌtsi	tsi

Consonant	ts,s	ts	ts	ts	ts
Number	a032	a073	a125	a142	a150
Site	‘knee’	‘horn (of an animal)’	‘fire’	‘the moon; month’	‘road; path; way’
Ikema	sĩgusi	nnu	umatsĩ	tsĩtsĩ	ntsĩ
Karimata	tsĩgasĩ / p ^h ĩɕa	tsũu	ũmatsĩ	tskssu	ntsĩ
Shimajiri	tugusɿ ~ tugasɿ	tsɿnu	mmatsɿ	tskɿ ~ tsk ^s ɿ	ntsɿ
Ōura	sugasɿ	tsɿnu	mmo:tsɿ	tskɿ	ntsɿ
Kugai	tsĩgusi	tsĩnu	umutsĩ	tskssu	mtsĩ
Yonaha	tsɿgusɿ	tsɿno	umatsɿ	tsɿk ^s ɿ / tsɿk ^s ɿnoju:	mtsɿ
Uechi	tsigusi	tsĩnu	ũmatsi	tsĩkiju˙	mtsĩ
Kurima	tsĩgusi	tsĩnu	umatsĩ	tsĩtsĩ // tsĩtsĩnuju:	mtsĩ
Uruka	tsɿgusɿ ~ tsɿgusɿ	tsnu ~ tsũnu	umats ~ umatsɿ	tsks	mts ~ mtsɿ
Bora	tsɿgusɿ	tsɿno	mmatsɿ	tskɿ	mtsɿ
Irabu	tsɿgusɿ	tsɿnu ~ tsɿno	umatsɿ	tsstu ~ tsstsu (?)	mtsɿ
Kuninaka	tsigusi	tsinũ	ũmatsi	tsĩttũ	ntsĩ

Consonant	ts	ts	k,ts	k,ts	k,ts
Number	a153	a115	a009	a030	a121
Site	‘dew’	‘common garcinia (tree)’	‘breath’	‘liver’/‘heart’	‘clothing; kimono’
Ikema	tsĩ:	kutsĩgi	iki	tsĩmu (‘liver’)	tsĩŋ
Karimata	tsĩju	p ^h ũkagagi:	ikw	k ^s ĩmu	k ^s ĩŋ
Shimajiri	tɕiv	k ^h ũpag ^ɕ gi:	–	k ^s ɿmu	k ^s ɿŋ
Ōura	tsɿv	p ^h ukagi	ikɿ	k ^s ɿmu	k ^s ɿŋ / fuku (‘clothing’)
Kugai	tsĩv	p ^h ukaɕgi:	ik ^s ĩ	k ^s zĩmu	k ^s ĩŋ
Yonaha	ts ^s ɿv	p ^h ũkugi:	–	k ^s ɿmu / basanaɿ	k ^s ɿŋ / k ^s ɿmono
Uechi	NR	pũkukugi	–	k ^ɕ ĩmu ~ kimu	kiŋ
Kurima	tɕuf	pukutsĩgi:	i ^s ĩ // itsĩ	tsĩmu	tsĩŋ
Uruka	tsv ~ tsɿv	pũkũkuki:~ pũkukugi	–	ksmu ~ k ^s ɿmu	kʂn
Bora	tsuv ~ tsɿv	fũkukgi: [new]	ik ^s ɿ	k ^s ɿmu	k ^s ɿŋ
Irabu	tsɿv	kuputsɿgi	itsɿ	tsɿmuutsɿ (‘heart’) / tsɿmu (‘liver’)	t ^s ɿŋ
Kuninaka	tũv	pũkutsigi˙	itsi	tsĩmu	tsĩŋ

Consonant	k,ts	Ø	Ø	Ø	Ø
Number	a163	a081	a092	a001	a012
Site	‘yesterday’	‘fish’	‘sickle; scythe’	‘head’	‘jaw; chin’
Ikema	nnu	zzu ~ ɖu	zzara ~ ^d zara	kanamai	utugai
Karimata	ksɲu	izu	izara	kanamaw ~ k ^h anamaï / aha	utugaw ~ tugaï
Shimajiri	k ^s ɲnu	zzu	zzara	aɣa	agu
Ōura	k ^s ɲnu	ɭzu	ɭzara	k ^h anamaɭ	utuguɭ
Kugai	ksɪnu	zzu	zzara	k ^h anamaz ⁱ	staguz
Yonaha	k ^s ɲno	zzu ~ ɭzu	zzara	k ^h anama ^z ɭ	st ^h uga ^z ɭ
Uechi	k ^s ɪnu	ⁱ zzu	ⁱ zzara	kanamaʒe	agu
Kurima	tsino	zzɸ	zzara	k ^h anamaɭ // x ^h anamaz	s ^w tugaɭ
Uruka	kɣnu:	zzu	zzara	k ^h anamaz _ɸ ~ k ^h anamaɭ	agu
Bora	k ^s ɲno:	zzu ~ ɭzu	zzara	k ^h anama ^z ɭ ~ k ^h anamaɭ	agu / utugaɭ ~ utugaɖɭ
Irabu	tsɲnu:	ɭzu	ɭzara	k ^h anamaɭ (‘ɭ’ sometimes sounds like ‘l’)	agu / utugaɭ
Kuninaka	tsinɸ	(ⁱ)zzu:	ⁱ zzara	kanamaɭ	ɸtugaɪ

Consonant	Ø	Ø	Ø	Ø	Ø
Number	a057	a066	a077	a082	a099
Site	‘niece’	‘ant’	‘bird’	‘scale (of an animal)’	‘rice’
Ikema	m ^j u:i	akai	tui	tsi:ɖi / i:ki	mai
Karimata	m ^j u:ï	ha:u	tuu	i:ki	mau
Shimajiri	mju: ^z ɭ	aɣa ^z ɭ	t ^h u ^z ɭ	–	maɭ ~ ma ^z ɭ
Ōura	m ^j u:ɭ	ha:ɭ ~ xa:ɭ	t ^h uɭ	–	maɭ
Kugai	m ^j u:z	aka:z	t ^h uz	izki	namamaz / maz
Yonaha	m ^j u: ^z ɭ (‘nephew’/ ‘niece’)	aka: ^z ɭ	t ^u ^z ɭ	–	ma ^z ɭ
Uechi	mjuə ^z / mjuəffa	ak ^ɣ a:ɭ	tou	–	mal
Kurima	m ^j u:ï ~ m ^j u:z	akaɭ // akaz	t ^h uz	izki	maz // maɭ
Uruka	m ^j u:z	azgara	tuz	–	maz _ɸ ~ maɭ
Bora	m ^j u:ɭ ~ m ^j u: ^z ɭ	a ^z ɭgara // ak ^h a: ^z ɭ	t ^h uɭ	ɭ ^z :ki	ma ^z ɭ
Irabu	m ^j u: ^z ɭ	aha:ɭ	t ^h u ^z ɭ ~ t ^h uɭ	i ^z ɭkja	maɭ
Kuninaka	mju:ɭ ~ mju:ɭ ^z	aka:ɭ	tɸɭ	iɭki	maɭ

Consonant	Ø	Ø	Ø	Ø	Ø
Number	a100	a103	a112	a120	a126
Site	‘(wooden) bowl’	‘garlic’	‘fruit; nut’	‘needle; pin’	‘ash’
Ikema	makai	hi:	mi:	hai	karahai
Karimata	ma:u	p ^s i:	n:ta	p ^h au	karapau
Shimajiri	maχaɿ ~ maχa ^z ɿ	p ^h i ^z ɿ	mi ^z ɿ / na ^z ɿ	pi ^z ɿ	karapa ^z ɿ
Ōura	makaɿ	p ^h iɿ	naɿ	piɿ	k ^h arapaɿ
Kugai	mak ^h az ⁱ	p ^h iz	naz	piz	k ^h arap ^h az / p ^h az(i)
Yonaha	mak ^h a ^z ɿ	p ^h i ^z ɿ	ki:nuna ^z ɿ	p ^h i ^z ɿ	k ^h arapa ^z ɿ
Uechi	mak ^χ al	p ^h il / p ^h iltɕikina	na ^z ~ naɕ ~ nau	p ^h i ^z ~ p ^h iɿ ~ p ^h iũ	karap ^h aɿ ~ karap ^h a ^z
Kurima	makaɿ // makaz	piz	(ki:nu) naz	p ^h iz	karabaɿ // karabaz
Uruka	makaz ~ [sic.]	piz ~ pi ^z	naz	p ^h i ^z	karapaz
Bora	maka ^z ɿ	p ^h i ^z ɿ	na ^z ɿ	p ^h ja ^z ɿ	k ^h arapaɿ ~ k ^h arapa ^z ɿ
Irabu	maxaɿ ~ mahaɿ	p ^h iɿ	naɿ	p ^h aɿ	k ^h ara paɿ
Kuninaka	makaɿ	p ^h iɿ	naɿ	paɿ	karapaɿ

Consonant	Ø	Ø	Ø	Ø	Ø
Number	a139	a143	a145	a148	a137
Site	‘light’	‘the east’	‘the west’	‘(the) left (side)’	‘lightning’
Ikema	çikai	agai	i:	çidai	kannai
Karimata	pskau	a:u	niſi	bida ~ bzda	nnapskau
Shimajiri	pska ^z ɿ	aɸaɿ	i ^z ɿ	b ^z ɿda ^z ɿ	nnapska ^z ɿ
Ōura	pskaɿ	(agaɿ ~) a:ɿ	iɿ / niſɿ	b ^z ɿdaɿ	nnapsɿkaɿ / k ^h annaɿ (‘thunder’)
Kugai	pskaz	aɸaz	i ^z	pzdaz	m:napskaz
Yonaha	p ^s ɿka ^z ɿ	aga ^z ɿ	i ^z ɿ	p ^s ɿda ^z ɿ	nnap ^s ɿka ^z ɿ
Uechi	p ^s kal	aɸal	l: (or ‘ɿ:’?)	pidal ~ pida	mnap ^s ɸal (the ‘l’ is dorsal)
Kurima	pskaɿ	agaɿ // agaz	iɿ // iz	p ^h idaɿ // psdaz	nnabi ^h kaɿ // nnapskaɿ
Uruka	p ^s ka ^z	agaz	z:	p ^s da ^z ~ p ^s daɿ	nnap ^s ka ^z
Bora	pskaɿ	agaɿ	i ^z ɿ	p ^s ɿdaɿ ~ p ^s ɿda ^z ɿ	nnapska ^z ɿ
Irabu	p ^s kaɿ	a ^s aɿ	i ^z ɿ	p ^h idiɿ	mnapskai
Kuninaka	pi ^s kaɿ	agaɿ	iɿ	p ^s idaɿ	mnapikaɿ

Basic vocabulary b

Consonant	p	p	b	g,z,ɬ
Number	b013	b047	b111	b010
Site	‘tendon’	‘daytime; noon’	‘paper’	‘lower leg’/‘foot’
Ikema	haits	hi:ma (‘noon’)	kabi:	hazl (‘part of the leg from the knee down’)
Karimata	p ^s ikibaü	p ^s ima	kabi	pagi
Shimajiri	p ^h aɕidɬl	pssuma ~ pɬsuma	kab ^z l	karasɲi
Ōura	pskipaɭ	p ^s l:ma	kab ^z l	pagl
Nobaru	psɭkɭpaɭ (careful pronunciation) ~ psɭkupaɭ (normal pronunciation)	pɭru	kab ^z l	pagl (‘foot’)
Bora	p ^s kɭpaɭ ~ p ^s k ^z paɭ ~ p ^s kɭpaɭ ^z	p ^t si:ma	kabl ^z	pagw
Irabu	paztsɭ:	p ^s l:ma	kabz	paz
Kuninaka	paltsi:	pilma	kabi:	paɬi

Consonant	g,z	s	s	s	s
Number	b081	b012	b049	b052	b061
Site	‘cereal (specif. wheat, barley, rye & oats)’	‘shoulder’	‘star; celestial body’	‘island’	‘cattle (i.e. cow or bull)’
Ikema	muzl	katamuɕi:	hoɕi	ɕima	uɕl
Karimata	mugi	katamusi	psi	ɕima / sima	usi / uɕi
Shimajiri	mugz ~ mugl	ibira / k ^h ɤta	psɭ ~ pɤsɭ	sɭma	usɭ
Ōura	mug ^z l	katamusu	psɭ	sɭma	usɭ
Nobaru	mug ^z l (weak friction)	kɤtamusɭ ~ kɤtamusɭ / kɤta	pɤsɭ	sɭma	usɭ
Bora	mgɭ ^z	k ^h ata	psi ~ psɭ	sima	ussi
Irabu	nuz	kɤtamurasɭ	pɤs ~ pɤsɤ	sɤma	usɭ
Kuninaka	mugi	katamusu	pɤsi	sima	usi

Consonant	s	ts	ts	ts	ts
Number	b136	b076	b021	b022	b024
Site	‘down; below; under; bottom’	‘sago palm’	‘three (things)’	‘four (things)’	‘six (things)’
Ikema	ɕi̥ta / ɕi̥ta:ra	tɕu:tsɿ	mi:tsɿ	ju:tsɿ	m:tsɿ
Karimata	sita:ra	sisuɕɰ / stitsɰ / ssuɕɰ	mi:tsi / mi:tsɰ	ju:tsi / ju:tsɰ	n:tsi / n:tsɰ
Shimajiri	sta	NR	mi:tsɿ	ju:tsɿ	n:tsɿ
Ōura	sta:ra	—	mi:tsɿ	ju:tsɿ	nntsɿ
Nobaru	sɿta / sɿta:ra	sutitsɿ	mi:tsɿ	ju:tsɿ	m:tsɿ
Bora	sɿ̥ta	ʃuk ^h atsɿ̥	mi:tsi	ju:tsi	mmtsɿ
Irabu	ʃta:ra	sɕitsɿ	mi:tsɿ	ju:tsɿ	m̥:tsɿ
Kuninaka	sita:ra	sɕtetsi	mi:tsi	ju:tsi	m:tsi

Consonant	ts	∅
Number	b033	b101
Site	‘five (people)’	‘medicine’
Ikema	itsunuɕi̥tu	fɯsui
Karimata	itsɿ̥nuɕtu / ʔitsɿ̥nupɰtu	ɕswi / ɕusujɰ
Shimajiri	itsɿ nu ttu	ssuɿ
Ōura	itsɿ̥nupstu	fsui / ssui
Nobaru	itsɿ̥nupstu	fɯsu:ʔɿ
Bora	guni̥ŋ	fsi:z ~ fsi̥l̥ ^z
Irabu	itsɿ̥nu pstu	fɕʒ
Kuninaka	itsunup ^s itu	ɕusul

Furthermore, the transcription used for *ni* in such words as ‘a162: ja:ni (next year)’, ‘a172: funi (boat; ship)’, ‘b070: ni: (root)’, ‘b074: tani (seed)’, ‘b083: fun^ju: (mandarin orange)’, and ‘b116: ni: (load; cargo)’ also differs among researchers. The three transcriptions *ni*, *ni*, and *ni* are used for it; rather than implying different pronunciations, this difference appears to reflect a difference in phonological interpretation among the researchers. The transcriptions used by each of the groups of researchers are given in Table 3.

Table 3. Different transcriptions for *ni* in such words as ‘ja:ni (next year)’.**Basic vocabulary a**

Site	Researchers	Transcription	a162	a172
			‘next year’	‘boat; ship’
Ikema	Lawrence, Ogino, Hirako, Aoi	ni	ja:ni	funi
Karimata	Lawrence, Nakazawa	ni	ja:ni	funi
Shimajiri	Shirata, Pellard	ni	ja:ni	funi
Ōura	Hayashi, Takemura	ni	ja:ni	funi
Kugai	Lawrence, Nakahara, Kawase, Kubozono	ni	ja:ni	funi
Yonaha	Shirata, Ogawa	ni	ja:ni	fɯni
Uechi	Nitta, Inoue, Kawase	nʲi	ja:nʲi	funʲi
Kurima	Lawrence, Hirako	ni	ja:ni	funi
Uruka	Karimata, Kibe, Hirayama, Takemura	nʲi	ja:nʲi	ϕʉnʲi
Bora	Shirata, Tokunaga, Pellard	ni	ja:ni	fɯni
Irabu	Pellard, Takemura	ni	jaini	funi
Kuninaka	Nitta, Nakazawa	ni	ja:ni	funi

Basic vocabulary b

Site	Researchers	Transcription	b070	b074	b083	b116
			‘root’	‘seed’	‘mandarin orange’	‘load; cargo’
Ikema	Nitta, Hirayama, Matsuura, Kawase	ni	ni:	tani	funʲu:	ni:
Karimata	Nakajima, Takeda	ni	nibaɭ	tani	ϕniŋ / ϕniɯ / ϕnʲɯ	ni:
Shimajiri	Shimoji, Hayashi	ɲi	ɲi:	tapi	fɯnŋ	ɲimutsɯ
Ōura	Hirako, Kubozono	ni	ni:	tani	funiʔ	ni:
Nobaru	Nohara, Tokunaga, Matayoshi, Hirayama	ni	ni:	sani	funiɿ	ni:
Bora	Nitta, Hirako, Nakazawa	ni	ni:	tʰani	funiɿʔ	ni:
Irabu	Kibe, H. Nakama, Toyama	nʲi	nʲi:	tanʲi	f(u)nʲiz	nʲi:
Kuninaka	Morooka, Tokunaga	nʲi/ni	ni:	tani	ϕunʲiu	ni:

Grammar

<i>Module</i>	<i>Site</i>	<i>Researchers</i>	<i>Transcription</i>
Grammar (first)	Ikema	Nohara, Nakahara, Davis, Utsumi	ɲi
Grammar (last)	Ikema	Matayoshi, Yamada, Shirata, Toyama	nʲi
Grammar (first)	Karimata	Nakahara, Matsumoto	ɲi
(middle)	Karimata	K. Nakama, Davis, Utsumi	ni
Grammar (first)	Kugai	Nohara, Hayashi, H. Nakama, Matsumoto	ni
Grammar (first)	Yonaha	Shimoji	ni
(middle)	Yonaha	Hayashi	nʲi
Grammar (first)	Kurima	Karimata, Utsumi, Davis	nʲi
(middle)	Kurima	Kaneda, Inoue, Takeda	ni
Grammar (first)	Miyaguni	Kaneda, Takeda	ni
(middle)	Miyaguni	Takubo, Nakajima	ni
Grammar (first)	Uruka	K. Nakama, Inoue, Ogino	ni
(middle)	Uruka	Nishioka, Utsumi, Davis	ni
Grammar (first)	Bora	Karimata, Toyama	nʲi
(middle)	Bora	Shimoji, Morooka	nʲi
(last)	Bora	Karimata, Kaneda, Yamada, Morooka	nʲi
Grammar (last)	Kuninaka	Nakajima	ni

Basic Vocabulary A

No.	Item	Ikema	Karimata	Shimajiri
a001	‘head’	kanamai	kanamaʷ ~ k ^h anamaï / aha (‘ʷ’ is pronounced far towards the back; ‘i’ is frictionless.)	aχa
a002	‘head hair’	aka (‘body hair’) / ki:	karadzï	k ^h aradzɿ
a003	‘comb’	fʊɕi (not ‘fçi’)	fʊɕi = f ^w sï	ssɿ
a004	‘forehead’	ftai (‘t’ unaspirated)	ftai	–
a005	‘tear(drop)’	nada	nada	–
a006	‘mouth’	fʊtsï	fʊtsï	fɬɿ
a007	‘lip’	fʊtsï	sïba (wa:sïba ‘upper lip’; s; tasïba ‘lower lip’)	ʔba
a008	‘tongue’	ɬta	sɬa (sta:ra ‘down; below; under; bottom’)	ʔda
a009	‘breath’	iki	iku	–
a010	‘yawn’	afudzï	afu	afkʔ ~ afkʔ
a011	‘voice’	kui	k ^h ui	–
a012	‘chin’	utugai	utugaw ~ utugaï	agu
a013	‘jaw; jawbone’	utugaibuni (kamatsï ‘cheek’)	kamagida	agubuni (k ^h amats(ɿ) ‘cheek’)
a014	‘gum (of the teeth)’	haczišï	p ^h abasï (p ^h a: ‘tooth’)	p ^h abas(ɿ) (p ^h a: ‘tooth’)
a015	‘neck’	fudzï / nudu	nubai	nubai
a016	‘beard; mustache/hair’	higi	bzgu ~ bzgï ~ biği	bʔgi

No.	Ōura	Kugai	Yonaha
a001	k ^h anamaŋ	k ^h anamaz ⁱ	k ^h anamaʔ
a002	k ^h aradzŋ	k ^h ara ^d zi	k ^h ara ^d z
a003	s: ~ sɔ:	fsi ('f is unrounded)	fɔʊ
a004	futai ~ ftai	ftai	—
a005	nada	nada / mi:nada	—
a006	futsɔ	ftsɪ	futsɔ
a007	NR	sɪba	sʔba
a008	ɔda ~ ʔda	sɪda	sʔda
a009	ikɔ / ikssu ('breath-ACCUSATIVE')	ik ^s i	—
a010	NR	afugʔi	afukʔ
a011	—	kui	—
a012	utugun (k ^h ujun 'gill')	staguz ('t is unaspirated)	st ^h ɔgaʔ
a013	NR (k ^h amatsɔ 'cheek')	agubuni (k ^h amats 'cheek')	k ^h amatsɔ
a014	p ^h a:nuni:	p ^h asɪ ~ p ^h asɪ	pazɔ
a015	nubaŋ (nudu 'throat')	nubui / nudu (nudufugz 'back of the neck')	nɔbɔi / fɔgʔ ('back of the neck')
a016	pʔgi ~ pɔgi	psgi (also 'body hair')	pʔgi

No.	Uechi	Kurima	Uruka
a001	kanamaʒe	k ^h anamaʎ [A] // x ^h anamaz [B]	k ^h aṇamaz ~ k ^h anamaṇ
a002	karadzɪ	k ^h aradzɪ	karadzɪ ~ k ^h aṛadzɪ
a003	fu (or ‘ff’?)	fʊʂɪ	fʂ ~ fʂɪ ~ fʊʂɪ (‘ʊ’ is a labiodental approximant that functions as a vowel; ‘. ’ signifies that the sound in question begins voiceless.)
a004	—	fteɣ	—
a005	—	nada	—
a006	fʊʂɪ	fʂɪ	fʂ ~ fʂɪ
a007	sɪba (ofʂɪba ‘large mouth’)	sɪba	sɪba ~ spa
a008	sɪda	sɪda	sɪda ~ sɪda (or ‘sɪda’)
a009	—	i ^h si [A] // itsi [B]	—
a010	akubi	afudzɪ	akubi ~ akʊbi
a011	—	kui	—
a012	agu	s ^w tugaʎ (not ‘s ^w tugaz’; k ^h amats ‘cheek’)	agu
a013	kamatsɪ (‘jaw’) / agubuni (‘jawbone’)	k ^h amagida(buni)	k ^h amagita ~ kaṃmagita
a014	paʂɪ:sɪ (pa: ‘tooth’)	p ^h asɪ:sɪ	pabasɪ ~ pabas
a015	nubuci	nubui / nudu	nubui
a016	p ^ɛ igi	psgi (also ‘body hair’)	psgi ~ p ^ɛ gi

No.	Bora	Irabu
a001	k ^h anamaʔ ~ k ^h anamaɳ	k ^h anamaɳ (‘ɳ’ sometimes sounds like ‘l’; this also holds for the other vocabulary items that include this sound.)
a002	k ^h aradzɳ	k ^h aradzɳ
a003	fʊɳɳ	fʊɳɳ (‘ʊ’ is not as rounded as ‘u’; it also differs from ‘ɳ’)
a004	fʊɳtai	fʊɳtai
a005	nada	nada
a006	fʊɳɳɳ	fʊɳɳɳ
a007	sɳba	sɳba
a008	sɳda	sta
a009	ik ^h ɳ	itɳ
a010	afʊɳɳɳ	akuɳ
a011	k ^h ʊi	k ^h ui
a012	agʊ / ʊtʊgaɳ ~ ʊtʊgadɳ	agu / utugaɳ
a013	agʊ / k ^h amatsɳ (‘cheek’)	p ^h agita (t ^h aa ^h kamadɳ ‘cheek’)
a014	p ^h apasɳ ~ p ^h abɳasɳ	p ^h ɳɳɳ:ɳ
a015	nʊɳɳi	nudu / nubui
a016	p ^h ɳgi	p ^h ɳgi / fʊɳɳɳp ^h ɳgi

No.	Item	Ikema	Karimata	Shimajiri
a017	‘arm’	ti: (kaina ‘wrist’)	kaina	udzi (ibira ‘shoulder’)
a018	‘strength’	taja	taja	tskara ~ tsʰkara / tʰaja
a019	‘armpit’	jakata	bagida	baksta
a020	‘finger; toe’	ujubi	uʃbi	uibi
a021	‘hand; arm’	ti:	ti:	–
a022	‘fist’	NR	NR	tsifurj
a023	‘elbow’	hidzi	pidzi	pidʒa
a024	‘wound’	ndari	NR	kʰidʒa
a025	‘blood’	akatsi	ha:tsi (ha:munu ‘to be red’)	aʒatsa
a026	‘pus’	ŋ:ku	n:ku	–
a027	‘to be itchy’	kaumunu	ko:gaŋ / paʃkʰo:munu (in the case of a light itch)	–
a028	‘bone’	huni	pʰuni	pʰuni
a029	‘belly’	bata	bada	–
a030	‘liver’/‘heart’	tsimu (‘liver’; fu: ‘one of the internal organs’)	kʰimu	kʰamu
a031	‘mother’s milk; breast’	tsi:	tzi:	tsa
a032	‘knee’	sigusɪ	tsigasɪ / pʰidza	tugusa ~ tugasa
a033	‘leg’	hadzi	pʰagu / karasuni (‘lower leg’)	pʰaga ~ pʰagʒa
a034	‘foot’	stabija (‘foot’)	pssa	pssabʒʒa / pssa (‘sole’)

No.	Ōura	Kugai	Yonaha
a017	udi	t ^h i: / udi (k ^h aina ‘shoulder ache’)	k ^h aina
a018	t ^h aja	tskara / t ^h aja	tsɯkara / t ^h aja
a019	baksta	bak ^s idana	bak ^s ida
a020	wi:bi	ujabi	uibi
a021	—	t ^h i:	—
a022	NR	tsiftsim	t ^h iʊtsim
a023	p ^h idɯ	p ^h idzi	p ^h idɯ
a024	k ^h idɯ	k ^h idzi	jummai / k ^h idɯ (nibuta ‘swelling; boil’)
a025	ha:tsɯ	akatsi	ak ^h atɯ
a026	—	m:ku	—
a027	—	k ^h o:munu	—
a028	p ^h uni	p ^h uni	puni
a029	—	bat ^h a	—
a030	k ^s amu	k ^{sz} i ^h mu	k ^s mu/basana
a031	tsɯ	tsi:	tsɯ:
a032	sugasɯ	tsigusi	tsagʊsɯ
a033	p ^h agɯ ~ p ^h agɯ	p ^h adzi	p ^h agɯ
a034	pssa	psa	p ^s sa / p ^s sa ^h ʊgɯ (‘ankle’)

No.	Uechi	Kurima	Uruka
a017	udi / kaina ('forearm') / ti : ('hand')	ude / k ^h aina ('forearm')	kaina
a018	ṭsikara / taja (tjamunu 'to be strong')	taja	taja
a019	bakiḷa (or 'bakiḏa'?)	bak ^h ida [old] / bitta [new]	baksda
a020	uibi	u.ibi	ujubi ~ ujubḷ
a021	–	t ^h i:	–
a022	ti:sim	tivṭsim	ṭadṭafuṃ ~ ṭadṭafuṃ
a023	pidḷi	pidḷi	piḏa ~ piḏa
a024	kidḷi	NR	kiḏa ~ kiḏa
a025	aḥaṭṣi ~ akaṭṣi	akatsi [A] // a ^h xatsi [B]	akaṭṣa ~ akaṭṣa
a026	–	m:ku	–
a027	–	koḷoko:	–
a028	puni	p ^h uni	puni ~ p ^h uni
a029	–	bata	–
a030	k ^h imu ~ kimu	ṭsimu	ksmu ~ k ^h amu
a031	ṭsi	ṭsi [A] // ṭssi [B]	ṭa:
a032	ṭigusi	ṭigusi	ṭgusa ~ ṭagusa
a033	pagi	p ^h adḷi	pagz
a034	p ^h idza / piṣa	p ^h adḷibzza	pṣsa ~ pṣsa

No.	Bora	Irabu
a017	ɔ̃di / k ^h aina (‘back of the arm where it connects to the shoulder’)	k ^h aina
a018	t ^h aja	t ^h aja (t ^h u:munu ‘to be strong’)
a019	bak ^ɤ da [Bora] // bitta [Aragusuku]	batta
a020	ɔ̃ibi	uibi ~ oibi
a021	ti: / ɔ̃difɔ̃dzɔ̃ (‘wrist’)	t ^h i:
a022	t ^h iɔ̃tsɔ̃m ~ t ^h iɔ̃tsɔ̃m	t ^h ivtsɔ̃m
a023	p ^h i ^d zɔ̃ (p ^h it ^s ɔ̃ ~ p ^h i ^d zɔ̃ ‘elbow’)	p ^h idzɔ̃
a024	k ^h i ^d zɔ̃	k ^h idzɔ̃
a025	ak ^h at̚sɔ̃	axat̚sɔ̃ ~ ahat̚sɔ̃ / ahamunu (‘to be red’)
a026	m:kɔ̃ (nɔ̃bɔ̃ta ‘swelling; boil’)	umku
a027	k ^h aɔ̃kaɔ̃	k ^h o:munu
a028	p ^h ɔ̃ni ~ pɔ̃ni	p ^h uni
a029	bata	bata
a030	k ^ɤ amɔ̃	tsamuɔ̃tsɔ̃ (‘heart’) / tsɔ̃mu (‘liver’)
a031	tsɔ̃ / tsɔ̃sɔ̃ (‘mother’ s.milk/breast-ACCUSATIVE’)	tsɔ̃:
a032	tsɔ̃gɔ̃tsɔ̃	tsɔ̃gɔ̃tsɔ̃
a033	p ^h a ^d zɔ̃ ~ p ^h ag ^ɤ ɔ̃	p ^h adzɔ̃
a034	pssa / k ^h a ^ɤ asɔ̃ni (‘lower leg’)	pssafɔ̃tsɔ̃

No.	Item	Ikema	Karimata	Shimajiri
a035	‘lower leg’	kuvva	kuʊʊa	kuvva ~ kuʊʊa
a036	‘ankle’	amambuni	amambuni	–
a037	‘body’	du:	du:	–
a038	‘anus’	ʔɛi:nuŋ	ʔɛibiruŋ	ʔɛiburuŋ
a039	‘(break) wind’	hi:	pʔi:	–
a040	‘testicle’	tani / fugui	tʰani / fugaw (The whole is referred to as ‘fugazdani ~ fuguɔdani’; the penis as ‘mara’)	–
a041	‘I; me’	ba:	ban (bano:ba: ‘I-TOPIC’)	baŋ
a042	‘we; us’	banti	banta	bantɛi
a043	‘you’	vva	ʊva (‘v’ is weak.)	vva
a044	‘you (plural)’	vvalu:	ʊata:	vvatɛi
a045	‘uncle’	budʒa (‘uncle’) / uja ~ uibituuja (‘one’s senior’) (buba (‘aunt’) / ha:mma (‘one’s senior’))	budʒa (buba ‘aunt’; ʒu: ‘elderly man’)	buda / budasa (budaga: ‘youngest uncle’ / upuzza ‘eldest uncle’ / buba ~ bubama ‘aunt’)
a046	‘uncle (plural)’	–	budzata	budata
a047	‘father’	zza ~ ʒza	uja / iza (rare)	–
a048	‘mother’	mma	anna	–

No.	Ōura	Kugai	Yonaha
a035	NR	kuvva (strong friction)	k ^h ʊ:ʊa
a036	—	amambuni	—
a037	—	du:	—
a038	ʈɕiburʊŋ	ʈɕibinum	ʈɕibinʊm
a039	—	p ^h i:	—
a040	—	t ^h ani (mara ‘penis’)	—
a041	baŋ / ba: (‘I-GENITIVE’) / baja (‘I-TOPIC’)	baŋ	baŋ
a042	baga: / бага: (‘I-PLURAL- GENITIVE’)	banta	banta:
a043	ʊʊa	vva	ʊʊa
a044	ʊda ~ uda	vvata	ʊʊata:
a045	budza	budza	bʊdza
a046	budza:ta	budzata:	bʊdza ^h a:
a047	—	a:za	—
a048	—	ani	—

No.	Uechi	Kurima	Uruka
a035	–	kuvva	kuṽṽa ~ kuṽṽa
a036	–	amambuni	–
a037	–	du:	–
a038	ṭɕibinum	ṭɕibinum	ṭɕibinum
a039	–	p ^{hi} :	–
a040	–	t ^h ani / fugul ~ fuguz	t ^h an ⁱ ~ tan ⁱ / fuḡuʔ (not frequently used)
a041	du (long vowel?) / ban	baŋ	baŋ
a042	banta: (du:θa: / dʒara:ka 'companions; peers')	banta:	ban ^h a
a043	vva	vva	vva (The stricture is such that it almost sounds like 'vba'.)
a044	vvata:	vvata:	vvataja
a045	butɕagama (also 'budɕag ama'?)	budɕa / budɕasa	budɕa ~ bu ^d za
a046	butɕagamata: (also 'budɕa gamata:'.?)	budɕata: / budɕasata:	budɕata: ~ bu ^d zata:
a047	–	uja	–
a048	–	anna	–

No.	Bora	Irabu
a035	kövva / mömötaŋ ('thigh')	k ^h uvva
a036	amambuni	amambuni
a037	dʊ:	up ^h udu:
a038	ʈɕibirʊm	ʈɕibinum
a039	p ^h i:	p ^h i:
a040	t ^h ani (of humans) / fugʊŋ	fugu(ʔ)ŋ
a041	bəŋ / bəja ('I-TOPIC')	aŋ
a042	banta: / banta:ja ('I- PLURAL-TOPIC') / bantaga (('I-PLURAL-GENITIVE'))	du:gaczi:na / du:dzi:na: / du:
a043	vva ~ ʊva	ja:
a044	ʊvata: / ʊvata:ja ('you- PLURAL-TOPIC')	iti
a045	bʊdza / bʊdzagama / sʊdza (('elder brother'))	budza
a046	bʊdzata	budzati
a047	zza (only used by the elderly)	ʊja
a048	anna (mma 'grandmother')	anna

No.	Item	Ikema	Karimata	Shimajiri
a049	‘wife’	tudzi	tudzi	t ^h udzi
a050	‘to be beautiful’	aparagi (aparagimiduŋ ‘beautiful woman’)	ap ^h aragi	–
a051	‘husband’	butu	budu	butu
a052	‘husband and wife’	tudzibutu	mi:tuŋa	mju:tu / mju:taŋa
a053	‘child; offspring’	ffa	ffa	fa: / mmaga (‘grandchild’)
a055	‘child; minor’	jarabi	jarabi	–
a054	‘to be born’	mmarigamatado: (‘to appear to be about to be born’)	ffo: naŋgumuta (‘to be likely to give birth to a child’)	mmari ² / mmarigumata (‘to ought to be born’)
a056	‘elderly person’	uibitu	uipstu	–
a057	‘niece’	m ^h u:i	m ^h u:i	mju: ²
a058	‘man; male’	bikiduŋ	bigiduŋ	bikiduŋ
a059	‘woman; female’	miduŋ	miduŋ	miduŋ
a060	‘person; human being’	p ^h i ^h tu ~ ɕtu ~ ɕto	pstu	ttu
a061	‘everyone; everything’	m:nanai (‘all together’)	n:na	n:na
a062	‘mosquito’	kadzəŋ	ga ^d zaŋ	gadaŋ

No.	Ōura	Kugai	Yonaha
a049	t ^h u ^d ʒɪ	t ^h uɖʒi	t ^h ʊɖʒɪ
a050	–	k ^h agimunu (of flowers) / aparagi (of people)	–
a051	butu	but ^h u / bikiɾa [old]	bʊt ^h ʊ
a052	mju:tu	t ^h uɖʒibutu / m ^j u:t ^h u	m ^j ʊ:t ^h ʊ / m ^j ʊ:tʊra
a053	fa:	ffa	ffa
a055	jarabi	jarabi [new]	–
a054	mmari	mmari	mmari:
a056	–	uipstu	–
a057	m ^j u:ɾ	m ^j u:z	m ^j u:ʒɪ (‘nephew/niece’) / bikim ^j u:ʒɪ (‘nephew’) / midʊmʊm ^j u:ʒɪ (‘niece’)
a058	bikiduŋ	bikidum	bikidʊmʊ
a059	miduŋ	midum	midʊmʊ
a060	pstu	pstu	p ^ʒ ɪt ^h u
a061	n:na	m:na	m:na
a062	ga ^d zaŋ / ga ^d zammu (‘mosquito-ACCUSATIVE’)	gaɖzam	gaɖzam

No.	Uechi	Kurima	Uruka
a049	midum ~ miðum (‘woman; wife’; ‘tudʒi’ is a word from Okinawa Island.)	midumu (not ‘tʰudʒi’)	tudʒi
a050	–	kʰagi (of flowers) / apʰara gi (of women)	–
a051	bikidum ~ bikidzum	bikidumu (not ‘butu’)	butʰu
a052	mju:tu	mʰu:tu	mju:tʰu
a053	ffa	ffa / ffa:ma	ffa
a055	jarabi	jarabi	jarabi
a054	naʒu:	naʒi(-du) / ffo:-du nas (‘to give birth to a child’)	m̥marin
a056	–	uipstu	–
a057	mjuəʔ / mjuəffa (a combination of the words for ‘niece’ and ‘child’ in which ‘z’ is elided)	mʰu:i ~ mʰu:z	mʰu:z
a058	bikidum	bikidumu	bikidum̥ ~ bikidum̥
a059	midum ~ miðum	midumu	midum̥
a060	pʲisu	pstu	pstu̥ ~ pstu̥
a061	m̥:na	muztu (‘z’ signifies the sound ‘z’ with creaky voice.) / m:na	m:na
a062	gadʒam	gadʒam	gadʒam̥

No.	Bora	Irabu
a049	t ^h ʊdʒɪ	t ^h udʒɪ
a050	ap ^h aragi	ap ^h aragimunu
a051	bʊt ^h ʊ	butu
a052	m ⁱ ʊ:tʊra	m ⁱ u:tura
a053	ffa	ffa
a055	jarabi	jarabi
a054	mmari	mmari
a056	ʊipstʊ	uipstu ~ oipstu
a057	m ⁱ ʊ:ɪ ~ m ⁱ ʊ:ʒɪ	m ⁱ u:ʒɪ
a058	bikidʊm	bikidum
a059	midʊm	midum
a060	pstʊ	pstu
a061	m:na	m:na
a062	ga ^d zam	gaɕzam

No.	Item	Ikema	Karimata	Shimajiri
a063	‘spider’	kumo	ku:	k ^h uma
a064	‘spiderweb’	kumonuja:	ku:gasĩ	k ^h umanussʌ
a065	‘butterfly’	tso:tso:	tso:tso:	tso:tso:
a066	‘ant’	akai	ha:u	aʒaʒ
a067	‘earthworm’	dʒimi:dʒi	mi:midʒi	mi:midʒ
a068	‘snail’	harunna	n:na	nna / p ^h arinna (small species)
a069	‘cat’	maju	maju	–
a070	‘mouse; rat’	jumunu	jamunu	jamunu
a071	‘horse’	nu:ma	nu:ma	nu:ma
a072	‘billy goat’	bikihindza / hindza (‘goat’) / mi:hindza (‘nanny goat’)	bigipindza / pindza (‘goat’) / mi:bindza (‘nanny goat’)	–
a073	‘horn (of an animal)’	nnu	ʈnu (‘n’ signifies that this sound begins voiceless.)	ʈnu
a074	‘tail’	dzu:	dzu:	du:
a075	‘pig’	wa:	wa:	ʊa:
a076	‘meat (pork and the like)’	sĩ:sĩ	mi: / si:sĩ (‘lean meat’)	ʎi:ʀ
a077	‘bird’	tui	tuu	t ^h uʒ
a078	‘bird’s nest’	tuinusi: / tuinuja:	si:	ssʌ
a079	‘egg’	tunuka	tunuga	t ^h unaʒa

No.	Ōura	Kugai	Yonaha
a063	k ^h umu	k ^h uv	k ^h ʊ: ~ k ^h ʊʊ (also ‘kombu; kelp’)
a064	k ^h umunuɾa:	k ^h uvnuk ^h a:paz / k ^h uvnuga dzaparaɕi	k ^h ʊ:nʊssɾa
a065	NR	tso:tso:	NR
a066	ha:ŋ ~ xa:ŋ	aka:zɿ (‘k’ signifies the sound ‘k’ pronounced towards the back)	aka:zɿ
a067	mi:ma ^d zɿ	mi:mi ^d zɿ	mi:mi ^d zɿ
a068	nna ~ n:na	m:na	nna / p ^h iŋɕinna (‘turban snail’)
a069	maju	maju	—
a070	jumunu	jumunu	jʊmʊnʊ / ʊjadza
a071	numa	nu:ma	nʊ:ma
a072	—	bikip ^h indza / p ^h indza (‘goat’) / mi:p ^h indza (‘nanny goat’)	—
a073	ʦanu	ʦinu	ʦanʊ
a074	dzu:	dzu:	dʒʊ:
a075	wa: (ʊɾa ‘cattle (i.e. cow or bull)’)	va:	ʊa:
a076	ɾa:ɾa (‘lean meat’)	miz (collective) / ɕi:sɿ (for the separate parts)	ɾa:ɾa
a077	t ^h uŋ	t ^h uz	tʊzɿ
a078	ɾa:	ssɿ	tʊ:nʊssɾa
a079	t ^h unaka	tunak ^h a	t ^h ʊnaka

No.	Uechi	Kurima	Uruka
a063	kumo (Standard Japanese)	ja:barigaŋ	jamakuɸ ~ jamakuy.
a064	ku:gasɨ (kaʃɨ ‘thread; string’)	ja:bari / ja:barigannussi	NR
a065	ʔo:ʔo (Standard Japanese)	ʔo:ʔo	ʔo:ʔo:
a066	akʰa:ɭ	akaɭ [A] // akaz [B]	azgara
a067	mimidʒi	mi:midʒi	mindʒa
a068	mɨ:na	m:na	nna
a069	–	maju	–
a070	jumunu	jumuna [A] // jumudʒa [B]	jumura.
a071	nu:ma	nu:ma	nu:ma.
a072	–	bikipʰindʒa / pʰindʒa (‘goat’) / mi:pʰindʒa (‘nanny goat’)	ʔnu ~ ʔnu
a073	ʔinu	ʔinu	ʔnu ~ ʔnu
a074	dʒu:	dʒu:	dʒu:
a075	wa:	wa:	ʊa:
a076	sɨ:sɨ (‘lean meat’) / avva (‘fatty meat’)	sɨ:sɨ	ʎi:s ~ ʎi:ʂa
a077	tou	tʰuz	tuz.
a078	sɨ / tuɭ no sɨ (‘bird’s nest’)	tʰuɭnussi	ʂu: ~ ʂa:
a079	tunaka	tʰunuka	tʉnaka

No.	Bora	Irabu
a063	k ^h ʔʊʊ ~ k ^h ʔʊ / k ^h ʔʊʊʊʊ ~ k ^h ʔʊʊʊʊ ('spider- ACCUSATIVE')	NR
a064	k ^h ʔʊʊʊʊʔ:	NR
a065	p ^h abiŋ (large black species)	ʔso:ʔso:
a066	aʔaga [Bora] // ak ^h a:ʔ [Aragusuku]	aha:ŋ
a067	mimɕa	mimidɕa
a068	nna / ma:nna (small species) / paɾinna (rare)	ʔaɾami
a069	majʊ	maju
a070	jʊmʊʊʊ	jumunu
a071	nʊ:ma	nu:ma
a072	b̥ʝipinɕa	bikipinɕa / p ^h inɕa (‘goat’)
a073	ʔaɾʊ	ʔaɾnu ~ ʔaɾno
a074	ɕʔ:	^d zu:
a075	ʊa: ~ wa:(?)	wa:
a076	ʔa:ʔa	ʔa:ʔa
a077	t ^h ʊa	t ^h uʔ ~ t ^h u
a078	ʔa:	ʔa:
a079	t ^h ʊnaka	k ^h u:ga

No.	Item	Ikema	Karimata	Shimajiri
a080	‘pigeon; dove’	hatu	p ^h atu	–
a081	‘fish’	zzu ~ dzu	izu	zzu
a082	‘scale (of an animal)’	tsi: dʒi / i: ki	i: ki	–
a083	‘turtle; tortoise’	kami	kami	–
a084	‘crab’	kaŋ (makugaŋ ‘coconut crab’)	kaŋ	k ^h aŋ
a085	‘shellfish’	nna	piŋina (‘turban snail’; n: na ‘(land) snail’)	piŋina (‘turban snail’) / t ^h aŋanna
a086	‘sea urchin (Hemicentrotus pulcherrimus)’	uŋ / kadʒitsi	ju: uŋ / kadʒiki / biŋju: uŋ ~ bzŋju: uŋ / kadʒikju: uŋ	uŋ / aŋauŋ
a087	‘meat (of sea urchins and the like)’	mi:	mi:	miʔ
a088	‘salt’	ma: su	ma: su	–
a089	‘to be salty’	sukaramunu	sukuraŋ (‘karaŋ’ refers to the taste of pepper)	–
a090	‘sugar’	sata	sata (a ^d zimaŋ ‘to be sweet’)	–
a091	‘sugar cane’	bu: dʒi	bu: gi	bu: ɣ ~ bu: ɣʔ
a092	‘sickle; scythe’	zzaŋa ~ ^d zaŋa (ju: tsi ‘ax; hatchet’)	izaŋa	zzaŋa

No.	Ōura	Kugai	Yonaha
a080	–	mːbatu (pʰa̠tu ‘swallow’)	–
a081	ɾzu	zzu	zzu ~ ɾzu
a082	–	izki	–
a083	–	kʰami	–
a084	kʰaŋ	kʰaŋ	kʰaŋ
a085	butara	kaigara (mːna ‘(land) snail’)	kʰaʔ
a086	kʰa̠ʔ	kacʔaʔsa	uŋ (sea urchins in general) / kʰacʔɪkʰ (‘Hemicentrotus pulcherrimus’)
a087	miŋ	kacʔaʔsanumiz	mʔ:
a088	–	maːsu	–
a089	–	sukarasukara	–
a090	–	sata (acʔimamunu ‘to be sweet’)	–
a091	buːgɾ ~ buːgʔ	buːgʔi	buːgʔ
a092	ʔzara	zzara	zzara

No.	Uechi	Kurima	Uruka
a080	–	p ^h atu / mːbatu (‘rufous turtle dove’) / aubatu (‘white-bellied green pigeon’)	–
a081	ⁱ zzu	zzu	zzu
a082	–	izki (also ‘dandruff’)	–
a083	–	k ^h ame	–
a084	k ^x aŋ (an aspirated ‘k’?)	kaŋ	kaŋ
a085	m̥na ~ m̥ːna	asaɭ ~ asaz (‘mːna’ refers to a species of shellfish.)	NR
a086	akχoːŋ	uŋ (‘akaŋ’, ‘ffuŋ’, and ‘boːd͡ziŋ’ refer to specific species.)	uŋ
a087	m̥iː	m̥iː	mz̥iː
a088	–	maːsu	–
a089	–	sukura	–
a090	–	saʔa (azimaː ~ azima ‘to be sweet’)	–
a091	buːg̊i	buːd͡zi	buːgz̥i
a092	ⁱ zaza	zaza	zaza

No.	Bora	Irabu
a080	mːbatʊ ~ mːbʌtʊ	pʰaʈu
a081	zzʊ ~ ɾʊ	ʒʌzu
a082	ɾʰ:ki	iʒkja
a083	kʰami	kʰa:mi
a084	kʰaŋ	kʰaŋ
a085	NR / pɕɕinna ('turban snail')	pɕɕima / mna / nigo: ('giant clam')
a086	kʰadʒɪkʰ / akʰaʊŋ (inedible species)	ohouŋ / kʰaʰdʒɪʔ
a087	mʰ:	miŋ
a088	ma:sʊ (ʊpʊʂʊʂ 'tide')	ma:su
a089	sʊkara(mʊnʊ)	sukaramunu
a090	sata ~ saʈa (adʒma: 'to be sweet')	sata
a091	bʊ:gʒ ~ bʊ:ɕʌ	bu:ɕʌ
a092	zzafa	ɾzafa

No.	Item	Ikema	Karimata	Shimajiri
a093	‘to eat’	faifiiru (‘to.eat to.give- IMPERATIVE’)	fai (‘ŋkegisamaɕzi’ to one’ s superiors)	fau
a094	‘food’	faimunu	faumunu	faumunu
a095	‘oil’	avva	aʊva	–
a096	‘rice porridge’	ju:	NR	juv
a097	‘cooked rice’	munu (‘cooked rice’; i: / maii: ‘rice ball’)	miʃmaʊ	mannuʔa (‘rice ball’) / n: nuʔa (‘potato ball’)
a098	‘miso; fermented soybean paste’	nsu	nsu	nsu
a099	‘rice’	mai	maʊ	maʌ ~ maʔa
a100	‘(wooden) bowl’	makai	ma:ʊ	maχaʌ ~ maχaʔa
a101	‘tea bowl; rice bowl’	tɕabaŋ	tɕabaŋ	–
a102	‘to throw away (tea)/to spill’	augi: / ɕtiru ~ stiru	stiru (‘to.throw.away- IMPERATIVE’)	aʊgiʔa / itatɕin
a103	‘garlic’	hi:	pʰi:	pʰiʔa
a104	‘garlic chive’	mi:na	mizza	miʔana
a105	‘bud; sprout’	mi:	bakami: / pʰaʔɕiki (‘germination’)	–
a106	‘oriental melon’	ui (‘watermelon’) / ŋgʷau (‘cucumber’) / gaurā (‘bitter melon’)	uu (go:ra ‘bitter melon’)	–

No.	Ōura	Kugai	Yonaha
a093	fo:	fo·	fo:
a094	fo:munu	fo:munu	fo:mʊnʊ
a095	—	avva	—
a096	juʊ	juv	jʊ:
a097	NR	maz (nnaz ‘rice ball’)	NR (maʒnuʒ ‘rice ball’)
a098	nʌsu	msu	mʌsʊ
a099	maʌ (ssumaʌ ‘white rice’)	namamaz / maz	maʒʌ
a100	makaʌ	mak ^h az ⁱ	mak ^h aʒʌ
a101	—	tʰabaŋ	—
a102	o:giŋ / skja:ʌ (“to make a mess of?”)	stiru (“to.throw.away- IMPERATIVE”)	o:gi / it ^h ʌti ~ itχti
a103	p ^h iŋ	p ^h iz	p ^h iʒʌ (also ‘needle; pin’)
a104	miŋna	mizza	mʒʌ:na
a105	—	mi:	—
a106	—	uzgama (go:ra ‘bitter melon’)	—

No.	Uechi	Kurima	Uruka
a093	fo:	ŋkjagisamatɕi ('to.eat- IMPERATIVE'; to one's superiors) / fe: ('to.eat- IMPERATIVE'; to one's inferiors)	fau ~ faʊ
a094	fa'munu	foꜛmunu	faumunu
a095	—	avva	—
a096	juv / dzu:ɕwi ('rice soup')	juv	juv,
a097	NR / gohaŋ (Standard Japanese)	maz (zz [old], nnari [new] 'rice ball/potato ball')	('maz z:' is not used.)
a098	mɕu	m:su [A] // m:so [B]	mɕu ~ mɕuꜛ
a099	mal	maz [A] // maɭ [B]	maz _i ~ maŋ
a100	makʰal	makaɭ [A] // makaz [B]	makaz _i ~ [sic.]
a101	—	ɬabaŋ	—
a102	sitiɾu / sitiɾuŋ	stiz	jaz _i ~ stiz _i
a103	pʰil / pʰiltɕikina	piz (apparently not 'piɭ')	piz _i ~ piɕ _i
a104	miɕla ~ milna	mĩ:na	nʰira / mizna ~ miɾna
a105	—	mi:	—
a106	—	uz (go:ra 'bitter melon')	—

No.	Bora	Irabu
a093	faʊ / fa:di ('to.eat- HORTATIVE')	fo: / fai ('to.eat- IMPERATIVE')
a094	faʊmʊnʊ	faɪmunu
a095	avva ~ aʊva	avva
a096	jʊv ~ jʊʊ	dzu:ɛa
a097	ʒa: / nigʒa ('rice ball')	maɪnuʒ: / um
a098	mtʊ	msu
a099	maʒa	maɪ
a100	makaʒa	maxaɪ ~ mahaɪ
a101	ʔabaŋ	ʔabaŋ
a102	itaʔi	wa:giŋ / itakiŋ
a103	pʰiʒa	pʰiŋ
a104	ʀʊna ~ ʀʊna (maʀna 'spring onion')	nubiŋ (ʀʊma 'spring onion')
a105	mi:	bahabura / mi:
a106	ʊʒa	uʒa

No.	Item	Ikema	Karimata	Shimajiri
a107	‘field (cultivated)’	hai	p ^h atagi / p ^h ari	p ^h ataki (‘p ^h ari’ is not frequently used.)
a108	‘field (not cultivated)’	nu:	nu:	nu:naʒa / nu: / abarinu: (abaribari ‘field lying waste’)
a109	‘night-scented lily; giant upright elephant ear’	bibi:gassa	biugassa ~ b ^h u:gassa	bju:gassa
a110	‘tree’	ki:	ki:	ki:
a111	‘branch’	juda	ida (not ‘juda’)	juda
a112	‘fruit; nut’	mi:	n:ta	miʒ / naʒ
a113	‘grass’	fuʒa (= ‘f ^w sa’)	fuʒa / juʒa (for livestock)	ssa
a114	‘to plant’	ibi: fi:ru (‘to.plant to.give- IMPERATIVE’)	ibiru (‘to.plant-IMPERATIVE’)	–
a115	‘common garcinia (tree)’	kutsigi (‘k’ is unaspirated and non-pharyngeal.)	p ^h uʒkagagi:	k ^h uʒpaʒʒigi:
a116	‘saw’	nukudʒi	nukagi	nukagʒ
a117	‘board; plank; plate; sheet’	tana	ita	ita
a118	‘nail; spike; peg’	kanifudʒi	fugi ~ fugu	fugʒ
a119	‘carpenter’	sajafu	sajafu	sajafu
a120	‘needle; pin’	hai	p ^h au	piʒ
a121	‘clothing; kimono’	tsiŋ	k ^h iŋ	k ^h ʒŋ
a122	‘sash; belt’	suku: ~ siʒku:	si ^p hugu	safugʒ ~ sapugʒ
a123	‘collar’	tsinnufudʒi	fugu	fugʒ
a124	‘mirror’	kagaŋ	k ^h agaŋ	k ^h aʒaŋ
a125	‘fire’	umatsi	u ^p matsi	mmatsʒ

No.	Ōura	Kugai	Yonaha
a107	p ^h atagi / p ^h ari	p ^h ari	p ^h ari
a108	nu:	nu:	nʊ: ('field lying waste')
a109	biʊ (biʊgasa ~ bju:gasa 'night-scented lily leaf')	bivgasa	biugassa
a110	k ^h i:	ki·	ki:
a111	ida	juda	jʊda
a112	naŋ	naz	ki:nunaʒ
a113	ssa	fsa	fsa
a114	—	ibifu ('to.plant-IMPERATIVE')	—
a115	p ^h ukagi	p ^h ukadzgi:	p ^h ʊkʊgi:
a116	nukagʒ	nukugz	nʊkʊgʒ
a117	ita	itsa	NR
a118	k ^h anifugʌ	k ^h anifugz / fugz	fʊgʒ
a119	sajafu	sajafu	sajafʊ
a120	pɪŋ	piz	p ^h iʒ
a121	kʰŋ / fuku ('clothing')	kʰŋ	kʰŋ / kʰamʊʊ
a122	subagʌ	sipugz	sʰʊgʒ
a123	fugʌ	kʰinnufugz	fʊgʒ
a124	k ^h agaŋ / k ^h agammu (‘mirror-ACCUSATIVE’)	k ^h agam	k ^h agam
a125	mmo:ʌ	umutsi	ʊmaʌ

No.	Uechi	Kurima	Uruka
a107	p ^h ari	p ^h ari	paɾi ~ paɾi
a108	nu:	t ^h usari ('land covered in grass') / nu: (used for a kind of grass)	nu:
a109	bivgassa	biv (bivgassa 'night-scented lily leaf')	bivgassa
a110	ki:	ki:	ki: ~ ki:
a111	juda	ida	juda
a112	na ^z ~ naɭ ~ naɯ	(ki:nu) naz _ɿ	naz _ɿ
a113	fuɕa	fsa	fɕa
a114	—	—	—
a115	pʊkukugi ('g' is not palatalized.)	pukutsigi: (also 'bungi:')	pʊkʊkuki: ~ pʊkukugi
a116	nukugi ~ nufugi	nukudzi	nukugz _ɿ
a117	jufa ~ juk ^ɕ a (kabejuk ^ɕ a 'wall board')	itsa	it ^h a ~ itsa
a118	fugi	fudzi / k ^h anfudzi	fgz _ɿ
a119	sajafu	sajafu	sajafu ~ sajafu
a120	p ^h iz ~ p ^h iɿ ~ p ^h iɯ ~ (also 'garlic')	p ^h iz (tsinnubiz 'sewing; needlework')	p ^h iz _ɿ
a121	kɪŋ	tsɪŋ	kɕŋ
a122	supʊgʊ (or 'supigi?')	sipudzi	spugz _ɿ
a123	fugʊ (or 'fugi?')	fudzi	eri
a124	kagam _ɿ	kagam	kagam _ɿ
a125	umatsi	umatsi / p ^ɕ i [old]	umats ~ umatsɿ

No.	Bora	Irabu
a107	p ^h ari	p ^h ataki / p ^h aru
a108	nʊ:	nu:
a109	biugasa	biugassa
a110	k ^h i:	k ^h i:
a111	jʊda	ida
a112	naʒ	naŋ
a113	fʊsa	fʊsa
a114	ibi / ibirʊ (imperative form?)	ibin
a115	fʊkʊkʊgi: [new]	kupʊtʊŋgi
a116	nʊkʊgʒ	nuk ^h adʒ:
a117	itsa [Bora] // ita [Aragusuku]	itsa
a118	fʊgʒ	fudʒ
a119	sajafʊ	sajafu
a120	p ^h jaʒ	p ^h aŋ
a121	kʒŋ	tʒŋ
a122	spʊ ^d ʒ	sʌkubʒ
a123	fʊgʌ ~ fudʒ	k ^h ubʒ
a124	k ^h agam	k ^h aa ^ɾ m
a125	mmaʒ	umaʒ

No.	Item	Ikema	Karimata	Shimajiri
a126	‘ash’	karahai	karapaʷ	karapaʔ
a127	‘water’	midzi	mi ^(d) zi	midʒ
a128	‘to become wet’	mmi(j)ui (‘to.become.wet- STATIVE’)	mmi-	m:mi
a129	‘wind’	k ^h adi	k ^h adzi	k ^h adzi
a130	‘whirlwind; tornado’	amaunau	ino:	amaino:
a131	‘earthquake’	nai	naʷ	nai
a132	‘cloud’	m̥mu (amimmu ‘rain cloud’)	fumu	fuma (tɕiŋ ‘sky’)
a133	‘rain’	ami	ami	–
a134	‘rainbow’	NR	o:natɕi (also ‘Japanese rat snake’)	NR
a135	‘color; hue’	iru ~ iro	iru	–
a136	‘to be blue’	aumunu	o:	aukaŋ (ffu ‘to be black’; aɣ a ‘to be red’)
a137	‘lightning’	kannai	nnapskaʷ	nnapskaʔ
a138	‘to be dazzling; to be glaring (of light)’	mi ^h ɸu ^h aimunu ~ mi ^h ɸu ^h taimunu	mipada:simunu	mi:putɕikaŋ
a139	‘light’	ɕikai	pskaʷ	pskaʔ
a140	‘shade’	kagi	kagi	k ^h agi
a141	‘the sun’	tida	tida	tɕida
a142	‘the moon; month’	tɕi ^h tɕi (ɕi ^h to ^h tɕi ^h ‘one month’)	tɕkssu	tɕka ~ tɕk ^h (ŋgitantɕka ‘next month’; k ^h atɕka ‘last month’)

No.	Ōura	Kugai	Yonaha
a126	k ^h arapaŋ	k ^h arap ^h az / p ^h az(i)	k ^h arapaʔ
a127	midʒ / mitʒu ('water- ACCUSATIVE')	midʒi	mi ^d ʒ
a128	mmiŋ / mminja:ŋ ('to have become wet')	mmi	mmi:
a129	k ^h adʒi	k ^h adʒi	k ^h adʒi (also 'fire')
a130	amaino:	ama.ino:	amaino:
a131	nai	nai	nai
a132	k ^h umu	fumu	fʊm
a133	—	ami	—
a134	timpau ~ timpau (pau 'snake')	t ^h imbav	timpau ~ timpau
a135	—	iru	—
a136	o:o: / o:munu / o:kaŋ	o:	o:nʊ
a137	nnapsʌkaŋ / k ^h annaŋ (‘thunder’)	m:napskaz	nnap ^ʌ kaʔ
a138	mipudasʌmunu	mak ^ʌ i:maks	mip ^h ʊʔaʔnʊ
a139	pskaŋ	pskaz	p ^ʌ kaʔ
a140	k ^h agi	k ^h agi	k ^h agi
a141	t ^h ida	t ^h ida	t ^h ida
a142	ʒkaŋ	ʒkssu	ʒkaʔ / ʒkaʔnʊjʊ:

No.	Uechi	Kurima	Uruka
a126	karap ^h aʌ ~ karap ^h aʔ	karabaʎ [A] // karabaz [B]	karapaz _ɿ
a127	midzi	midzi	midʒɪ
a128	m̥midu ~ m̥miðu	m̥mi:(du:)	m̥mi
a129	kadzɪ	k ^h adzɪ	kadzɪ
a130	amainou ^ː	ama.ino:	amainau
a131	nai	nai	nai
a132	kumu / fumu [elicited]	fumu	ɸu _ɸ mu
a133	—	ami	—
a134	timbaʊ (paʊ ‘snake’)	nidzi (‘timbav’ is obsolete.)	timbaʊ ~ timpau
a135	—	iru	—
a136	‘o:’? (o:diŋ ‘blue sky’; o:umi ‘blue sea’)	au / auiru	au ~ aʊ
a137	m̥nap ^s yal (‘l’ is dorsal.)	nnabikaʎ [A] // nnapskaʎ [B]	nnapskaz _ɿ
a138	m̥iptw ^z / m̥iptʰ	mi:p̥uʈiʎ [A] // mi:p̥uʈiz [B]	m̥ipuʈuŋ
a139	p ^s kal	pskaʎ	p̥s̥kaz _ɿ
a140	kagi (The final sound is somewhat central.)	kagi	kagi ~ kagi
a141	t̥ida (p ^s imu ‘(in the) sunlight’)	tida	t̥ida ~ tida
a142	ts̥ikiju ^ː	ts̥itsi [A] // ts̥itsinuju: [B]	ts̥ks̥ɿ

No.	Bora	Irabu
a126	k ^h arapaŋ ~ k ^h arapaʔ	k ^h ara paŋ
a127	mi ^d ʔ	mi ^d ʔ
a128	mmi:	mni: / ni:ŋ ('to have become wet') / mnuddo (('to.become.wet-EMPHATIC'))
a129	k ^h a ^d ʔi	k ^h a ^d ʔi
a130	amaino:	amaino:
a131	nai	nai
a132	fʊmʊ	fumu
a133	ami	ami
a134	t ^h imbaʊ ~ t ^h imbaʊ (pav ~ paʊ 'snake')	t ^h imbav (p ^h av 'snake')
a135	iʊ	iru
a136	aʊaʊ / aʊka:	o: / o:iʊo / o:hriʔa / o:ha ŋ
a137	nnapskaʔ	mnapskaŋ
a138	mipʊtʊʔ / mipʊtʊʔŋ ~ mip ʊtʊʔ	mi:p ^h utiŋ / mi:p ^h utiŋmunu
a139	pskaŋ	p ^s kaŋ
a140	k ^h agi	k ^h a:gi
a141	pssʊma	t ^h ida
a142	ʔkaŋ	ʔʔʊ ~ ʔʔʊʔ (?) (t ^h ataʔʔʊ 'next month')

No.	Item	Ikema	Karimata	Shimajiri
a143	‘the east’	agai	aːu / aːgaɖzi (‘east wind’)	aɕaŋ
a144	‘the north’	niɕi	ui / uigaɖzi (‘north wind’)	ui
a145	‘the west’	iː	nisi / niskaɖzi (‘west wind’)	iʒ
a146	‘the south’	haibara	p ^h ai / p ^h aigaɖzi (‘south wind’)	p ^h ai
a147	‘(the) right (side)’	migi	ŋgu	ŋgʒ
a148	‘(the) left (side)’	ɕidai	bidaʷ ~ bzdaʷ	bʒdaʒ
a149	‘(in) front (of); forward’	mai (tibi ‘behind; backward’)	mafka (tɕibi ‘behind; backward’)	–
a150	‘road; path; way’	nɕi	nɕi	nɕ
a151	‘peak; ridge’	mmi	mmi	mmi
a152	‘fog’	NR	NR	kʒ:
a153	‘dew’	ɕiː	ɕiju	ɕiʊ
a154	‘morning’	ɕitumuti	stumuti	stumatei
a155	‘daytime’	hiːma	psma	pʒnaɣa / pʒma
a156	‘evening’	jusarabi	jusarabi	–
a157	‘night’	junaka	juːnaː	juːʒ
a158	‘now’	nnama	nnama	nnama
a159	‘today’	kʒuː	kjuː	kʒjuː

No.	Ōura	Kugai	Yonaha
a143	(agaŋ ~) a:ŋ	ag ⁻ az (‘g ⁻ ’ signifies the sound ‘g’ pronounced towards the back) / ag ⁻ azk ^h adzi (‘east wind’)	agaŋ
a144	t ^h uranpa: / ni:nupa:	nisi ~ nsī / uinagi / nsik ^h a dzi (‘north wind’)	nisi
a145	iŋ / nisi	i ^z / i ^z k ^h adzi (‘west wind’)	iŋ
a146	mmanupa: / p ^h ai	p ^h ai / p ^h aik ^h adzi (‘south wind’)	pai
a147	n:ŋ	ŋgz	ŋgŋ
a148	b ^z daŋ	pzdaz	p ^z daŋ
a149	—	mai (tsibi ‘behind; backward’)	—
a150	nɿ	mɿ	mɿ
a151	mmi	mmi	mmi
a152	k ^h a:vva	ksī	k ^z :
a153	ɿv	ɿiv	ɿv
a154	stumuti	stumuti	ɿt ^h umuti
a155	p ^z ma	psima	p ^z ma
a156	—	jusarabi	—
a157	ju:ŋ	jun ^h a:ŋ	jv: / jvnai
a158	nnama	nnama	nnama
a159	k ^h u:	kju:	k ^h u:

No.	Uechi	Kurima	Uruka
a143	aʎal	agaɭ [A] // agaz [B]	agazɿ
a144	ninupa / nisi	nisi	nisiɾ ~ nis
a145	l: (or 'ʌ:ʔ')	iɭ [A] // iz [B]	zɿ:
a146	p ^h ai	p ^h ai	p ^h ai
a147	ŋgɨ	ndzi	ŋgzɿ
a148	pɨdal ~ pɨda	p ^h ɨdaɭ [A] // psdaz [B]	psɖazɿ ~ psɖaɾ
a149	—	mai	—
a150	mɨsi	mɨsi	mɨs ~ mɨsɾ
a151	mɨmi (↔ 'sukū')	m:ni	mɨmi
a152	k ^ɕ i·uɸi	NR	kɕɿ:
a153	NR	tɕuf	tɕuɿ ~ tɕuɸ
a154	sɨtɨmuti (asamunu 'breakfast')	stumuti	stumutiɿ ~ stumuti
a155	p ^ɕ ɨma (aɕi 'lunch'; sanakaɸ 'ten o'clock snack')	pssɨma	p ^ɕ ɨ:ma
a156	jusarabi (juɭ ~ juʌ 'dinner')	jusarabi	—
a157	junaka	june:	junai
a158	nɨnama	nɨnama	nɨnama
a159	kju:	k ^h u:	kju: ~ kjuɿ:

No.	Bora	Irabu
a143	agaŋ	a ^h aŋ
a144	nis ^h ~ nisŋ	ui
a145	i ^h ŋ	i ^h ŋ
a146	p ^h ai	p ^h ai
a147	ŋg ^h ŋ	mi:tsa
a148	p ^h adaŋ ~ p ^h ada ^h ŋ	p ^h idiŋ
a149	mai	mauki: (tsibi ‘behind; backward’)
a150	m ^h tsa	m ^h tsa
a151	mmi	mni
a152	k ^h a:	k ^h iri
a153	tsu ^h v ~ tsu	tsu ^h v
a154	s ^h tum ^h ti	stumuti
a155	p ^h a:ma	p ^h a:ma
a156	j ^h usarabi	j ^h usarabi
a157	j ^h unai / j ^h u:ŋ ‘dinner’	ju ^h na ^h ŋ
a158	nnama	nnami
a159	k ^h ju:	k ^h ju:

No.	Item	Ikema	Karimata	Shimajiri
a160	'tomorrow'	atɕa	atɕa	ata
a161	'the day after tomorrow'	mm ^ɨ a mi:ka	asadi	astɕi
a162	'next year'	ja:ni	ja:ni	ja:ni
a163	'yesterday'	nnu	ksɳu	k ^ɕ ɳu
a164	'last year'	kudzu	kudzu	k ^h udu
a165	'a long time ago'	ŋk'a:ŋ	ikja:ŋ	ŋkja:ŋ
a166	'summer'	—	natsi	—
a167	'to be warm'	nfumunu	fumuraŋ	nufkaŋ
a168	'to be cold (of the weather)'	ɛɛimunu	pɛimunu	piɕikaŋ
a169	'to be cold (to the touch)'	higurumunu	bzguu	b ^ɕ ɳu
a170	'sea'	iŋ	iŋ	iŋ
a171	'to become muddy; to become cloudy'	mugairi: du:i (‘to.become.muddy- STATIVE’)	mugari	janavvi / mugairi
a172	'boat; ship'	funi	funi	funi
a173	'coral reef'	piɕi	urubuni ('things growing in the sea'; pɛɛi 'shoal')	piɕi
a174	'sand'	nnagu	nnagu	nnagu
a175	'to go; to leave'	haitti (<i>shite</i> -continuative)	p ^{hi} a:ri	ik ^ɕ / pi ^ɕ
a176	'to be fast'	h ^ɨ a:munu (not 'ç')	p ^{hi} a:munu	pja:munu
a177	'earth; the ground'	nta ~ mta ('m' pronounced as 'mn')	nta	nta

No.	Ōura	Kugai	Yonaha
a160	aʦa	aʦa (also ‘geta; Japanese clog’)	aʦa
a161	asatti	asati	asaʦʰi
a162	jaːni	jaːni	jaːni
a163	kʰnu	ksinu	kʰnʊ
a164	kʰuˈzu	kudzu	kʰʊdzʊ
a165	ŋkʰaːŋ	ŋkjaːŋ	ŋkʰaːŋ
a166	–	natsi	–
a167	nufkaŋ / aʦʰikaŋ	ŋko.ŋku	nʊʰnʊ (‘to be lukewarm?’)
a168	pɛɛikaŋ	pɛimunu	pʰiɛiːnʊ
a169	bʰgurukaŋ	psigurumunu	pʰgʊʊʊːnʊ
a170	iŋ / immu (‘sea-ACCUSATIVE’)	im	im
a171	mugʰaːri	ŋgʊvjuː (of the sea) / mugjaz (of water in a glass)	–
a172	funi	funi	fʊni
a173	pɛɛi	jamoːra (pɛɛi ‘shoal’)	ɛiː / pʰiɛi
a174	nnagu	mːnagu	nnagʊː
a175	pʰirinʰaːŋ (‘to have gone’)	pʰiri (‘to.go-IMPERATIVE’) / pʰizdus (‘to.go-EMPHATIC’)	pʰiŋʰ
a176	pʰjaːkaŋ	pʰjaːmunu	pʰjaːnu
a177	nta	mʰta	mtʰa

No.	Uechi	Kurima	Uruka
a160	aɕa / atɕ	atɕa	atɕa
a161	asaɕi	asate	asaɕi
a162	ja:n'i	ja:ni	ja:n'i
a163	k ^s inu	tsino	kɕnu:
a164	kudʒu	k ^h udʒu	ku ^d ʒu
a165	ŋkja:ŋ	ŋkja:ŋ	ŋkja:ŋ
a166	—	natsi	—
a167	atsisa / nufsa [elicited]	nuffu: / nuffu:u nuffu:	nuɸu: ~ nuɸu / nuɸu:nuɸu (reduplicated adjective)
a168	p ^s isa	pɕimunu	piɕi:piɕi
a169	p ^s isa ~ p ^c isa	pɕguro:	pɕguru:pɕguru
a170	im	im	im
a171	mugaili ~ mugaiʌ	mug'a:ri (‘to.become.muddy- STATIVE’)	n'iguri / cf. mugairi (of river water and seawater that is mixed together)
a172	fun'i	funi	ɸun'i
a173	pɕi ~ pɕi	pɕi	piɕi
a174	mɲagu (ku ‘powder’)	m:nagu	ɲagu
a175	ik ⁱ / k ⁱ / pa ^z ~ pa ^z	p ^h iri (‘to.go-IMPERATIVE’)	piɰ ~ piɰ
a176	pja:munu	pja:munu	pja:munu
a177	mɬa ~ mɬa (isi ‘stone’)	mta	mɬa

No.	Bora	Irabu
a160	aʦa	aʦa
a161	asatti	asatti
a162	ja:ni	jaini
a163	kʰnu:	ʦanu:
a164	kʰuɕu	kʰudu
a165	ŋkʰa:ŋ	mki:ŋ
a166	naʦa	naʦa
a167	nʊfʊ:nʊ	nufumunu
a168	pɕɕi:pɕɕi ~ piɕi:piɕi	pɕɕimunu
a169	pʰɔɕʊ:nʊ	pʰɔɕʊmunu
a170	im	im
a171	mʊgaŋ / mʊgari (continuative form)	mugaŋ
a172	fʊni	funi
a173	pɕɕi ~ piɕi	pɕɕi
a174	mnagu:	mnagu
a175	pʰiʔ	pʰiŋ / pʰiri ('to.go- IMPERATIVE')
a176	pʰa:mʊnʊ / pʰa:pʰja	pʰa:munu
a177	mta	mta

No.	Item	Ikema	Karimata	Shimajiri
a178	'yard; garden'	minaka	a:ra / mina:	—
a179	'house'	ja:	ja:	—
a180	'dust'	ɸuɕi	p ^h uɕi	—
a181	'to be dirty'	ɕiɕana	ɕɕanaŋ	ɕɕana
a182	'door'	jadu	jadu	—
a183	'gate'	muŋ / dzau	dzo:	dau (paʔɪftɕa 'entrance')
a184	'front'	maukja:	taŋka: / maukja: ('house in front')	mafkja: (ŋkaʔa 'opposite side')
a185	'village'	mmaridzima	sima	sɪma
a186	'grave; tomb'	haka	paɕa	paɕa
a187	'there (distal)'	kama	kama	kama
a188	'there (medial)'	uma	uma (also 'here')	—
a189	'to be absent; to be nonexistent'	n'a:ŋ	n'a:ŋ	—

No.	Ōura	Kugai	Yonaha
a178	—	minaka	—
a179	ja:	ja:	—
a180	—	p ^h u _ŋ ki / ja:buki ('ball of dust')	—
a181	ʒʒana / sputaŋ	ʒʒana	ʒʒana:nu
a182	—	jadu	—
a183	dzo:futʂɿ ('entrance')	ʂimbu (for the whole structure) / dzo: (for the space between the gateposts)	dzo:
a184	mai (maibara 'house in front'; ʒʒibara 'house behind')	maf _ŋ k'a ~ maf _ŋ k'a	maʊk ^h a:
a185	sɿma	buraku ('sima' refers to the whole of Miyakojima.)	NR
a186	p ^h aka	p ^h aka	p ^h aka
a187	k ^h ama	k ^h ama	k ^h ama
a188	NR (ui 'that (medial)')	uma (kuma 'here')	—
a189	—	n'a:ŋ	—

No.	Uechi	Kurima	Uruka
a178	–	minaka	–
a179	–	ja:	–
a180	–	p ^h u _ɕ ki	–
a181	ɕ:ana / ɕ:anamunu	ɕɕana	jaɾimunu
a182	–	jadu	–
a183	dʒoː	dʒo:	dʒau
a184	mafkja: (ɕi:bara ‘behind; backward’)	mo:t ^h u / mo:t ^h umai / maibara	mavkja: ~ maukja:
a185	NR	bantadzima	ʂma ~ ʂma
a186	paka	paka	paka
a187	kama	kama	k ^h a _ɕ ma:
a188	kuma (‘uma’ is not used.) / amakuma (‘here and there’)	uma (kuma ‘here’)	–
a189	–	n ^h a:ŋ	–

No.	Bora	Irabu
a178	minaka	minaha
a179	ja:	ja:
a180	p ^h ɔ̃ki / mtabɔ̃ki ('soil dust')	gumi / p ^h uki
a181	ʌʌana	ʌʌanamunu
a182	jadɔ	jadu
a183	dzo: [Bora] // dzaɔ [Aragusuku]	dzo:vʌɾ
a184	maʊkja: / maibara ('house in front')	maʊkja:
a185	sɾma	sɾma
a186	p ^h aka	p ^h a: ~ p ^h a:
a187	k ^h ama	k ^h ama ~ k ^h ama:
a188	ɔ̃ma (k ^h ɔ̃ma 'here')	umahama ('here and there')
a189	nja:ŋ	no:mai ni:ŋ ('what-too to.be.absent'; 'There is nothing.')

Basic Vocabulary B

No.	Item	Ikema	Karimata	Shimajiri
b001	‘eye’	me:	[mi / [mi:]	mi:
b002	‘tooth’	ha:	[pa	p ^h a:
b003	‘nail’	tsume (possibly Standard Japanese)	tsu[me (unaspirated)	tsami
b004	‘nose’	hana	pana (‘pa[na’ when pronounced slowly)	p ^h ana
b005	‘navel’	m ₁ :busu	[m:bu	m:bu
b006	‘chest’	m ₁ miutsu	miφ[tsu (or ‘miφu[tsu’)	mmi
b007	‘face’	mihana	mipa[na	mipana
b008	‘ear’	min	[min	miŋ
b009	‘skin’	ka: (also of trees, fruit, and the like)	[ka:	ka:
b010	‘lower leg’/ ‘foot’	haz ₁ (‘lower leg’; mumu ‘thigh’)	pa[gi	karas ₁ ŋi
b011	‘hip; buttock’	tsi:nun / ts ₁ :nun	tsi[bida ₁ (‘tsibida’ when pronounced slowly)	tsibita ₁ ~ tsibita ₂
b012	‘shoulder’	katamuci:	ka[tamusi (‘ka[tamusi’ when pronounced slowly)	ibira / k ^h a ₁ ta (There is awareness that ‘k ^h a ₁ ta’ is Standard Japanese.)
b013	‘tendon’	hai ₁ ts	p ^s i[kiba ₁ (‘pi[kibai’ when pronounced slowly)	p ^h a ₁ ci ₁ d ₁
b014	‘eyebrow’	maju	[maju (or ‘ma[ju’)	maju
b015	‘sweat’	a ₁ ci	a[ci	a ₁ ci
b016	‘nosebleed’	hanat ₁ ci	pa[nats ₁ u ([mbana ‘mucus’)	p ^h anats ₁ ŋ ₁ ts ₁
b017	‘drool’	judai	ju[da ₁ (‘judai’ when pronounced slowly)	judai ~ juda ₂

No.	Ōura	Nobaru	Bora
b001	mi:	mi:	mi:
b002	pa:	pa:	p ^h a:
b003	ʦami	ʦami	ʦimi
b004	pana	pana	p ^h ana
b005	m:bu	mbu / mbusu	m:bu
b006	mni	mmiʊʦʌ	mnigu: ('mn' with double articulation?)
b007	nipana	mipana	mip ^h ana
b008	miŋ	mim	mim
b009	ka:	ka: (of hands)	k ^h a
b010	pagʌ	pagʌ ('foot'; karasuni 'lower leg')	pagʌʌ / ʦigusi ('knee') / mumu(ni) ('thigh') / psa: bza ('foot') / amaŋgu: buni ('ankle')
b011	ʦibitai	ʦibigu: / also 'ʦibitar'	ʦibiruŋ
b012	katamusu	kaʦamusʊ ~ kaʦamusʌ / kaʦa	k ^h ata
b013	pskipaŋ	psʲkʲpaŋ (careful pronunciation) ~ psʲkʲupaŋ (normal pronunciation)	p ^s klpaŋ ~ p ^s kʲpaŋ ~ p ^s klpaŋ _z
b014	maju	maju	maju
b015	aʑi	aʑi	aʑi
b016	panaʦʌ	panaʦʌʃʌ	pandaŋʑ
b017	—	judaʃʌ (strong friction)	judalʑ

No.	Irabu	Kuninaka
b001	mi:	mi:
b002	pa:	pa:
b003	tsami	tsimi
b004	pana ~ paṅa	pana
b005	m:busu	m:bu
b006	mniutṣ	mniutṣi
b007	mipana ~ miḥana	mipana
b008	mim	mim
b009	ka:	k ^h a:
b010	paz / tsarasa ('knee') / kar asun'i ('lower leg')	padzi
b011	tsibitaz	tsibital
b012	kaṭamuras	katamusu
b013	pazts:	paltṣi:
b014	mi:nu maju	matsigi
b015	aḥi	aḥi
b016	panats:	panatsi
b017	judaz ~ juda	judal

No.	Item	Ikema	Karimata	Shimajiri
b018	‘tattoo’	NR	NR (‘[iredzumi’ in ‘grandmother’s day’)	𐄂𐄂𐄂𐄂𐄂 ~ 𐄂𐄂𐄂𐄂𐄂 (The response was that it is ‘probably’ this form.)
b019	‘one (thing)’	𐄂𐄂𐄂	p[ti:𐄂𐄂 (Or ‘pɯ[titsɯ’, although the vowel after ‘p’ is almost inaudible.)	ttu:𐄂
b020	‘two (things)’	fta:𐄂	φ[ta:𐄂𐄂 (The vowel after ‘φ’ is almost inaudible.)	fta:𐄂
b021	‘three (things)’	mi:𐄂	[mi:𐄂𐄂 (Or ‘[mi:𐄂𐄂’; there is fluctuation between ‘ɯ ~ i’.)	mi:𐄂
b022	‘four (things)’	ju:𐄂	ju:[𐄂𐄂 (or ‘ju:𐄂𐄂’)	ju:𐄂
b023	‘five (things)’	i𐄂𐄂𐄂	[itsɯ𐄂𐄂 (or ‘[itsɯtsu’)	i𐄂𐄂𐄂
b024	‘six (things)’	m:𐄂	[n:𐄂𐄂 (or ‘n:tsu’)	n:𐄂
b025	‘seven (things)’	nanat𐄂	na[nat𐄂 (or ‘nanatsu’)	nanat𐄂
b026	‘eight (things)’	ja:𐄂	[ja:𐄂𐄂 (or ‘ja:tsu’)	ja:𐄂
b027	‘nine (things)’	kukunuts𐄂 (The initial ‘k’ has a weak release.)	kɯ[kunu]𐄂𐄂 (Or ‘kukunu tsu’, although only ‘nu’ is clearly rounded.)	kukunuts𐄂
b028	‘ten (things)’	tu:	to:	tu:
b029	‘one (person)’	tauka:	[taφk ^h a:	t ^h afkja:
b030	‘two (people)’	hu𐄂a:i	φ[ta:l / φta:ɯ	fta:𐄂
b031	‘three (people)’	n𐄂𐄂a:i	n[𐄂a:l	mita:𐄂

No.	Ōura	Nobaru	Bora
b018	–	pɪnʁʊkʌ	pʰiˈdʒikʰu
b019	pʰitiːʂa	pʰʉtiːʂa	pstiːʂi
b020	ɸuʁaːʂa	futaːʂa	ftaːʂi
b021	miːʂa	miːʂʊ	miːʂi
b022	juːʂa	juːʂa	juːʂi
b023	iʂaʂa	itsʉʂa	itsʉʂi
b024	nntʂa	mːʂa	mmtʂi
b025	nanatʂa	nanatʂa	nanatʂi
b026	jaːʂa	jaːʂa	jaːʂi
b027	kukunutsʂa	kukunutsʂa	kukunutsʂi
b028	tʰuː	tuː	tʰu
b029	tavkʲaː (‘v’ has somewhat weak friction.)	taʊkjaː	taʊkʲaː
b030	ɸutaːʒa (‘ʒ’ has weak friction; it is an apical vowel.)	futaːʒa (strong friction)	ftaːlʲʒ
b031	mitʂaːʒa (‘ʒ’ has weak friction.)	mitʂaːʒa	mitʂaːlʲʒ

No.	Irabu	Kuninaka
b018	paztʃɿ	paldzumi
b019	pitɿ	pititsi
b020	fta:ʃ	ɸuʃa:ʃi
b021	mi:ʃɿ	mi:ʃi
b022	ju:ʃɿ	ju:ʃi
b023	itsɿʃɿ ~ itsuʃɿ	itsiʃi
b024	mɿ:ʃɿ	m:ʃi
b025	nanatʃɿ	nanatʃi
b026	ja:ʃɿ	ja:ʃi
b027	kukunutsɿ	koʔkoʔotsi
b028	tu:	tu:
b029	taʊki:	taʊkja:
b030	fta:ʒ	ɸuta:l
b031	mita:ʒ	mʰita:l

No.	Item	Ikema	Karimata	Shimajiri
b032	‘four (people)’	juta:i	ju[ta:u	juta:ɾ
b033	‘five (people)’	itsunuçi̯tu	[its̺nu̯tu (or ‘its̺inup̺u [tu’)	its̺ nu ttu
b034	‘six (people)’	mujunuçi̯tu	mu[inu̯tu (‘̺’ sounds close to ‘p’.)	muju nu ttu
b035	‘seven (people)’	nananuçi̯tu	na[na]nu̯tu	nana nu ttu
b036	‘eight (people)’	ja:nuçi̯tu	[ja:nu̯tu	ja: nu ttu
b037	‘nine (people)’	kununuçi̯tu / kukununuçi̯tu	ko[konu]nu̯tu	ku̯kunu nu ttu
b038	‘ten (people)’	tu:nuçi̯tu	[tu:nu̯tu	tu: nu ttu
b039	‘how much’	ikassaga: (‘how.much- INTERROGATIVE’; of prices)	[no]np[sa: (Or ‘nonnupsa :’; the final particle ‘sa:’ should have been separated but was not. The form in isolation is probably ‘nonp̺’; question words were apparently difficult to elicit in isolation.)	{nau ~ nou} nu pssa (‘How much is this?’)
b040	‘when’	its̺ga: (‘when- INTERROGATIVE’)	nan̺zi ni / its̺u nu (‘ni’ and ‘nu’ are final particles; they should have been separated but were not. Question words were apparently difficult to elicit in isolation.)	its̺
b041	‘who’	taruga: / taruga (‘who- INTERROGATIVE’)	ta[ru:	t̺a̯ru

No.	Ōura	Nobaru	Bora
b032	juta:ʔ	juta:ʔ	juta:l
b033	itsɿnupstu	itsɿnupstu	guniŋ
b034	mɔinupstu	mujunupstu	rukuniŋ
b035	nananupstu	nananupstu	nananiŋ
b036	ja:nupstu	ja:nupstu	hatsiniŋ
b037	kukunupstu	kukunupstu	kuniŋ
b038	tu:nupstu	tu:nupstu	dzu:niŋ
b039	no:nu psaga	no: nu pusa ga (‘how.much- INTERROGATIVE’) / also ‘iska’ (‘how much’)	isaka
b040	itsɿ ga	itsɿ / itsɿ ga kʷaga (‘When will you come?’)	itsi
b041	taru ga	to:ga ga kʷagumatarja: (‘Who will come?’)	tʰaʊ

No.	Irabu	Kuninaka
b032	juta:z̥	juta:l
b033	its̥nu pstu	its̥nup ^{s̥} itu
b034	mujunu pstu	mujunup ^{s̥} itu
b035	nananu pstu	nananup ^{s̥} itu
b036	ja:nu pstu	ja:nup ^{s̥} itu
b037	kukununu pstu	ko̞ko̞no̞nop ^{s̥} itu
b038	tu:nu pstu	tu:nop ^{s̥} itu
b039	is̥kiga ('how.much- INTERROGATIVE')	kurja: ikassa ga ('How much is this?')
b040	its̥	its̥ɰdu ɸu:ga ('When will you come'; 'ts' becomes 's' depending on the phonetic environment.)
b041	taruga ('who- INTERROGATIVE')	ʊʊa taru ga: ('Who are you?')

No.	Item	Ikema	Karimata	Shimajiri
b042	‘where’	idzanuɕitu (‘where- GENITIVE person’)	n[ɕzai / n[ɕzan / n[ɕza	nda
b043	‘which’	idiga (‘which- INTERROGATIVE’)	n[ɕzaga du / n[ɕziga du (‘du’ is a final particle; it should have been separated but was not. Question words were apparently difficult to elicit in isolation.)	ndzi
b044	‘why’	naujahi:ga (‘why- INTERROGATIVE’)	no[sun]tɕi du / no:[sun]tɕi [du] (‘du’ is a final particle; it should have been separated but was not. Question words were apparently difficult to elicit in isolation.)	noui ~ nau
b045	‘what’	nauga (‘what- INTERROGATIVE’)	[no:	nou ~ nau
b046	‘how many’	ifutɕu (uvaga tussa ifutɕu a ‘you-GENITIVE age-TOPIC how.many-INTERROGATIVE’)	[iɸtɕu	iftɕa
b047	‘daytime; noon’	hi:ma (‘noon’; junaka ‘middle of the night’)	p ^s i[ma (p ^s u[ma’ when pronounced slowly)	pssuma ~ pɾsuma
b048	‘rice paddy’	ta: (no form corresponding to Standard Japanese ‘tanbo’)	[ta: / ɸa[ta]gi / pa[ta]gi	ta:
b049	‘star; celestial body’	hoci	p[si (‘pu:[si’ when pronounced slowly)	pɾ ~ puɾ

No.	Ōura	Nobaru	Bora
b042	n ^d za ga	ndza / ndzaŋ kair'a: (‘where to’) / ndzaŋga (‘at what place’)	n ^d za
b043	n ^d zi ga	ndzi / ndzinuga zo:karja: (‘Which is best?’)	n ^d zi
b044	no: sttiga	{no:tsiga / no:tiga} nakju :rja: (‘Why are you crying?’)	naoŋi:
b045	ure no:ga	no: / no:ju ga puŋkarja: (‘What do you want?’)	naoŋu ~ no:nu
b046	iftsa ga	ifutsa ga ka:ttsa: (‘How many will you buy?’)	ifutsi
b047	p ^h :ma	paru	p ^t si:ma / stumuti (‘morning’) / junai (‘night’)
b048	ta	ta: (pari ‘field (cultivated)’)	t ^h a:
b049	psa	puŋsa	psi ~ psi

No.	Irabu	Kuninaka
b042	n ^(d) za	idaŋ kai ga: ('Where will you go?')
b043	ndzi	idziŋkai du aɸudzi ga: ('Which will you choose?')
b044	no:sti:ga	naʊtɕi: du namagami ga: ('Why are you late?')
b045	no:	naʊ judu aɕu: ga ('What are you doing?')
b046	if(u)ɕa	iɸutsi du al ga: ('How many are there?')
b047	pʰa:ma	pilma
b048	ta:	ta
b049	puɕ ~ puɕi	puɕi

No.	Item	Ikema	Karimata	Shimajiri
b050	‘road; path; way’	n̩ʈ	n[ʈi / n:[ʈu	nʈa
b051	‘mountain’	jama	ja[ma (sa:[ma ‘slope’)	jama (‘place with trees’)
b052	‘island’	ɕima	ɕi[ma / sɨ[ma (It was pronounced centrally in free conversation.)	sɨma
b053	‘shore; beach’	hida	bi[dza / pa[ma	p ^h ama
b054	‘flower’	hana	pa[na	p ^h ana
b055	‘bubble; foam’	awa	a[wa	awa (Standard Japanese?)
b056	‘hole’	ana	a[na	ana
b057	‘sky’	sora (Standard Japanese?)	ti[N (dzi: ‘ground’)	ʈsin
b058	‘squid’	ika	i[ka	ik ^h a
b059	‘shrimp; prawn; lobster’	ibi	e[bi	gan ~ ɲgan (‘Japanese spiny lobster’) / sa ~ saʔ (‘small shrimp’)
b060	‘feather; wing’	hani	pa[ni	p ^h aji
b061	‘cattle (i.e. cow or bull)’	uʈa (ussɤka:di ~ ussuka:di ‘to raise cattle’)	u[sɨ / u[sɨ	usɤ
b062	‘fly (insect)’	hai	pai / pau	paz ~ pa
b063	‘dog’	in	i[n̩ (also transcribable as ‘i N’)	iŋ
b064	‘octopus’	taku	t ^h a[ko / ta[ku	t ^h a _ɕ ku
b065	‘flea’	nun	[nun̩	nun̩
b066	‘crow; raven’	garasa	ga[rasu / ga[ra]sa	garasa
b067	‘sparrow’	ʃʃadura	[utʂa	maʂa
b068	‘leaf’	ha:	ki:nu[pa:	pa:

No.	Ōura	Nobaru	Bora
b050	ntsɿ	mtsɿ	m̥tsɿ
b051	mmi	jama	jama
b052	sɿma	sɿma	sima
b053	pama	pama	p ^h ama
b054	pana	pana	p ^h ana
b055	saɸuŋ	aʊa ~ awa // abuku	a:tsiʊ ~ a:tsiβ
b056	abuː	a:na	a:na
b057	tiŋ	tin ~ tiŋ	tiŋ
b058	ika	ik'a	ik'a
b059	saʔɿ	saʔɿ (weak friction)	ibz / p ^h aʊ ('snake')
b060	pani	pani	p ^h ani
b061	usɿ	usɿ	ussi
b062	paʔɿ	paʔɿ (weak friction)	paz ~ paiz
b063	iŋ	in ~ iŋ	iŋ
b064	tak ^h u	taḵu	taḵu
b065	nuŋ	num	num
b066	ga:r(r)sa	garasa	karasi ~ garasi / garasa
b067	padui	maɕa	p ^h aduɕa
b068	ki·nupa: ('tree-GENITIVE leaf')	pa:	ki: nu p ^h a ('tree-GENITIVE leaf') / upu ni nu p ^h a ('daikon.radish-GENITIVE leaf')

No.	Irabu	Kuninaka
b050	mtsɿ	mtsɿ
b051	jama	jama
b052	sma	sima
b053	pama	pama
b054	pana	pana
b055	abuku	awa
b056	ana	ɸugun
b057	tim	sora
b058	ik'a	ika
b059	saz (shrimp/lobsters in general) / ɿbzgaŋ (large species)	ebi
b060	pani	pani
b061	usɿ	usi
b062	paz̥	paʔi
b063	in (im 'sea')	in
b064	tḁku	tʰḁko
b065	num	num
b066	garasa	garasi
b067	f(u)sadur'a mat̤sa	ffadorja
b068	pa:	pa:

No.	Item	Ikema	Karimata	Shimajiri
b069	‘ear (of a cereal plant)’	hu:	[pu: / [maʷnupu: ~ mal nupu: (‘rice ear’)	pu:
b070	‘root’	ni:	niba[l	ɲi:
b071	‘bamboo’	taki	ta[ke	tʰa̠ki
b072	‘pine’	maʦa	ma[ʦu	maʦaki:
b073	‘straw (of cereal plants)’	NR	ba[ra	bara
b074	‘seed’	tani (also ‘fruit seed’)	ta[ni]	taɲi
b075	‘Chinese fan palm’	kuba	ku[ba	kuba
b076	‘sago palm’	tʰu:ʦa	sɨ[su] dʒu / s[tɨ] ʦu / s[su]dʒu	NR
b077	‘treetop; sugar cane tip’	nai	su[ra (bu:]gʷanusʷ[ra)	sura
b078	‘greens’	na:ʒu / na:ʒu:	[pa:dʒu: (‘leaf vegetable’; su: ‘vegetable’)	NR / (su: ‘vegetable’)
b079	‘sake; alcoholic beverage (in general)’	saki	sa[k̚i]	saki
b080	‘bean; pea’	mami	ma[me	mami
b081	‘cereal (specif. wheat, barley, rye & oats)’	muzɒ	mu[gɨ	mugz ~ mugɒ
b082	‘rice cake’	mutʰi:	mu[ʦi	mutʰa
b083	‘mandarin orange’	funʰu:	ɸni[n̩ / ɸni[ʷ / ɸ[nʰʷ	fʷanɒ

No.	Ōura	Nobaru	Bora
b069	p ^h u:	pu:	a: nu p ^h u: ('foxtail.millet- GENITIVE ear')
b070	ni:	ni:	ni:
b071	taki	taḵi	taḵi
b072	matṣaki	matṣa	matṣigi:
b073	bara	wara / bara	bara
b074	tani	sani (san ^h u: mak ^h a 'seed- ACCUSATIVE to.sow') / sanimunu	t ^h ani
b075	kuba	kuba	kuba
b076	—	sutitṣa	fuk ^h atṣi
b077	sa:ra nu pa / sa:ra	surapana	(bu:zḷnu 'sugar.cane- GENITIVE') baram
b078	na:zu:	na:	na:
b079	saki	saki	saki
b080	mami	mami	mami
b081	mug ^z	mug ^z (weak friction)	mgḷ ^z
b082	mutṣḷ	mutṣa	mṭṣi
b083	funi ^z (' ^z ' has weak friction.)	funiḷ (weak friction)	funil ^z

No.	Irabu	Kuninaka
b069	pu:	pu: (accompanied by a slight bilabial trill)
b070	n'i:	ni:
b071	ta _ɕ ki	tʰa _ɕ ke
b072	maɽgi	maɽgi:
b073	gara	giɽiɽi
b074	tan'i	tani
b075	kuba	kuba
b076	sdɽɽa	so _ɕ teɽi
b077	bu:znu sɽa	ki:nu suɽa ('tree-GENITIVE tip')
b078	na: / su: ('vegetable')	pa:
b079	sa _ɕ ki	sake
b080	mami	mami
b081	nuz _ɕ	mugi
b082	mutɽa:	mutɽi
b083	f(u)n'iz	ɸun'iu

No.	Item	Ikema	Karimata	Shimajiri
b084	'sponge gourd'	nab'a:ra	na[b'a:ra	nabja:ra
b085	'parent'	uja (uza 'father'; m̐ma 'mother')	oja ('father') / ʷ[ɟaʷ [ma ('father and mother') / ojafa: ('parent and child')	ujamma:sa
b086	'cousin'	it̪ufu	i[t̪u̯ɸu	itufu
b087	'older brother'	suza ('eldest son') / uzag ama ('youngest son') / nakasuza ('sons between the eldest and the youngest')	a[ɟa	suda / aɟa
b088	'older sister'	ha:ni ('eldest daughter') / ʊbagama ('youngest daughter') / anigama (('next youngest daughter')) / ʊbagama ('youngest daughter'; the first sound is a labiodental approximant, not a vowel.)	[aŋ]ga	anga
b089	'sibling'	utuza (male as well as female)	NR / [k'o:]dai (?)	k'o:dai
b090	'relative; kin'	utuza ('it̪umu' on festive occasions)	u[ja]ku	ut ^h ada
b091	'bowl; (flower) pot'	hatsi	NR / ha[t̪si	NR
b092	'jar'	kami	ka[mi / mi[ɟʷugami	k ^h ami
b093	'spatula'	hira	pi[ra	pira
b094	'umbrella; parasol; bamboo hat'	sana	sa[na / mi[nokaʃa = ku[ba:sa	sana

No.	Ōura	Nobaru	Bora
b084	nab ^h o:ra	nabja:ra	nab ^h a:ra
b085	nd za mma (first ‘m’ of ‘mma’ with double articulation of ‘m’ and ‘n’)	uja (uja ‘father’; anna ‘mother’)	zzamma / uja (‘father’) / anna (‘mother’)
b086	iɬaɸu	iɬɰfu	iɬɰifu
b087	azza:	aɬɬsa	si ^(d) za / atɬsa
b088	aŋga	aŋga	aŋga
b089	—	kjo:dai	k ^h o:dai (Standard Japanese?)
b090	utɰdza	utɬutɬsa	ututɬsa
b091	paɬɰ (oɰziŋ ‘meal tray’?)	haɬɰ // paɬɰ	paɬɰi
b092	kami	kami	k ^h ami
b093	pɪra	pɪra	p ^h ɪra
b094	sana	sana	sana

No.	Irabu	Kuninaka
b084	nab ^h a:ra	nabja:ra
b085	uja	uja / uja anna
b086	itʃfu	it ^h o _{ko}
b087	a ^(d) za	ada
b088	ani	ani
b089	k ^h o:dai / bikitu (^d)zara / mi:tu (^d)zara	k ^h o:dai
b090	ujaku	utuda
b091	paʃʃ(ɿ)	p ^h aʃʃi
b092	kami	kami
b093	pīra	pīra
b094	sana / kuba:sa ('fan palm hat')	sana

No.	Item	Ikema	Karimata	Shimajiri
b095	‘thread; string’	itu	[i]ʈsu	itu
b096	‘cord (esp. the thong of a geta)’	bu: / attɕa nu bu: (‘geta-GENITIVE thong’)	[bu: / pa[nabu:]	bu:
b097	‘handle; grip; haft’	juru	[ʔi:]	i:
b098	‘net; mesh’	an	[ʔan	aŋ
b099	‘tub; bucket’	taɾu	NR / ta[rɯ	kubadɕa:
b100	‘pillow’	maffa	maɸ[ɸa	maffa
b101	‘medicine’	fɯsui (Visually, it does not appear to be labiodental to a high degree; the contact is weak. Perhaps it is ‘hɯ sui’.)	ɸ[sɯi / ɸusujɯ	ssuŋ / ssuŋzu ~ ssuzzu (fɯ sui ‘medicine-ACCUSATIVE’)
b102	‘ax; hatchet’	jutsɾ	na[ta (apparently ‘ax; hatchet’; confirmed by showing a drawing made on the spot)	juksɾ
b103	‘sickle; scythe’	zzara (The first ‘z’ begins with a low degree of fricativity.)	ɯ[za]ra	zzara
b104	‘hoe’	ffatsɾ	[ɸɸatsɯ	ffatsɾ
b105	‘colander’	sauki	[so:gi	ba:ki (deep type) / so:ki (shallow type)

No.	Ōura	Nobaru	Bora
b095	itu	itu / kaçi ('weaving thread')	nuzzu: ~ nuzju:
b096	bu:	bu:	p ^h anabu: ('geta-GENITIVE thong')
b097	i:	i:	ʔi·
b098	aŋ	am	am
b099	tagu ('g' has somewhat weak closure.)	u:ki / tagu (carried on top of the head to transport water)	t ^h aru
b100	maffa	maffa	maffa
b101	fsui / ssui	fusu:ʔ	fsi:z ~ fsi _u ʔ
b102	jukkʔ	ju:kʔ	juks
b103	zzafa	ʔzafa	zzafa ~ ʔzafa
b104	ffatʔ	ffatʔ ('f is weak.)	ffatʔi
b105	–	so:ki / ba:ki	sauḱi

No.	Irabu	Kuninaka
b095	itu	ito
b096	bu:	bu: (As the opening between the lips is very narrow, it is sometimes accompanied by a slight trill.)
b097	i:	ji:
b098	am ₁	am
b099	u:ki / tarai ('washtub')	NR / 'u:ki' is not used.
b100	maf(u)ra	maφφa
b101	f ₁ sz ₁	φusul
b102	bu:nu	ono
b103	zzara	lzara
b104	ffats ₁	φφatsi
b105	so:ki / ba:ki	so:ki

No.	Item	Ikema	Karimata	Shimajiri
b106	‘spade; shovel’	NR (There were no cattle.)	NR (‘sɯ[ki’; a picture was shown but there was no response. The men would know it; it is used with horses.)	ski
b107	‘iron pot; kettle’	hagama	pa[gama (o[kama ‘cooking stove’)	ukama
b108	‘rice paddle’	kina	miɯski[na (miɯ[sɯ ‘rice paddle’; ki[na ‘ladle’)	kina
b109	‘cane; walking stick; wand’	di:gi:	gu[ɕan	guɕan
b110	(missing)			
b111	‘paper’	kabi:	ka[bi (without an ‘s’-sound)	kabʰ
b112	‘(thick) rope’	nna: / nna	tsɯ[na	tsʰna
b113	‘(tobacco) pipe’	tʰi: (‘tʰi:’?)	kʰi[sɯ	kʰiɕ
b114	‘name’	namai	[na:	na:
b115	‘sail; canvas’	hu:	[pu:	pu:
b116	‘load; cargo’	ni:	[ni:	ɲimutsʰ
b117	‘metal’	kani	ka[ni	kaɲi
b118	‘money’	din	ɕzi[n	ɕziɲ
b119	‘sound; noise’	NR (The form obtained was ‘...nu nariju’ (‘...-NOMINATIVE to.sound’))	u[tu	NR / (oto)
b120	‘song’	a:gu	[a:]gu	a:gu
b121	‘bridge’	NR (There were no bridges; sambaɕi ‘pier’.)	ha[ɕi	pʰasʰ

No.	Ōura	Nobaru	Bora
b106	ma:jama	ma:jama (for digging up slightly) / sɯki	s(ʷ)ki / jama
b107	ukama	pagama	ʔukama
b108	k ^h ina	miskai	kina
b109	—	guɕaŋ	guɕaŋ
b110			
b111	kabʔ	kabʔ	kabl ^z (kabitul ^z ‘kite’; combination of the words for ‘paper’ and ‘bird’)
b112	ʦna	ʦna	ʦina
b113	kiɕiʔ (“ʔ” has weak friction.)	kiɕiʔ	k ^h iɕi:l ^z
b114	na:	na: (‘name’; du:ga na: ‘one’s own name’)	na:
b115	pu:	pu:	(funi nu) pu:
b116	ni:	ni:	ni:
b117	kani	kani	k ^h ani
b118	ɕiŋ	ɕiŋ	ɕiŋ
b119	kannaʔ (‘thunder’)	utu	nal ^z
b120	a:gu(:)	a:gu	a:gu
b121	pasɯ	pasɯ	NR

No.	Irabu	Kuninaka
b106	suki	siki
b107	ukama / ukuma	ukama
b108	kina	kina
b109	guɕaŋ	guɕan
b110		
b111	kabz	kabi:
b112	tsna	tsina
b113	tɬe(ɾ)z	ɬeil
b114	na:	na:
b115	pu:	pu: (accompanied by a slight bilabial trill)
b116	nʲi:	ni:
b117	kani	
b118	dʒiŋ	dʒiŋ
b119	na:z̥	utu
b120	ajagu ~ ajago	a:gu
b121	pasz ~ pasʰɾ:	pʰaʃi:

No.	Item	Ikema	Karimata	Shimajiri
b122	‘stone’	iɕi	i[su (‘[issadzari’ when there are many)	isɔ
b123	‘feces’	ɸuɕu	ɸ[su (‘ɸu[su’ when pronounced slowly)	ssu
b124	‘grain (of something); particle’	NR	dü:[ɕu / ɕü:[ɕü (ma uduɕu ‘grain of rice’; sekkendɕuɕu ‘lump of soap’)	ɕabu
b125	‘life’	nuɕɔ	u[nutsu	nnuɕɔ
b126	‘pig shed; lavatory’	wa:nuɕi	[tu:wa / [tuʸ:wa / wa:nuja	wa: nu ja:
b127	‘illness’	jamiju (verb)	ja[mi]u / jamiju (A noun was difficult to elicit.)	jaŋ
b128	‘pillar; post; column’	hala (‘l’ is perhaps pronounced somewhat behind the alveolar ridge; hassa ‘mast’.)	pa[ra	para
b129	‘imitation’	ma:bi	m’a:[bi	ɲa:bi
b130	‘lie; untruth’	bakurau / bakuro: (‘l’ instead of ‘r’?)	da[ra]ɸu	daraxa
b131	‘smell; scent’	kadzɔ	ka[ɕɔ / ka[basuɲkan	kʰada
b132	‘(the) front’	a:gi (‘(the) front’; ɕita, ɕita:ra (‘(the) back’)	[ma:sima (kaisima ‘(the) back’)	a:ra
b133	‘outside’	ara	[a:]ra	a:ra / puka [elicited]

No.	Ōura	Nobaru	Bora
b122	isʌ	isʌ	isi
b123	ssu	fʊsu	fsu
b124	gumadani	sɔɕʌ	NR
b125	nnutʂʌ	nnutʂʌ	nnutʂi
b126	wa: nu ja: / ɸuʔʌ ('ʔ' has weak friction)	wa:nu ja: (It is not used for 'lavatory'; 'fuɾʌ' is used for that.)	NR
b127	jaŋ / b'oɕʌ	jam	jam
b128	para	para	para ~ para
b129	na:bi	na:bi	na:bi
b130	daraɸu	janacʰzai / damasai (nominalization of 'to.deceive-PASSIVE') / also 'daraka'	daraka
b131	kadɕʌ	kacʰʌ	kʰacʰ(ʰ)a
b132	wa:bi	umuti	ma:sma / kaisma ('(the) back', only of clothes; 'wa:bi' and 'sɪta' for the front and reverse sides of paper)
b133	pʰuka	pʊka // a:ra	a:ra:

No.	Irabu	Kuninaka
b122	isɿ	isɿ
b123	ɸuɕu	ɸuɕi
b124	ɽsubu	ɽibu
b125	nnuɽɿ	nnuɽi
b126	wa:nu ja: / NR ('lavatory')	ɸuɕi mal ɽsubu (apparently not what was intended to be elicited)
b127	jamɿ	jam
b128	para	para
b129	ma:bi	ma:bi
b130	skasɿ / darafu	taraɸu
b131	kadzɿ	kusamunu / kbasumunu ('bad smell' / 'good smell')
b132	umuti	mae (ɽibi '(the) back')
b133	ari:	puka

No.	Item	Ikema	Karimata	Shimajiri
b134	‘inside’	naka (‘middle; inside’)	na: (‘middle; inside’; [ja: na]: ‘inside the house’)	naxa ~ naka (‘x’ in spontaneous utterance)
b135	‘up; above; over; top’	a:gi	[wa:gu	wa:gi
b136	‘down; below; under; bottom’	ɕiɕa / ɕiɕa:ra	si[ta:ra	sta (‘s:ta’ when pronounced slowly)
b137	‘too; also (particle)’	ha[na]mai (‘nose-too’) / ha[na]mai (‘flower-too’)	—	—
b138	‘a little’	hi:tɕagama	[pi:ŋ]ka:	pittaga:
b139	‘more’	m̥m̥’ahi	—	—
b140	‘much; many’	ha:sa	u[po:]sa	—
b141	‘small’	imiimi	i[miŋ]ka: / i[miŋ]ga	imikaŋ
b142	‘large’	gaba:	u[ɸo:bi / u ^p ɸo:bi	u:gatakaŋ
b143	‘low; short (of height)’	ssabana / ssamunu (‘munu’ adjectival?)	—	—
b144	‘the same’	junusui / junuɕɕi (‘same age’; ɕɕi ‘age’)	—	—
b145	‘short (of length)’	ma:ku	—	—
b146	‘round; spherical’	ma:ku / ma:ra	—	—
b147	‘that (medial pronoun)’	ui (scope of usage unclear; ka:ma ‘far away’)	—	—
b148	‘thing’	munu	—	—

No.	Ōura	Nobaru	Bora
b134	naka	naka / ʉʌ	(ja:) naka
b135	wa:bi	wa:bi / wa:gu	wa:bi
b136	sta:ra	sʌta / sʌta:ra	sʌta
b137	—	—	—
b138	pittʌ:	ipi:ʌtagama	ipittʌ ~ ipi:ʌ / ipi:ʌtag ama
b139	—	—	—
b140	—	—	—
b141	imittʌ (imisʌma / imizʌ ma ‘small island’)	imi:tta	imi:mi / imimunu (imi:mi nu munu ‘small thing’; ‘imi :mi munu’ is not used frequently.)
b142	upujarabi (‘large child’; upo:upu ‘very large’)	upo:upu	upu:pu / upumunu (upu: pu nu munu ‘large thing’)
b143	—	—	—
b144	—	—	—
b145	—	—	—
b146	—	—	—
b147	—	—	—
b148	—	—	—

No.	Irabu	Kuninaka
b134	naka ('middle; inside')	naka
b135	wa:ra	ʉa:ra
b136	ʂta:ra	ʂita:ra
b137	–	
b138	jo: tʰa:i (ffiru)	ipi:ta gama
b139	–	
b140	–	
b141	imi:imi	imimunu gama
b142	upo:up ~ opo:up	opo.opu (The vowel fluctuates between 'u ~ o'.)
b143	–	
b144	–	
b145	–	
b146	–	
b147	–	
b148	–	

No.	Item	Ikema	Karimata	Shimajiri
b149	‘to give (honorific)’	fi:sama	phi:samai	fi:samaŋ
b150	‘to lend’	karasŋ	—	—

No.	Ōura	Nobaru	Bora
b149	fi:(ʷ) (‘ʷ’ has weak friction.)	fi: (‘to give’) / fi:samaŋ (‘to give (honorific)’)	fi:samaŋ ^ʷ (honorific) / fi:
b150	—	—	—

No.	Irabu	Kuninaka
b149	ffiz	fi:samatal (‘to.give(honorific)-PAST’)
b150	–	

Grammar Data

N-155B-1	Standard Japanese	<i>hato-mo taka-mo tobu.</i> pigeon-too hawk-too to.fly 'Pigeons and hawks both fly.'	Researchers
N-155B-1	Ikema	ffjaduramai ('sparrow-too') takamai tubi (/h/ fluctuates between 'h ~ φ ~ f' in this dialect. There were several repeated utterances and hesitations by the speakers, so the researchers' data also vary; in this report, the sound is uniformly transcribed as 'f'.)	N,N,D,U
N-155B-1	Karimata	p ^h aʈu mai t ^h aʈkamai tubi	N,M
N-155B-1	Kugai	m:batumai takamai tubʔ	N,H,N,M
N-155B-1	Yonaha	tuʔja tubansuɡa mbata: tubɔdu ʂ ('Birds don't fly, but pigeons do.')	S
N-155B-1	Kurima	paʈume: takame: {tubz / tubzdu} ʂ: takanudu tubz	K,U,D
N-155B-1	Miyaguni	{tuzmai/tuʔmai} takamai butuki	K,T
N-155B-1	Uruka	m̥batumai takamai tuvi:du uʔ	N,I,O
N-155B-1	Bora	mbatumai takamai tubz	K,T
N-155B-2	Standard Japanese	<i>kyoo-wa tenki-ga warui-kara hikooki-wa toba-nai.</i> today-TOPIC weather-NOMINATIVE to.be.bad-because plane-TOPIC to.fly-NEGATIVE 'Planes won't fly today, because the weather is bad.'	
N-155B-2	Ikema	kju:ja {teŋkinu / suʔanu} baikai ba tubimunumai tubaɴ	N,N,D,U
N-155B-2	Karimata	kju:ja {teŋkinu / ʉa:ʂi kinu} ʉa:ʂikaɾiba ɕiko:kja tubampaʔi	N,M
N-155B-2	Kugai	kju:ja ʉa:ʂaʔaʔnu {baska:ba / basʔka:ba} hiko:kja: tubaŋ	N,H,N,M
N-155B-2	Yonaha	kju:ja wa:ʂaʔaʔnu baʔkaɾiba ɕiko:kja: tubaɴ	S
N-155B-2	Kurima	kju:ja tintsʔnu bazkaɾiba ɕiko:kja: tubaŋ kju:ja ʉa:ʂaʔnu janakaɾiba ɕiko:kja: tubaŋ	K,U,D
N-155B-2	Miyaguni	kju:ja tiŋki {bazkaiba / baikaiba} hiiko:kja ituŋ	K,T
N-155B-2	Uruka	kju:ja wa:ʔskʔ baʔkaɾiba ɕiko:kja: tubaŋ	N,I,O
N-155B-2	Bora	kju:ja wa:ʂkaʔnu bazkaɾiba ɕiko:kja: tubaŋ	K,T
N-155B-3	Standard Japanese	<i>kaze-de booshi-ga ton-da.</i> wind-INSTRUMENTAL hat-NOMINATIVE to.fly-PAST 'My hat was blown away by the wind.'	
N-155B-3	Ikema	kadiɕi: kavvimunumai tubahaɾiʔa:ɴ	N,N,D,U
N-155B-3	Karimata	kaɕi ndu bo:ɕinu {tubiuʔ / tubju:}	N,M
N-155B-3	Kugai	kaɕiɕidu bo:ɕinu tubin'a:ŋ (The existence of 'tubʔta:' was not confirmed.)	N,H,N,M
N-155B-3	Yonaha	kaʔna: ɕiko:kja: {tubɔdu ʂʔa: / tubʔta:} ('Planes flew yesterday.')	S

N-155B-3	Kurima	kaɕinu ʦu:karibadu bo:ɕime: tubi kaɕinu {ʦu:karibadu / ʦu:karibadu} bo:ɕime: {tubɕtaz / tubɕtan}	K,U,D
N-155B-3	Miyaguni	kazindu bo:sinu {tubipi:/tubasafirja:}	K,T
N-155B-3	Uruka	kaɕiɕidu bo:ɕinu tuvʔtaʔ	N,I,O
N-155B-3	Bora	kaɕiɕi: bo:ɕinu tubɕta:	K,T
N-155B-4	Standard Japanese	<i>oyadori-ga tonde, koori-ga ton-da.</i> parent.bird-NOMINATIVE to.fly, little.bird-NOMINATIVE to.fly-PAST 'The parent bird flew away, after which the little bird flew away.'	
N-155B-4	Ikema	mmaduinu tubi fɕaduinu tubiui	N,N,D,U
N-155B-4	Karimata	mmaduɕinu tubidu fɕa:duɕnu du bju:	N,M
N-155B-4	Kugai	mmaduʔnu tubibadu fɕaduʔmai tubʔ (<i>Shite</i> -continuative 'tubisʔ' was not obtained.)	N,H,N,M
N-155B-4	Yonaha	mmaduɕnu tubitti fɕaduɕmai {tubɕta:/ tubɕtan} (Perhaps 'tubɕtan' instead of 'tubɕtan'.)	S
N-155B-4	Kurima	mmaduznu tubittidu fɕaduzza {tubɕtaz / tubɕtan}	K,U,D
N-155B-4	Miyaguni	mmaduzdu tubi: ibi:nu tuzɕamanu tubipirija:	K,T
N-155B-4	Uruka	ujaduʔnu tuvitti(du) fɕaduʔnu tubɕtaʔ	N,I,O
N-155B-4	Bora	mmaduɕnu tubittɕi fɕaduɕnu tubɕta:	K,T
N-155B-5	Standard Japanese	<i>soko-kara tonde mi-ro.</i> there-ABLATIVE to.jump to.see-IMPERATIVE 'Try jumping from there.'	
N-155B-5	Ikema	umakaɕa tubi mi:ru	N,N,D,U
N-155B-5	Karimata	uma:ɕa tubi mi:ru	N,M
N-155B-5	Kugai	umakaɕa tubi mi:ru	N,H,N,M
N-155B-5	Yonaha	umakaɕa tubi mi:[ru	S
N-155B-5	Kurima	umakaɕa tubi mi:ɕ	K,U,D
N-155B-5	Miyaguni	umakaɕa tubimiɕu	K,T
N-155B-5	Uruka	umakaɕa tuvi mi:ru	N,I,O
N-155B-5	Bora	umakaɕa tubi mi:ru	K,T
N-156B-1	Standard Japanese	<i>minna-de fune-o kogu.</i> everyone-INSTRUMENTAL boat-ACCUSATIVE to.row 'We all row the boat together.'	
N-156B-1	Ikema	nnaɕi funu: kuɕi	N,N,D,U
N-156B-1	Karimata	n:naɕi funiu kuɕi	N,M
N-156B-1	Kugai	m:naɕi: funu: kuɕʔ	N,H,N,M
N-156B-1	Yonaha	m:naɕi: funiu kuɕʔ ('iu' in 'funiu' is an ambiguous diphthong.)	S

N-156B-1	Kurima	ha:ri:nu fñu:ba: muztuɕi:du kudʒ / <cf> muztuɕi: fñu: kuge (‘All row the boat together’ (imperative))	K,U,D
N-156B-1	Miyaguni	m:nasi fñu kugi	K,T
N-156B-1	Uruka	m:naɕi: {funiju / fun’u:} {kuguŋ / kuguŋ}	N,I,O
N-156B-1	Bora	m:naɕi fñu: kugʒ	K,T
N-156B-2	Standard Japanese	<i>daremo fune-o koga-nai.</i> anyone boat-ACCUSATIVE to.row-NEGATIVE ‘No one rows the boat.’	
N-156B-2	Ikema	{tarumai / n:na} {fñu: kugan / fñu:ba kugadʒa:N}	N,N,D,U
N-156B-2	Karimata	tarumai fñu(:)ba kugan	N,M
N-156B-2	Kugai	ta:mai fñu:ba: kugan	N,H,N,M
N-156B-2	Yonaha	to:mai fñu:ba: kugan	S
N-156B-2	Kurima	to:me: fñu:ba: kugan	K,U,D
N-156B-2	Miyaguni	to:mai fñu:ba: kugan	K,T
N-156B-2	Uruka	taru:mai fñu:ba: kugan	N,I,O
N-156B-2	Bora	ta:mai fñu:ba: kugan	K,T
N-156B-3	Standard Japanese	<i>mukashi-wa yoku fune-o koi-da.</i> long.ago-TOPIC often boat-ACCUSATIVE to.row-PAST ‘Back in the day, I often rowed the boat.’	
N-156B-3	Ikema	ŋkja:nna ju:du fñu:ba kugitai	N,N,D,U
N-156B-3	Karimata	ŋkja:nna ju:du fñu:ba ku:dai	N,M
N-156B-3	Kugai	ŋkja:nna ju:du fñu:ba kugita:	N,H,N,M
N-156B-3	Yonaha	ŋkja:nna ju:du fñu:ba kugita:	S
N-156B-3	Kurima	ŋkja:nna fñu:ba: ju:du kudʒa	K,U,D
N-156B-3	Miyaguni	ŋkja:nna urusiku fñu:ba: kugitai	K,T
N-156B-3	Uruka	ŋkja:nna ju:du fñu:ba: kugita:	N,I,O
N-156B-3	Bora	ŋkja:nna jaudu fñu:ba: kugita:	K,T
N-156B-4	Standard Japanese	<i>fune-o koide, sonoato yasum-e.</i> boat-ACCUSATIVE to.row, after.that to.rest-IMPERATIVE ‘Row the boat; then, take a rest.’	
N-156B-4	Ikema	fñu:ba: kugittikara jukui	N,N,D,U
N-156B-4	Karimata	fñu:ba: kugidu atuŋi juko:dai	N,M
N-156B-4	Kugai	fñu:ba: kugittikara jukui	N,H,N,M
N-156B-4	Yonaha	fñu:ba: kugitti: uriga atuŋ jukui (fñu:ba: ‘boat-TOPIC’)	S
N-156B-4	Kurima	fñu:ba: kugitti unu atu:ba: jukui	K,U,D
N-156B-4	Miyaguni	fñu:ba: {kugicci / kugicja:} unuato: bugarikaiba jukui	K,T
N-156B-4	Uruka	fñu:ba: kugittikara jukui	N,I,O
N-156B-4	Bora	fñu:ba: kugitti unu atuŋ jukui	K,T

N-156B-5	Standard Japanese	<i>hitori-de fune-o koide ki-ta.</i> one.person-INSTRUMENTAL boat-ACCUSATIVE to.row to.come-PAST 'I rowed the boat by myself.'	
N-156B-5	Ikema	{taʊka:çi: / tavka:çi:} fuŋa: {ku gi: fi: ru ('to.row to.give-IMPERATIVE') / kuɡittai ('to.row-PAST')}	N,N,D,U
N-156B-5	Karimata	taʊkja:ʎidu fuŋu: kuɡikiʎi	N,M
N-156B-5	Kugai	taʊkja:ʎidu funʉu: kuɡikʉʎa:	N,H,N,M
N-156B-5	Yonaha	ʊʊkja:ʎi:du funʉa: kuɡadu ŋʉa: (funʉa: 'boat-TOPIC')	S
N-156B-5	Kurima	{taʊkja:ʎi:du / taʊkja:ʎi:dʊ} fɯu: kuɡiʈʈaŋ	K,U,D
N-156B-5	Miyaguni	taʊkja:ʎidu fɯu kuɡikʈʈa:	K,T
N-156B-5	Uruka	tavka:ʎidu {funiju / funʉu:} {kuɡiʈʈaŋ / kuɡʉiʈʈaŋ}	N,I,O
N-156B-5	Bora	taʊkja:ʎidu fɯu: kuɡikʈʈa:	K,T
N-157-1	Standard Japanese	<i>mainichi umi-e iku.</i> every.day sea-ALLATIVE to.go 'I go to the sea every day.'	
N-157-1	Ikema	juiçi: iŋkai ifu	N,N,D,U
N-157-1	Karimata	maiŋiʈʈi iŋgai ifu	N,M
N-157-1	Kugai	mainiʈʈa imkai ikaŋ	N,H,N,M
N-157-1	Yonaha	mainiʈʈadu imkai ikaŋ (Also pronounced 'ma: inʉiʈʈadu' when emphasized.)	S
N-157-1	Kurima	mai:niʈʈi imke:du {iʈʈ / iʈʈa}	K,U,D
N-157-1	Miyaguni	mai:niçi imkai ikaʒgamata	K,T
N-157-1	Uruka	{iʈʈa:mai / mainiʈʈa} imkai {ikaŋ / ikaŋa}	N,I,O
N-157-1	Bora	mai:niʈʈa imkai {iks / piz}	K,T
N-157-2	Standard Japanese	<i>chichi-wa tenki-ga warui-kara umi-e-wa ika-nai.</i> father-TOPIC weather-NOMINATIVE to.be.bad-because sea-ALLATIVE-TOPIC to.go-NEGATIVE 'My father won't go to the sea, because the weather is bad.'	
N-157-2	Ikema	(oto:ʊa) kju:ja teŋkinu baikaiba iŋkaija ikaŋ	N,N,D,U
N-157-2	Karimata	uja: ʊa:ʈʈikinu baikaiba iŋgaija ikaŋ	N,M
N-157-2	Kugai	ʉza: ʊa:ʈʈaŋ javvi:du imkaija ikaŋ (When asked about how 'a:ɕza' was used for 'father' in the case of N-165-3, the speaker changed 'ʉza:' into 'a:ɕza:'.)	N,H,N,M
N-157-2	Yonaha	ʊjaʃ: wa:ʈʈaŋnu baikaiba imkaija ikaŋ	S
N-157-2	Kurima	uja: ʊa:ʈʈaŋnu baikaiba imke:ja ikaŋ	K,U,D
N-157-2	Miyaguni	uja: {ciŋkzga / ciŋkaŋga} baikaiba imkaija ikaʒjaŋ	K,T
N-157-2	Uruka	uja: wa:ʈʈaŋnu baikaiba imkaija ikaŋ	N,I,O
N-157-2	Bora	uja: wa:ʈʈaŋnu baikaiba imkaija ikaŋ	K,T

N-157-3	Standard Japanese	<i>kinoo-mo umi-e it-ta.</i> yesterday-too sea-ALLATIVE to.go-PAST 'I went to the sea yesterday, too.'	
N-157-3	Ikema	fūnu: iŋkai ifutai	N,N,D,U
N-157-3	Karimata	kinumaidu iŋgai {ifutai / iftai}	N,M
N-157-3	Kugai	kʰnumai imkai pi:ta:	N,H,N,M
N-157-3	Yonaha	kʰnumaidu imkai ikʰta:	S
N-157-3	Kurima	ʈsnume: va:ʈsʈnu bazkariba imke: istan ʈsno: va:ʈsʈnu bazkaribadʊ imke: istan	K,U,D
N-157-3	Miyaguni	kʰnu:mai imkai iksta:	K,T
N-157-3	Uruka	kʰnu:mai imkai {iksʰtaʰ / iksta:} (The pronunciation of 'ks' approaches double articulation; this also holds for the rest of the data.)	N,I,O
N-157-3	Bora	ʈsnu:mai imkai {iksʰta: / pʰʰta:}	K,T
N-157-4	Standard Japanese	<i>umi-e itte, oyoide ki-ta.</i> sea-ALLATIVE to.go, to.swim to.come-PAST 'I went to the sea to swim.'	
N-157-4	Ikema	iŋi iki: u:gittai	N,N,D,U
N-157-4	Karimata	iŋgai ikidu uigi {futai / ftai}	N,M
N-157-4	Kugai	imkai iki:du u:gi kʰta: (The <i>shite</i> -continuative was not obtained.)	N,H,N,M
N-157-4	Yonaha	im ikidu ʊ:gitti kʰʰa ('ikidu' is an <i>ari</i> -continuative. When asked the speaker also accepted 'im ikitti: ʊ:gidu kʰʰa', but this sentence was not uttered by the speaker.)	S
N-157-4	Kurima	imke: {iki:du / ikiʰtidʊ} u:gi ʈsta	K,U,D
N-157-4	Miyaguni	{imkai / immikidu} ikiʰci: u:gʰʰta:	K,T
N-157-4	Uruka	imkai ikitti u:gi {ksʰta: / ksta}	N,I,O
N-157-4	Bora	imkai ikiʰʰidu u:gi kʰta:	K,T
N-157-5	Standard Japanese	<i>umi-e-wa hitori-de itte ko-i.</i> sea-ALLATIVE-TOPIC one.person-INSTRUMENTAL to.go to.come-IMPERATIVE 'Go to the sea alone.'	
N-157-5	Ikema	iŋkaija {taʊka: / taʊka:} {iki: / iki: ku:} ('ʊ' is a back (centralized) close (towards close-mid) vowel; 'ʊ' is a labiodental approximant.)	N,N,D,U
N-157-5	Karimata	iŋgaija taʊkja:ɛi iki ku:	N,M
N-157-5	Kugai	imkai taʊke:ɛi iki ku:	N,H,N,M
N-157-5	Yonaha	imkaija taʊkja:ɛi {ikitti ku: / iki fuɣja:nna} ('ikitti' is a <i>shite</i> - continuative; 'iki' in 'iki fuɣja:nna' ('to.go to.give-NEGATIVE- INTERROGATIVE') is an <i>ari</i> -continuative.)	S

N-157-5	Kurima	imke:ja taŋkja:ŋi: {ikitti ku: / ikiku:}	K,U,D
N-157-5	Miyaguni	imkaija taŋkja: iki ku:	K,T
N-157-5	Uruka	imkaija taŋkja:ŋi: ikiku:	N,I,O
N-157-5	Bora	imkaija taŋkja:ŋi iki ku:	K,T
N-158-1	Standard Japanese	<i>kyoo-wa chichi-ga uchi-ni kuru.</i> today-TOPIC father-NOMINATIVE house-LOCATIVE to.come 'Today, my father will come to my house.'	
N-158-1	Ikema	kju:ja ʔizaŋadu ja:ŋkai fu:	N,N,D,U
N-158-1	Karimata	kju:ja uja:du ja:ju ffu	N,M
N-158-1	Kugai	kju:ja ʔzanudu ja:ŋkai {kʔŋʔ / ks:}	N,H,N,M
N-158-1	Yonaha	kju:ja ʔjaŋadu ja:ŋkai kʔŋʔ	S
N-158-1	Kurima	kju:ja ujaŋadu ja:ŋke: mmʔa / mmʔaʔ (Honorific for 'to come'.) <cf> dusnudu ja:ŋke: ʔsʔ ('My friend will come to my house.')	K,U,D
N-158-1	Miyaguni	kju:ja ujaŋadu ja:ŋkai ki:	K,T
N-158-1	Uruka	kju:ja ujaŋadu ja:ŋkai {ksʔ / ksʔʔ} (The honorific for 'to come' is 'mmʔaʔ'.)	N,I,O
N-158-1	Bora	kju:ja ujaŋadu ja:ŋkai kʔʔ:	K,T
N-158-2	Standard Japanese	<i>kyoo-wa haha-wa ko-nai.</i> today-TOPIC mother-TOPIC to.come-NEGATIVE 'Today, my mother won't come.'	
N-158-2	Ikema	kju:ja mmaŋadu ku:N	N,N,D,U
N-158-2	Karimata	kju:ja anna: {ku:N / fu:N}	N,M
N-158-2	Kugai	kju:ja ane: ku:ŋ	N,H,N,M
N-158-2	Yonaha	kju:ja anna: ku:N	S
N-158-2	Kurima	kju:ja anna: ku:ŋ	K,U,D
N-158-2	Miyaguni	kju:ja anna: ku:ŋ	K,T
N-158-2	Uruka	kju:ja anna: ku:ŋ	N,I,O
N-158-2	Bora	kju:ja anna: ku:ŋ	K,T
N-158-3	Standard Japanese	<i>kinoo chichi-ga uchi-ni ki-ta.</i> yesterday father-NOMINATIVE house-LOCATIVE to.come-PAST 'My father came to my house, yesterday.'	
N-158-3	Ikema	{fuŋu:/ŋu:} ʔizaŋa ja:ŋkai {ttai / t'ai}	N,N,D,U
N-158-3	Karimata	kinudu uja: jai kiŋi	N,M
N-158-3	Kugai	kʔno: ʔzanudu ja:ŋkai kʔŋa:	N,H,N,M
N-158-3	Yonaha	kʔna: ʔjaŋadu {ja:ŋke: / ja:ŋkai} kʔŋŋa:	S
N-158-3	Kurima	ʔno: ujaŋadu ja:ŋke: mmʔaŋa (Honorific for 'came'.) / {ʔstaŋ / ʔstaŋ} (Non-honorific for 'came'.)	K,U,D
N-158-3	Miyaguni	kinu:du ujaŋa ja:ŋkai ki:ta:	K,T

N-158-3	Uruka	ksʀnu: uja: ja:ŋkai {ksʀta: / ksʀtaʔ}	N,I,O
N-158-3	Bora	ʒʀnu: ujaɣadu ja:ŋkai kʂta:	K,T
N-158-4	Standard Japanese	<i>kocchi-e kite, uchi-ni modot-ta.</i> this.way-ALLATIVE to.come, house-LOCATIVE to.return-PAST 'I came over here and returned home.'	
N-158-4	Ikema	kumattikafa ja:ŋkai muduitai	N,N,D,U
N-158-4	Karimata	umai {kiʂidu / kiʂiʂidu} jai muduta	N,M
N-158-4	Kugai	kumaŋkai {kʰʂittikara / kiʂittikara} ja:ŋkai piʔa:	N,H,N,M
N-158-4	Yonaha	kumaŋkai kʰʂittidu ja:ŋkai pi:ta:	S
N-158-4	Kurima	kumaŋke: ʔʂittidu ja:ŋke: {piʀta / piʀtaʀ}	K,U,D
N-158-4	Miyaguni	kumaŋkai kiʂiccidu ja:ŋkai muduʔta:	K,T
N-158-4	Uruka	kumaŋkai kiʂittidu ja:ŋkai muduri piʔʀtaʔ ('to.return to.go-PAST')	N,I,O
N-158-4	Bora	kumaŋkai kiʂittʂidu ja:ŋkai piʔta:	K,T
N-158-5	Standard Japanese	<i>kocchi-e hayaku ko-i.</i> this.way-ALLATIVE to.be.early to.come-IMPERATIVE 'Quickly come over here.'	
N-158-5	Ikema	kumaŋkai hajamaʀi ku:	N,N,D,U
N-158-5	Karimata	umai ha:ʀi ku:	N,M
N-158-5	Kugai	umaŋkai pe:pe:ti: ku:	N,H,N,M
N-158-5	Yonaha	kumaŋkai pʰa:kai ku:	S
N-158-5	Kurima	kumaŋke: pʰa:kari ku:	K,U,D
N-158-5	Miyaguni	kumaŋkai pja:pja: ku:	K,T
N-158-5	Uruka	kumaŋkai pʰa:pʰa:ti ku:	N,I,O
N-158-5	Bora	kumaŋkai pʰa:kari ku:	K,T
N-158-5	Standard Japanese	<i>kocchi-e kite mi-ro.</i> this.way-ALLATIVE to.come to.see-IMPERATIVE 'Try coming over here.'	
N-158-5	Ikema	umatti mi:ru	N,N,D,U
N-158-5	Karimata	{umai / uma:i} kiʂi mi:ru	N,M
N-158-5	Kugai	umaŋkai {kʰʂi / kiʂi} mi:ru	N,H,N,M
N-158-5	Yonaha	kumaŋkai kʰʂi mi:ru	S
N-158-5	Kurima	kumaŋke: {ʔʂiʂimi:ʀ / ʔʂiʂimi:ʀo}	K,U,D
N-158-5	Miyaguni	kumaŋkai kiʂi mi:ru	K,T
N-158-5	Uruka	kumaŋkai {kiʂi / kiʂi} mi:ru	N,I,O
N-158-5	Bora	kumaŋkai kiʂi mi:ru	K,T
N-159-1	Standard Japanese	<i>nigatsu-wa yoku ame-ga furu.</i> February-TOPIC often rain-NOMINATIVE to.fall 'In February, it rains often.'	

N-159-1	Ikema	{fu:ɕiʔsinna / fu:ɕiʔsinda} ju:du {aminu / amja:} fu:	N,N,D,U
N-159-1	Karimata	ɲigatsunna ju:du aminu {ffu/fu:}	N,M
N-159-1	Kugai	niɡatʂa ju:du aminu fuʔ	N,H,N,M
N-159-1	Yonaha	niɡatʂa ju:du aminu fɰ	S
N-159-1	Kurima	niɡatʂanna aminudu ju: fɰ	K,U,D
N-159-1	Miyaguni	niɡacunna unusiʔku aminu fuʔ	K,T
N-159-1	Uruka	niɡatʂa ju:du aminu fuʔ	N,I,O
N-159-1	Bora	niɡatʂa: ju:du aminu fɰʔ	K,T
N-159-2	Standard Japanese	<i>kinoo-wa ame-ga fura-nai.</i> tomorrow-TOPIC rain-TOPIC to.fall-NEGATIVE 'It won't rain, tomorrow.'	
N-159-2	Ikema	atʂa: amja: ffaN	N,N,D,U
N-159-2	Karimata	atʂa: amja: ffaN	N,M
N-159-2	Kugai	atʂa: ame: fufaŋ	N,H,N,M
N-159-2	Yonaha	atʂu: amja: ffaN (Perhaps 'atʂu:' is the zero-case form for 'tomorrow'.)	S
N-159-2	Kurima	atʂa: amja: ffaŋ	K,U,D
N-159-2	Miyaguni	ac'a: amja: ffaŋ	K,T
N-159-2	Uruka	atʂa: amja: ffaŋ	N,I,O
N-159-2	Bora	ata: amja: ffaŋ	K,T
N-159-3	Standard Japanese	<i>kinoo-wa ame-ga fut-ta.</i> yesterday-TOPIC rain-NOMINATIVE to.fall-PAST 'Yesterday, it rained.'	
N-159-3	Ikema	nnu: amja: fu:tai	N,N,D,U
N-159-3	Karimata	kino: aminudu {ffi / fɰfi}	N,M
N-159-3	Kugai	kano: aminudu fuʔta:	N,H,N,M
N-159-3	Yonaha	kana: aminudu fɰtta:	S
N-159-3	Kurima	ʂano: aminudu fɰta	K,U,D
N-159-3	Miyaguni	kīnu:ja aminudu fuzta:	K,T
N-159-3	Uruka	ʂanu:ja aminudu {ʔʂtaʔ / ʔʂta:}	N,I,O
N-159-3	Bora	ʂanu:ja aminudu fɰʔta:	K,T
N-159-4	Standard Japanese	<i>ooame-ga futte, hideri-ga tuzui-teiru.</i> heavy.rain-NOMINATIVE to.fall, drought-NOMINATIVE to.continue-PROGRESSIVE 'After the heavy rain, there has continued to be a drought.'	
N-159-4	Ikema	gaba: aminu ffi: ntanu ('earth-NOMINATIVE') ka:kijui ('to.dry.up-STATIVE')	N,N,D,U
N-159-4	Karimata	upu aminudu fiʔite pja:inu ʂiɕiʔiki:juN	N,M

N-159-4	Kugai	{abʔza'ami / abʔza:mi} furi:du pia:ʔnu ʔaʔaʔku: (The apostrophe signifies a hiatus.)	N,H,N,M
N-159-4	Yonaha	upu aminudu ffiti piaʔnu ʔsuzukiu (‘iu’ in ‘ʔsuzukiu’ is an ambiguous diphthong; it can also be interpreted as ‘ʔsuzuku:’.)	S
N-159-4	Kurima	upuaminu ffitidʔ pia:ʔinu ʔu:kaʔ <cf> pia:ʔinu {ʔaʔaʔku: / ʔaʔaʔku:} (‘the sunshine is strong’)	K,U,D
N-159-4	Miyaguni	up.aminu ficcidu wa:cʔkinu cuzukiu	K,T
N-159-4	Uruka	upu: aminu ffiti(du) ato: pia:ʔ ʔaʔaʔki uz (‘there has continued to be a drought’)	N,I,O
N-159-4	Bora	upuaminu ffitʔidu pia:ʔinu ʔaʔaʔku:	K,T
N-159-5	Standard Japanese	<i>ima ame-ga fut-teiru.</i> now rain-NOMINATIVE to.fall-PROGRESSIVE ‘It’s raining now.’	
N-159-5	Ikema	n:nama aminu fʔju:ui	N,N,D,U
N-159-5	Karimata	nnama: aminudu {fʔju: / fʔju:}	N,M
N-159-5	Kugai	nnama: aminudu fuʔju:	N,H,N,M
N-159-5	Yonaha	nnamadu aminu fʔju: (‘iu’ in ‘fʔju:’ is an ambiguous diphthong; it can also be interpreted as ‘fʔju:’.)	S
N-159-5	Kurima	nʔnama: aminudu {fʔju:ʔ / fʔju:ʔ}	K,U,D
N-159-5	Miyaguni	nnama aminu fʔju:	K,T
N-159-5	Uruka	nama: aminudu {fʔju:ʔ / fʔju:ʔ}	N,I,O
N-159-5	Bora	nʔnamadu aminu fʔju:	K,T
N-159-5	Standard Japanese	<i>ame-ga futte ki-ta.</i> rain-NOMINATIVE to.fall to.come-PAST ‘It has started raining.’	
N-159-5	Ikema	aminu fʔi: fu:do:	N,N,D,U
N-159-5	Karimata	aminudu fʔi kiʔi	N,M
N-159-5	Kugai	aminudu furi {kʔ: / ks:}	N,H,N,M
N-159-5	Yonaha	aminudu fʔi kʔʔ	S
N-159-5	Kurima	aminudu fʔi ʔiʔʔ:ʔ (‘to.fall to.come-STATIVE’)	K,U,D
N-159-5	Miyaguni	aminudu fʔikʔ	K,T
N-159-5	Uruka	aminudu fʔi ksʔ:	N,I,O
N-159-5	Bora	aminu fʔi: kʔ:	K,T
N-160-1	Standard Japanese	<i>minna koko-de oriru.</i> everyone here-LOCATIVE to.get.off ‘Everyone gets off here.’	
N-160-1	Ikema	n:nanai umakafa uʔifu	N,N,D,U

N-160-1	Karimata	n:na umandu urui (uripaʔi 'to.get.off-EPISTEMIC'; uraʔi 'to.drop.off-IMPERATIVE')	N,M
N-160-1	Kugai	m:na umaŋ urɪʔ	N,H,N,M
N-160-1	Yonaha	m:na kumaN urɪʔ (Perhaps 'urɪʔ' is an imperative.)	S
N-160-1	Kurima	mu:ʔtu kumaŋke: urɪ mu:ʔtu kumaŋke: urɪʔ	K,U,D
N-160-1	Miyaguni	m:na {kumau / kumaŋkai} urɪʔ	K,T
N-160-1	Uruka	m:na kumaŋ urɪtʃa: ('to.get.off-EMPHATIC' (intentional); an assertive form was not obtained.)	N,I,O
N-160-1	Bora	m:na umaŋdu urɪ	K,T
N-160-2	Standard Japanese	<i>watashi-wa koko-de-wa ori-nai.</i> I-TOPIC here-LOCATIVE-TOPIC to.get.off-NEGATIVE 'I don't get off here.'	
N-160-2	Ikema	ba: umanna urɪdʒa:N	N,N,D,U
N-160-2	Karimata	ba: umanna urɪdafaN (Perhaps 'to.get.off-POTENTIAL-NEGATIVE'.)	N,M
N-160-2	Kugai	baja: umanna urɪŋ	N,H,N,M
N-160-2	Yonaha	baja: kumanna {urɪdʒa:N / urɪdʒa:N}	S
N-160-2	Kurima	aba: kumaŋke: {urɪŋ / urɪŋ / urɪdʒa:ŋ}	K,U,D
N-160-2	Miyaguni	baja: kumaŋkaija urɪʒa:ŋ	K,T
N-160-2	Uruka	baja: kumanna ʊru {ɾaŋ / dʒaŋ}	N,I,O
N-160-2	Bora	baja: umanna urɪŋ	K,T
N-160-3	Standard Japanese	<i>koko-de basu-o ori-ta.</i> here-LOCATIVE bus-ACCUSATIVE to.get.off-PAST 'I got off the bus here.'	
N-160-3	Ikema	umandu basukafa urɪtai	N,N,D,U
N-160-3	Karimata	uma urɪdu bassudu urɪtai (The nature of 'urɪ' in 'urɪdu' is uncertain.)	N,M
N-160-3	Kugai	umandu bas: urɪta:	N,H,N,M
N-160-3	Yonaha	kumandu {bassu / basukafa} urɪta: (basukafa 'bus-ABLATIVE')	S
N-160-3	Kurima	kumaŋke:du bassa {urɪtaʔ / urɪta}	K,U,D
N-160-3	Miyaguni	kumaŋkaidu {bassu / basukafa} urɪta:	K,T
N-160-3	Uruka	kumaŋdu bassu: {urɪta:/urɪtaʔ}	N,I,O
N-160-3	Bora	umaŋdu bassu urɪta:	K,T
N-160-4	Standard Japanese	<i>basu-o orite, denwa kake-ro.</i> bus-ACCUSATIVE to.get.off, telephone to.put.on-IMPERATIVE 'Get off the bus and make a call.'	
N-160-4	Ikema	basukafa urɪ: denɯɯau ja:ŋkai kakɪru	N,N,D,U
N-160-4	Karimata	bassu urɪʔɪ de:ɯɯau ʔɪ ku:	N,M
N-160-4	Kugai	bas urɪtti demɯo: kakɪru	N,H,N,M
N-160-4	Yonaha	basupa urɪtti demɯo: kakɪru	S

N-160-4	Kurima	baskara urittidu demɔao kəkɪru	K,U,D
N-160-4	Miyaguni	basukara uritte deŋwau kəkɪru	K,T
N-160-4	Uruka	bassu uritti demwauba: kəkɪru	N,I,O
N-160-4	Bora	basa: urittɛi demɔau kəkɪru	K,T
N-160-5	Standard Japanese	<i>imooto-ga basu-kara orite ki-ta.</i> younger.sister-NOMINATIVE bus-ABLATIVE to.get.off to.come-PAST 'My sister came out of the bus.'	
N-160-5	Ikema	uttunu midunnu basukara urittɛu:i	N,N,D,U
N-160-5	Karimata	utudunudu basukara uri kiɛi	N,M
N-160-5	Kugai	ututunudu bas: uri ks:	N,H,N,M
N-160-5	Yonaha	bunaɲnudu basukara uri kɪʁɔ	S
N-160-5	Kurima	utuɬunudu baskara uri {ɬɪa / ɬɪa}	K,U,D
N-160-5	Miyaguni	utuɬu basukara uri kiɬa:	K,T
N-160-5	Uruka	aŋ, g a g a (' older.sister-NOMINATIVE ') basukara {urikʂtaʁ / urikʂtaʁ}	N,I,O
N-160-5	Bora	utuɬunudu baskara uri kʂa:	K,T
N-161-1	Standard Japanese	<i>saru-mo ki-kara ochiru.</i> monkey-too tree-ABLATIVE to.fall 'Even monkeys fall from trees./Even the best sometimes make mistakes.'	
N-161-1	Ikema	sarumai ki:kara uti:jui	N,N,D,U
N-161-1	Karimata	sarumai ki:gaɾadu {utidu / utɛi}	N,M
N-161-1	Kugai	sarumai ki:kara utiʁ	N,H,N,M
N-161-1	Yonaha	itɬu:maidu ki:kara uti: (' They always fall from the trees (because the branches are weak). ')	S
N-161-1	Kurima	sarume: ki:kara {utidus / utidusɔ} (' to.fall-EMPHATIC to.do ') <cf> antɛi: itaɟɪaɾaɬu:ka: umakara utimdo: (' Being mischievous like that you'll fall down from there! ')	K,U,D
N-161-1	Miyaguni	sarumai ki:kara uci	K,T
N-161-1	Uruka	saru:mai ki:kara utidu {sɪ / sɪʁ} (Apparently unnatural with 'utiʁ'. 'sɪ:' is sometimes accompanied by some slight friction.)	N,I,O
N-161-1	Bora	sarumai ki:kara utɛi	K,T
N-161-2	Standard Japanese	<i>ki-o yurashi-temo mi(mikan)-wa ochi-nai.</i> tree-ACCUSATIVE to.shake-even.when fruit(mandarin.orange)-TOPIC to.fall-NEGATIVE 'No mandarins fall from the tree, even when you shake it.'	
N-161-2	Ikema	ki: jurugaɬimmai ki:nunaija ɟɪ:ŋkaija utiN	N,N,D,U
N-161-2	Karimata	ki:ju jurugaɬa:mai n:ta: utiN	N,M
N-161-2	Kugai	ki:ju jurɛi:mmai naʁza utiŋ	N,H,N,M
N-161-2	Yonaha	ki:ju jurugaɬa:mai funiizza utuN	S
N-161-2	Kurima	ki:ju jurugaɬa:me: mikanna utuŋ	K,U,D

N-161-2	Miyaguni	ki:u juru ^g asibam mikanna utuŋ	K, T
N-161-2	Uruka	ki:ju ujukasabaŋ naz ^ʔ ra utuŋ	N, I, O
N-161-2	Bora	ki:ju ja ^ʔ asa:mai naz ^ʔ ra utuŋ	K, T
N-161-3	Standard Japanese	<i>ani-ga ki-kara ochi-ta.</i> older.brother-NOMINATIVE tree-ABLATIVE to.fall-PAST 'My brother fell from the tree.'	
N-161-3	Ikema	sud ^ʔ zanu ki:kara sand ^ʔ ari ŋa:N (ka:ranu utitai 'A roof tile fell down.')	N, N, D, U
N-161-3	Karimata	ad ^ʔ za: ('older.brother-TOPIC ') ki: g ara uti ad ^ʔ zandu ('older.brother-NOMINATIVE ') ki:gara ut ^ʔ ei	N, M
N-161-3	Kugai	sud ^ʔ zanudu ki:kara utita:	N, H, N, M
N-161-3	Yonaha	azagadu ki:kara utita:	S
N-161-3	Kurima	ad ^ʔ zanadu ki:kara {uti ^ʔ / uti: / uti ^ʔ az}	K, U, D
N-161-3	Miyaguni	azi ^ʔ aga ki:kara ucita:	K, T
N-161-3	Uruka	azagadu ki:kara {utita ^ʔ / utita:}	N, I, O
N-161-3	Bora	ad ^ʔ agadu ki:kara ut ^ʔ ei ^ʔ :	K, T
N-161-4	Standard Japanese	<i>ani-wa ki-kara ochite, ima-wa byooiin-ni iru.</i> older.brother-TOPIC tree-ABLATIVE to.fall, now-TOPIC hospital-LOCATIVE to.be 'My brother fell from the tree and is now in the hospital.'	
N-161-4	Ikema	sud ^ʔ aga ki:kara sand ^ʔ ari:ti nnama i ^ʔ anuja:n uriui	N, N, D, U
N-161-4	Karimata	ad ^ʔ za ki:gara utidu nnama bjo:indu u ^ʔ i	N, M
N-161-4	Kugai	sud ^ʔ za: ki:kara uti ^ʔ idu nnama: bio:iŋ u:	N, H, N, M
N-161-4	Yonaha	aza: ki:kara ut ^ʔ sittidu nnama: bio:iŋ u ^ʔ (The friction noise of 'r' in 'uŋ' is weak.)	S
N-161-4	Kurima	ad ^ʔ zanadu ki:kara uti ^ʔ ti pa ^ʔ tsu jama ^ʔ itti bio:iŋke: piztaŋ	K, U, D
N-161-4	Miyaguni	aza: ki:kara uc ^ʔ cidu nnama: bjo:indu u:	K, T
N-161-4	Uruka	aza: ki:kara utittidu nama: bio:iŋ u ^ʔ	N, I, O
N-161-4	Bora	ad ^ʔ za: ki:kara ut ^ʔ sittidu nnama: bio:in u:	K, T
N-161-5	Standard Japanese	<i>ame-wa ten-kara ochite kuru.</i> rain-TOPIC sky-ABLATIVE to.fall to.come 'Rain falls from the sky.'	
N-161-5	Ikema	ami tiŋkara uti: fu:	N, N, D, U
N-161-5	Karimata	amja: tiŋgaradu ut ^ʔ ei: ku:	N, M
N-161-5	Kugai	ame: tiŋkaradu uti ks:	N, H, N, M
N-161-5	Yonaha	am ^ʔ aa tiŋkaradu uti k ^ʔ ŋ	S
N-161-5	Kurima	am ^ʔ a: {tiŋkaradu / tiŋkaradu} {ff ^ʔ ts ^ʔ / uti ^ʔ ts ^ʔ }	K, U, D
N-161-5	Miyaguni	amja: ciŋkara uciku:	K, T

N-161-5	Uruka	am ^{ja} : təŋkaradu utiks ^ʔ	N,I,O
N-161-5	Bora	am ^{ja} : tɛŋkaradu utɛi k ^ʔ :	K,T
N-162-1	Standard Japanese	<i>saru-ga kinomi-o otosu.</i> monkey-NOMINATIVE nut-ACCUSATIVE to.drop 'A monkey drops nuts from the tree.'	
N-162-1	Ikema	safu ki:nunai utaçi:jui	N,N,D,U
N-162-1	Karimata	safunudu ki:nu n:tau {utas ^ɿ : / utas ^ɿ }	N,M
N-162-1	Kugai	safunudu ki:nu na ^ʔ zuba: utas ^ʔ	N,H,N,M
N-162-1	Yonaha	safunudu ki:nu nazzu utus ^ʔ	S
N-162-1	Kurima	safunudu ki:ŋke: nu:ri: iki ('tree-LOCATIVE to.climb to.go') ki:nu {nazzu / nazzɯ} utus ^ʔ	K,U,D
N-162-1	Miyaguni	safu ^{ga} ki:nu nazzu utus ^ʔ	K,T
N-162-1	Uruka	safua ki:nu {naz ^ʔ ɿ / naz ^ʔ ɿ} utus ^ʔ	N,I,O
N-162-1	Bora	safunudu ki:nu nazzu {utus ^ʔ / utus ^ʔ }	K,T
N-162-2	Standard Japanese	<i>kono saru-wa kinomi-o otosa-nai.</i> this monkey-TOPIC nut-ACCUSATIVE to.drop-NEGATIVE 'This monkey doesn't drop nuts.'	
N-162-2	Ikema	kunu safu: ki:nunaiju:ba utahan	N,N,D,U
N-162-2	Karimata	kunu {safo: / safo} ki:nu n:tau utasan	N,M
N-162-2	Kugai	kunu safo: ki:nu na ^ʔ zuba: utasaŋ	N,H,N,M
N-162-2	Yonaha	kunu safa: ki:nu na ^ʔ zuba: utasan	S
N-162-2	Kurima	kufu safo: ki:nu nazzuba: utusaŋ	K,U,D
N-162-2	Miyaguni	kunu safo: ki:nu mi:uba: utusaŋ	K,T
N-162-2	Uruka	kunu safua ki:nu naz ^ʔ ɿba: utusaŋ	N,I,O
N-162-2	Bora	kunu safa: ki:nu nazzuba: utusaŋ	K,T
N-162-3	Standard Japanese	<i>kinoo ido-ni ishi-o otoshi-ta.</i> yesterday well-LOCATIVE stone-ACCUSATIVE to.drop-PAST 'I dropped a stone into the well yesterday.'	
N-162-3	Ikema	nnu ka:ŋkai issi utaɕitai	N,N,D,U
N-162-3	Karimata	kinu:ndu ka:i issu utaɕitai	N,M
N-162-3	Kugai	k ^ʔ nu: ka:ŋkai issu utasta:	N,H,N,M
N-162-3	Yonaha	k ^ʔ nu:du issu ka:ŋkai utus ^ʔ ta: ('yesterday stone-ACCUSATIVE well-LOCATIVE to.drop-PAST')	S
N-162-3	Kurima	t ^ʔ no: issudu ka:ŋke: {utustaz ^ʔ / utustan}	K,U,D
N-162-3	Miyaguni	kunu ka:ŋkai issu utusta:	K,T
N-162-3	Uruka	ks ^ʔ nu: ka:ŋkai issu: {utustaz ^ʔ / utustan}	N,I,O
N-162-3	Bora	t ^ʔ nu:du t ^ʔ ra:ŋka:ŋkai issu utusta:	K,T

N-162-4	Standard Japanese	<i>booshi-o otoshite, tori-ni it-ta.</i> hat-ACCUSATIVE to.drop, to.get-DATIVE to.go-PAST 'I dropped my hat and went to get it.'	
N-162-4	Ikema	kavvimunu dʒi:ŋkai utaçi tuiga ikitai	N,N,D,U
N-162-4	Karimata	bo:ɛiu utaɛidu tuiga iki	N,M
N-162-4	Kugai	bo:ɛu: utaɛitidu tuʔga ikaʔta:	N,H,N,M
N-162-4	Yonaha	bo:ɛa: utuɛittidu tuʔga ikaʔta: (Perhaps 'bo:ɛa:' corresponds to 'hat-TOPIC'.)	S
N-162-4	Kurima	bo:ɛu: utuɛitidʊ tuzga {iku:taʔ / iku:ta}	K,U,D
N-162-4	Miyaguni	bo:sju: utuɛittʔi tuʔga ikaʔta:	K,T
N-162-4	Uruka	bo:ɛu: utuɛitti tuʔga iksʔtaʔ	N,I,O
N-162-4	Bora	bo:ɛu: utuɛitʔidu tuzga iku:ta: ('to.go-STATIVE-PAST')	K,T
N-162-5	Standard Japanese	<i>ki-ni nobotte mi-o otoshite ku-re.</i> tree-LOCATIVE to.climb fruit-ACCUSATIVE to.drop to.give-IMPERATIVE 'Climb the tree and drop some fruit.'	
N-162-5	Ikema	ki:nu hananʔkai nu:ri: naimunun utaçi fi:ru	N,N,D,U
N-162-5	Karimata	ki:ŋgai nu:ri n:tau utaçi {fi:ru / firu}	N,M
N-162-5	Kugai	ki:ŋkai nu:ri iki: naʔzu u taçi fi:ru	N,H,N,M
N-162-5	Yonaha	ki:ŋkai nu:ri: nazzu utuɛi fʔiru	S
N-162-5	Kurima	ki:n naʔu:ʔ mikannu tʔri utuɛi fi:ru ('Get the mandarin that has grown on the tree and drop it.') ki:n nu:ri iki utuɛi fi:ru ('Go climb the tree and drop it.')	K,U,D
N-162-5	Miyaguni	ki:ŋkai nu:ricci nazzu utuɛi fi:ru	K,T
N-162-5	Uruka	ki:ŋkai nu:ritti {naʔʔ / naʔʔŋkai} utuɛi fʔiru	N,I,O
N-162-5	Bora	ki:n nu:ri: nazzu utuɛi fi:ru	K,T
N-163-1	Standard Japanese	<i>uma-mo hito-o keru.</i> horse-too person-ACCUSATIVE to.kick 'Horses kick people, too.'	
N-163-1	Ikema	nu:mamai {fʔtu / ɸʔtu} uba ki: tausʊ	N,N,D,U
N-163-1	Karimata	nu:mamai pʔʔtuudu ki:	N,M
N-163-1	Kugai	nu:mamai pstu: kiʔ	N,H,N,M
N-163-1	Yonaha	nu:ma:mai pʔtu:ʔu {ka:dusu / kizʔ}	S
N-163-1	Kurima	nu:mame: pʔtu:du {kiz / kiʔ}	K,U,D
N-163-1	Miyaguni	nu:mamai {pʔtuba: / pʔtu:} kiz	K,T
N-163-1	Uruka	nu:mamai pstu:ba: {kiʔ / kiʔadu sʔ} (Apparently unnatural with 'utiʔ' [translator's note: 'kiʔ'?). 'sʔ' [translator's note: 'sʔ'?) is sometimes accompanied by some slight friction.)	N,I,O
N-163-1	Bora	nu:mamai pʔtu: kizʔ	K,T

N-163-2	Standard Japanese	<i>otonashii uma-wa hito-o kera-nai.</i> to.be.quiet horse-TOPIC person-ACCUSATIVE to.kick-NEGATIVE 'Gentle horses don't kick people.'	
N-163-2	Ikema	manai nu:ma: fiŋtu uba kiraN	N,N,D,U
N-163-2	Karimata	nu:ma: pʰiŋtuuba kiraN	N,M
N-163-2	Kugai	nuka:nukanu nu:ma: pstu:ba: kiraŋ	N,H,N,M
N-163-2	Yonaha	nuka:nu nu:ma: pŋtu:ba kiraN	S
N-163-2	Kurima	nuka:nu nu:ma: pʰtuba: kiŋaŋ	K,U,D
N-163-2	Miyaguni	nuka:nukanu nu:ma: {pʰiŋtuba: / pʰiŋtuba} kiraŋ	K,T
N-163-2	Uruka	nuka:nukanu nu:ma: pʰiŋtu:ba: {kʷsaŋ / kʷsaŋ}	N,I,O
N-163-2	Bora	manai:manainu nu:ma: pʰtu: kiraŋ	K,T
N-163-3	Standard Japanese	<i>kinoo ano uma-wa hito-o ket-ta.</i> yesterday that horse-TOPIC person-ACCUSATIVE to.kick-PAST 'That horse kicked someone, yesterday.'	
N-163-3	Ikema	nnu: kanu nu:ma: ki:taɪ	N,N,D,U
N-163-3	Karimata	kino: kanu nu:ma: pʰiŋtuudu kiri (Perhaps 'pstu ~ pʰtu' instead of 'pʰtu'.)	N,M
N-163-3	Kugai	kʷnu: kanu nu:ma: pstu:du {kiʷta: / kiʷta:}	N,H,N,M
N-163-3	Yonaha	kʷna: kanu nu:ma: pŋtu:du kizʷta: (kʷna: 'yesterday-TOPIC')	S
N-163-3	Kurima	ʔnudu kanu nu:ma: pstu: {kizʷaz / kizʷa}	K,U,D
N-163-3	Miyaguni	kʷnu: kanu nu:ma: pʰiŋtu: kizʷta:	K,T
N-163-3	Uruka	ksnu: kanu nu:ma: pʰtu: kʷtaʷ	N,I,O
N-163-3	Bora	ʔʷnu:ja kanu nu:ma: pʰtu kizʷta:	K,T
N-163-4	Standard Japanese	<i>aruji-o kette, nigesat-ta.</i> master-ACCUSATIVE to.kick, to.run.off-PAST 'It kicked its master and ran off.'	
N-163-4	Ikema	nussu kiri: ɕiŋgi: hari:ŋa:N	N,N,D,U
N-163-4	Karimata	nussidu kiriʔiti piŋgitai	N,M
N-163-4	Kugai	nussu kiritidu piŋgi pi:ta:	N,H,N,M
N-163-4	Yonaha	aʷziba kirittidu piŋgi pi:ta:	S
N-163-4	Kurima	nu:manu nussudu kirittidu nussu kiŋittidʊ piŋgi piʷta: ('The horse kicked its master and ran off.')	K,U,D
N-163-4	Miyaguni	aʷzzadu kʷri piŋgasi piʷa:ʃta:	K,T
N-163-4	Uruka	nussʷ: kirittidu piŋgita:	N,I,O
N-163-4	Bora	nussu kirittʷi piŋgi piʷta:	K,T
N-163-5	Standard Japanese	<i>sono booru-o koko-ni kette ku-re.</i> that ball-ACCUSATIVE here-LOCATIVE to.kick to.give-IMPERATIVE 'Kick that ball this way.'	
N-163-5	Ikema	unu ma:iju kumaŋkai kiri: fi:ru	N,N,D,U

N-163-5	Karimata	unu bo:ru umai kiri fi:ru	N,M
N-163-5	Kugai	unu {bo:ru: / bo:ru'o} umaŋkai kiri fi:ru ('bo:ru'o' is not dialectal.)	N,H,N,M
N-163-5	Yonaha	unu ma:ʔu kumaŋkai kiri fi:ru	S
N-163-5	Kurima	unu ma:zzʊ ('ball-ACCUSATIVE') kiri fi:rʊ kumaŋke kiri jaʔae ('to.kick to.give-IMPERATIVE') <cf> vvaɡa kire ('You kick it.' (imperative))	K,U,D
N-163-5	Miyaguni	unu ma:zzu kumaŋkai kiri fi:ru	K,T
N-163-5	Uruka	unu bo:ru: kumaŋkai kiri jaʔae	N,I,O
N-163-5	Bora	unu bo:ru: kumaŋkai kiri fi:ru	K,T
N-163B-1	Standard Japanese	<i>chichi-ga mainichi gomi-o suteru.</i> father-NOMINATIVE every.day garbage-ACCUSATIVE to.discard 'My father throws away garbage every day.'	
N-163B-1	Ikema	{ʔizaɡa / zzaɡa} mainiʔi gumiuba: si:ti:	N,N,D,U
N-163B-1	Karimata	uʔa: mainiʔi gomiu {si:ti/sitidu} (si:tiui 'to.discard-PROGRESSIVE')	N,M
N-163B-1	Kugai	ʔzanudu mainiʔa gumiʊ: stiʔ	N,H,N,M
N-163B-1	Yonaha	uʔaga mai:niʔiʔ gumiʊ sutiʔ	S
N-163B-1	Kurima	uʔaŋadu ɡʊmiʊ:ba: mainiʔa {stiʔ/stiz}	K,U,D
N-163B-1	Miyaguni	uʔagadu mai:niʔi gumiʊ si:ciu	K,T
N-163B-1	Uruka	uʔagadu mainiʔa gumiʊ: ʃti	N,I,O
N-163B-1	Bora	uʔagadu mainiʔa gumiʊ:ba: ʃtɛi	K,T
N-163B-2	Standard Japanese	<i>sobo-wa furui kimono-mo sute-nai.</i> grandmother-TOPIC to.be.old kimono-too to.discard-NEGATIVE 'My grandmother doesn't even throw away her old kimonos.'	
N-163B-2	Ikema	oba:ja jaʔi dʒim (nu?) mai si:tiN	N,N,D,U
N-163B-2	Karimata	oba:ja jaʔi kinnuba si:tiN	N,M
N-163B-2	Kugai	a:ma: fuʔaʔannumai ʃtuŋ	N,H,N,M
N-163B-2	Yonaha	mma: furu:nu kʌnnumai sutuN	S
N-163B-2	Kurima	pa:mma: fuʔumi: ʃnnume: stuŋ	K,U,D
N-163B-2	Miyaguni	mma: fz:fzu kinnumai si:tuŋ	K,T
N-163B-2	Uruka	mʔma: fuʔaʔanu kʃnnumai ʃtuŋ	N,I,O
N-163B-2	Bora	mma: fz:fzu ʃnnumai ʃtuŋ	K,T
N-163B-3	Standard Japanese	<i>furui doogu-wa ototoi sute-ta.</i> to.be.old tool-TOPIC day.before.yesterday to.discard-PAST 'I threw away my old tools the day before yesterday.'	
N-163B-3	Ikema	jaʔi daʊɡu mi:kanai si:tiN	N,N,D,U
N-163B-3	Karimata	jaʔi dovva bututuʔidu si:ti	N,M
N-163B-3	Kugai	fuʔ do:ʊʊuba: bututuʔidu ʃtiʔa:	N,H,N,M
N-163B-3	Yonaha	furu:nu do:ɡʊuba: bututuʔidu ʃtiʔa:	S

N-163B-3	Kurima	fɯɾufɯɾuɾi:nu t̚ka:ruŋ do:vva: ('to.be.old to.become-PAST to.use- POTENTIAL-NEGATIVE tool-TOPIC ') {t̚nudu stitaɿ / buttuzdu {stitaɿ / stitaɿ}}	K,U,D
N-163B-3	Miyaguni	{fz:fznu / fɪ:fɪnu} do:guba: bututuɾdu sɯtita:	K,T
N-163B-3	Uruka	fɯɾufɯɾu do:ʊba: bututuɾ {sɯtitaɾ / stita:}	N,I,O
N-163B-3	Bora	fz:fznu da:vvuba: bututuz s̚t̚ita:	K,T
N-163B-4	Standard Japanese	<i>furui mono-wa sutete, atarashii mono-o ka-e.</i> to.be.old thing-TOPIC to.discard, to.be.new thing-ACCUSATIVE to.buy-IMPERATIVE 'Throw away your old things and buy new ones.'	
N-163B-4	Ikema	jaɾi munuba s̚ti: mi: munu kai	N,N,D,U
N-163B-4	Karimata	jaɾi munuba s̚ti:ɕiti m:mi: munu: kai	N,M
N-163B-4	Kugai	fɯɾmunuba: s̚titi me:ɾmunu:ba kai	N,H,N,M
N-163B-4	Yonaha	fɯɾu:nu munu:ba: sutitti: afa:nu munu: kai	S
N-163B-4	Kurima	fɯmunu:ba: st̚iti afamunu: ke:	K,U,D
N-163B-4	Miyaguni	{fz:fznu / fɪ:fɪnu} munu:ba: s̚ɕiɕi kaɕi:nu munu: kai	K,T
N-163B-4	Uruka	fɯɾufɯɾu munuuba: st̚iti m:ɾ:m:nu munu: kai	N,I,O
N-163B-4	Bora	fzmunu:ba: s̚t̚iɕi m'a:m'a:nu munu: kai	K,T
N-163B-5	Standard Japanese	<i>gomi-o soko-ni sutete ku-re.</i> garbage-ACCUSATIVE there-LOCATIVE to.discard to.give-IMPERATIVE 'Throw away the garbage over there.'	
N-163B-5	Ikema	janamunuba: kumaɾkai s̚ti: ku: ('to.discard to.come-IMPERATIVE') s̚tiɾu ('to.discard-IMPERATIVE')	N,N,D,U
N-163B-5	Karimata	gumju:ba umai s̚ti fi:ru	N,M
N-163B-5	Kugai	gumju: umaɾkai s̚ti fi:ru	N,H,N,M
N-163B-5	Yonaha	gumiɯ umaɾkai s̚ti fiɾu	S
N-163B-5	Kurima	gumu:ba: umaɾke: stifi:ro <cf> stiɾo 'to.discard-IMPERATIVE'	K,U,D
N-163B-5	Miyaguni	gumiɯ umaɾkai {s̚tiɾu / s̚ti fi:ru}	K,T
N-163B-5	Uruka	gumiuba: umaɾ s̚ti fiɾu	N,I,O
N-163B-5	Bora	gumu: umaɾkai st̚i fi:ru	K,T
N-164-1	Standard Japanese	<i>nagai ki-no eda-o kiru.</i> to.be.long tree-GENITIVE branch-ACCUSATIVE to.cut 'I cut the branches of tall trees.'	
N-164-1	Ikema	ki:nu judau kiri	N,N,D,U
N-164-1	Karimata	naɕa ki:nu idau kiri	N,M
N-164-1	Kugai	naɕa:naganu ki:nu judo: kiɕi	N,H,N,M
N-164-1	Yonaha	naɕa:nu ki:nu judo:du kɯɾɯ (The zero-case form for 'branch' is 'juda'.)	S

N-164-1	Kurima	naga:nu ki:nu ido:ba: tsige ('to.cut-IMPERATIVE') baŋa tsade ('I-NOMINATIVE to.cut-VOLITIONAL') bamme: tsstu sto ('I-too to.cut-EMPHATIC to.do-EMPHATIC') kanu pstunudu {ts _s / ts _ŋ } ('that person-NOMINATIVE to.cut')	K,U,D
N-164-1	Miyaguni	naga:nu ki:nu itau kiŋi	K,T
N-164-1	Uruka	naga:naganu ki:nu judau ksʔ	N,I,O
N-164-1	Bora	naga:naganu ki:nu judau kʔ:	K,T
N-164-2	Standard Japanese	yoru-ni-wa tsume-o kira-nai. night-LOCATIVE-TOPIC nail-ACCUSATIVE to.cut-NEGATIVE 'I don't cut my nails at night.'	
N-164-2	Ikema	junaka: tsimjuba kiran	N,N,D,U
N-164-2	Karimata	ju:nanna tsimiuba kiŋan	N,M
N-164-2	Kugai	june:nna tsami:uba: kʔsaŋ	N,H,N,M
N-164-2	Yonaha	junainna tsumiuba kisan	S
N-164-2	Kurima	june:ja ('night-TOPIC') tsu:ba: tsasŋ	K,U,D
N-164-2	Miyaguni	junainna cumiuba: kiŋasŋ	K,T
N-164-2	Uruka	junaija ffaŋfunari:karaja tsamijuba: {kʔsaŋ / kisan}	N,I,O
N-164-2	Bora	junainna tsam:u:ba: kssasŋ	K,T
N-164-3	Standard Japanese	watashi-ga gajimaru-wa kit-ta. I-NOMINATIVE banyan.tree-TOPIC to.cut-PAST 'I did cut down a banyan tree.'	
N-164-3	Ikema	bagadu gadzimarunu ki:ja kiritaio:	N,N,D,U
N-164-3	Karimata	ba:du gadzimarudu ki:sita	N,M
N-164-3	Kugai	ba:du gadzamagi:juba: kʔta:	N,H,N,M
N-164-3	Yonaha	bagadu gazimagi:uba kʔta:	S
N-164-3	Kurima	bagadu gadzimaruki:ju {tssta / tsstaz}	K,U,D
N-164-3	Miyaguni	bagazimaruba: ki:ta:	K,T
N-164-3	Uruka	bagadu gadzimaruba: {kstaʔ / ksra:taʔ}	N,I,O
N-164-3	Bora	bagadu gadzmagi:juba: ksssta:	K,T
N-164-4	Standard Japanese	sono nagai kami-wa kitte, oiwai-ni i-ke-yo. that to.be.long hair-TOPIC to.cut, celebration-DATIVE to.go-IMPERATIVE-EMPHATIC 'Cut your long hair and go celebrate!'	
N-164-4	Ikema	kunu nagai karadz: (ba?) kiri: ju:ŋkai ikija:	N,N,D,U
N-164-4	Karimata	unu naga karatsuba kiŋiŋi jo:ŋgai ikijo	N,M
N-164-4	Kugai	unu nagagaradzba kiŋitti jo:ʔfo:ga iki	N,H,N,M
N-164-4	Yonaha	unu naga karazuba kʔiŋi jo:ŋkai iki	S
N-164-4	Kurima	nagakara ^d zuba: {ffaŋiŋi / tsŋiŋi} jo:ŋke:ja iki	K,U,D

N-164-4	Miyaguni	unu naga:nu kafazziuba: kiṣittē jo:ŋkaija iki	K,T
N-164-4	Uruka	unu naga:naganu karatṣarba: {kiṣṣiti / kiṣṣiti} jo:ŋkai(ja) iki jo:	N,I,O
N-164-4	Bora	unu nagakaraddzuba: kiṣittē ja:zṛkai pirijo	K,T
N-164-5	Standard Japanese	<i>kono himo-o mittsu-ni kitte ku-re-nai-ka.</i> this string-ACCUSATIVE three-DATIVE to.cut to.give-IMPERATIVE-NEGATIVE-INTERROGATIVE 'Could you cut this string into three parts?'	
N-164-5	Ikema	kunu bo: ('stick-ACCUSATIVE') mi:ṣṛkai kiri: fi: samati (The nature of 'ti' in 'samati' is uncertain.)	N,N,D,U
N-164-5	Karimata	unu na:ju ('cord-ACCUSATIVE') mi:ṣṛṅgai kiṣi fi:ru	N,M
N-164-5	Kugai	kunu himo: mi:ṣṛkai kiṣi fi:ḍa:nna	N,H,N,M
N-164-5	Yonaha	kunu ṣuno: mi:ṣunṛkai kṛṣi furia:nna (ṣuno: 'rope-ACCUSATIVE')	S
N-164-5	Kurima	unu bu:juba: mi:ṣṛṅke: ṣṛṣi:ru	K,U,D
N-164-5	Miyaguni	kunu cinau mi:cuṅkai kiṣi fu:zjanna	K,T
N-164-5	Uruka	kunu ṣarnauba: mi:ṣṛṅkai {kiṣi / kiṣi} fṛiṛanṇa	N,I,O
N-164-5	Bora	unu bu:juba: mi:ṣṛṅkai kiṣi fi:ru	K,T
N-165-1	Standard Japanese	<i>tori-ga nige-nai-yoo (ryoo)ashi-o sibaru.</i> chicken-NOMINATIVE to.escape-NEGATIVE-so.that (both)leg(s)-ACCUSATIVE to.tie.up 'I tie up the chicken's legs so it won't escape.'	
N-165-1	Ikema	mja:tuiju ɕiŋɕiŋjo:n simai	N,N,D,U
N-165-1	Karimata	tuinu piŋɕiŋjo:m pagju simari	N,M
N-165-1	Kugai	tuṛnu piŋɕiŋ jo:ŋ fuṭapagʷazu sṛmaṛ	N,H,N,M
N-165-1	Yonaha	tuṛnu piŋɕun jo:N pagru sṛmaṛ	S
N-165-1	Kurima	tuṛnu piŋɕun jo:ndu patṣu sṛmaṛu:ṣ(ŋ) kariḡadu patṣuba: samaṛ ('he-NOMINATIVE leg-ACCUSATIVE to.tie.up')	K,U,D
N-165-1	Miyaguni	mmaduŋga piŋɕiŋarun ɸtapaɕu fuɕziukiba	K,T
N-165-1	Uruka	tuṛnu piŋɕunjoŋ ɸtapaɕadu sṛmaṛi	N,I,O
N-165-1	Bora	tuznu piŋɕun jo:ŋ padzu: {smaɕ / ɸṭṣ}	K,T
N-165-2	Standard Japanese	<i>ashi-mo hane-mo sibara-nai.</i> leg-too wing-too to.tie.up-NEGATIVE 'I tie up neither its legs nor its wings.'	
N-165-2	Ikema	hazimai haŋimai ṣimaŋ	N,N,D,U
N-165-2	Karimata	pagju:mai panju:mai simaŋ	N,M
N-165-2	Kugai	pagṛmai panu:mai sṛmaŋ	N,H,N,M
N-165-2	Yonaha	pagṛumai paniumai sṛmaŋ	S
N-165-2	Kurima	patṣume: panu:me: {smaŋ / sṛmaŋ}	K,U,D
N-165-2	Miyaguni	pagṛmai paniumai fuzzjaŋ	K,T
N-165-2	Uruka	pagṛmai paniumai sṛmaŋ	N,I,O

N-165-2	Bora	paɕʔmai panʲu:mai {sɰmaɾaŋ / fʲtaŋ}	K, T
N-165-3	Standard Japanese	<i>chichi-ga tori-o shibat-ta.</i> father-NOMINATIVE chicken-ACCUSATIVE to.tie.up-PAST 'My father tied up the chicken.'	
N-165-3	Ikema	zzaga mja:tuiju ɕimaritai	N, N, D, U
N-165-3	Karimata	uja:du tuʔi {sɰmaɾi: / sɰmaida (Perhaps 'sɰmaidai'.)}	N, M
N-165-3	Kugai	a:ɕagadu tuʔzu sɰmaɾta:	N, H, N, M
N-165-3	Yonaha	ujagadu tuzzu sɰmaʔta:	S
N-165-3	Kurima	ujanʔadu tuzzu {sɰmaɾta / smazta}	K, U, D
N-165-3	Miyaguni	ujaga tuzzu {fuzta: / fʲzta:}	K, T
N-165-3	Uruka	ujagadu tuʔba: sɰmaʔtaʔ	N, I, O
N-165-3	Bora	ujagadu tuzzu {smazta: / fʲtsta:}	K, T
N-165-4	Standard Japanese	<i>tori-o shibatte, kago-ni ire-te-ne.</i> chicken-ACCUSATIVE to.tie.up, cage-LOCATIVE to.put.in-IMPERATIVE-EMPHATIC 'Tie up the chicken and put it into the cage.'	
N-165-4	Ikema	mja:tui sɰmaɾi: hakunu nakaŋkai iriŋa:	N, N, D, U
N-165-4	Karimata	tuʔi sɰmaɾi: pʰakungai ('box-LOCATIVE') idʔi uki	N, M
N-165-4	Kugai	tuʔzu sɰmaritti kagunʔkai ʔzi fi:ru	N, H, N, M
N-165-4	Yonaha	tuzzu sɰmaitti: kagunʔkai ʔzi firu	S
N-165-4	Kurima	tuzzu {smaɾi kagunʔke zʔita / smaritti kagunʔke zʔiɾo}	K, U, D
N-165-4	Miyaguni	tuzzu sɰmaɾi kagunʔkai zzi fi:ru	K, T
N-165-4	Uruka	tuzʔ ɕimaritti kagunʔkai {izirujo: / idʔirujo:}	N, I, O
N-165-4	Bora	tuzzu {smarittʔi / fʲtʔittʔi} kagunʔkai {zʔiɾu / iziɾu}	K, T
N-165-5	Standard Japanese	<i>omae-ga tori-o shibatte ku-re.</i> you-NOMINATIVE chicken-ACCUSATIVE to.tie.up to.give-IMPERATIVE 'You tie up the chicken.' (imperative)	
N-165-5	Ikema	vvaɕa tuijuba sɰmaɾi: fi:ru	N, N, D, U
N-165-5	Karimata	vva tuʔʔi (Perhaps 'tuʔiuba'.) sɰmaɾi uki	N, M
N-165-5	Kugai	vvaɕa tuʔzu sɰmaɾi fi:ru	N, H, N, M
N-165-5	Yonaha	vvaɕa tuzzu sɰmaɾi firu	S
N-165-5	Kurima	vvaŋa tuzzuba: {smaɾi / sɰmaɾi} fi:ɾo vvaŋa smaɾe ('you-NOMINATIVE to.tie.up-IMPERATIVE')	K, U, D
N-165-5	Miyaguni	vvaɕa tuzzu sɰmaɾi fi:ru	K, T
N-165-5	Uruka	vvaɕa tuʔba sɰmaɾi fʲfiru	N, I, O
N-165-5	Bora	vvaɕa tuzzuba {smaɾi / fʲtʔi:} fi:ru	K, T
N-166-1	Standard Japanese	<i>mainichi imo-o horu.</i> every.day sweet.potato-ACCUSATIVE to.dig 'I dig up sweet potatoes every day.'	

N-166-1	Ikema	kju: ('today') ka:ju ('well-ACCUSATIVE') furadi	N,N,D,U
N-166-1	Karimata	abu: {pɸa / pɸi:}	N,D,U
N-166-1	Yonaha	NR / 'always here-ACCUSATIVE to.dig' itsɯ:me: kumaudu puzɪ	H
N-166-1	Kurima	mainɪʔa mmu:pu ('today') ('ɪ' and 'ɾ' are uniformly transcribed as 'ɪ'.)	K,I,T
N-166-1	Miyaguni	mainiʔi mmo: {poʔka / poʔka}	T,N
N-166-1	Uruka	mainiʔi ka:u ('well-ACCUSATIVE') puʔi iʔi:mai ('always') puriuʔi ('to.dig-PROGRESSIVE')	N,U,D
N-166-1	Bora	mai:nʔiʔa a:bu:du puzɪ (a:bu 'hole')	S,M
N-166-2	Standard Japanese	<i>hahaoya-wa kyoo-wa imo-o hora-nai.</i> mother-TOPIC today-TOPIC sweet.potato-ACCUSATIVE to.dig-NEGATIVE 'Mother won't dig up sweet potatoes today.'	
N-166-2	Ikema	kju:ja ka:juba furadʒa:N	N,N,D,U
N-166-2	Karimata	{abuba / abuβa} pɸuraŋ	N,D,U
N-166-2	Yonaha	NR / 'here-LOCATIVE-TOPIC hole-TOPIC to.dig-NEGATIVE' kumanna ano:ba puran	H
N-166-2	Kurima	anna kju:ja mmuba pʔaŋ	K,I,T
N-166-2	Miyaguni	anna kju:ja mmo:poʔan	T,N
N-166-2	Uruka	anna: kju:ja {ka:u/ka:uba} pʔaŋ	N,U,D
N-166-2	Bora	anna: kju:ja mmuba pʔaŋ ('puzɪta:' can also be interpreted as 'puzɪta'.)	S,M
N-166-3	Standard Japanese	<i>mukashi ido-o hot-ta.</i> long.ago well-ACCUSATIVE to.dig-PAST 'I dug a well a long time ago.'	
N-166-3	Ikema	ŋkja:ŋ ka:ju fuitai	N,N,D,U
N-166-3	Karimata	abuba puridə (The vowel in 'də' sounds further to the front than [u].)	N,D,U
N-166-3	Yonaha	NR / 'dog-NOMINATIVE hole-ACCUSATIVE to.dig-PAST' innudu ano : puzta:	H
N-166-3	Kurima	ŋka:nna ka:judu puztaŋ	K,I,T
N-166-3	Miyaguni	ŋkja:ŋ ka:ju poʔta:	T,N
N-166-3	Uruka	ŋkja:nna ('long.ago-TOPIC') ka:udu puʔitaʔi	N,U,D
N-166-3	Bora	ŋkja:N ka:ju puzɪta:	S,M
N-166-4	Standard Japanese	<i>ana-o hotte yasum-e.</i> hole-ACCUSATIVE to.dig, to.rest-IMPERATIVE 'Dig a hole and take a rest.'	
N-166-4	Ikema	ana: furi: jukui	N,N,D,U
N-166-4	Karimata	abo: puriʔiti jukui	N,D,U

N-166-4	Yonaha	NR / 'hole-ACCUSATIVE to.dig-after to.rest-IMPERATIVE' ana: puṛitti jukui	H
N-166-4	Kurima	ana: puṛi juke:	K,I,T
N-166-4	Miyaguni	anaʊ puṛittɕi jukui	T,N
N-166-4	Uruka	anau puṛitti jukui	N,U,D
N-166-4	Bora	a:nau puṛittɕi jukui	S,M
N-166-5	Standard Japanese	<i>asoko-no jimen-o hotte ko-i.</i> over.there-GENITIVE ground-ACCUSATIVE to.dig to.come-IMPERATIVE 'Dig up the ground over there.'	
N-166-5	Ikema	kamanu ɕɿ: furi: ku	N,N,D,U
N-166-5	Karimata	anu abu puṛi (<i>Ari</i> -continuative used as imperative.)	N,D,U
N-166-5	Yonaha	NR / 'over.there-ACCUSATIVE to.dig to.come-IMPERATIVE' kamau puṛi ku:	H
N-166-5	Kurima	kamanu ʒz puṛiku:	K,I,T
N-166-5	Miyaguni	kamano ɕɿzoo poṛi ko:	T,N
N-166-5	Uruka	kamanu ɕɿ:u puṛi ku:	N,U,D
N-166-5	Bora	kama:nu ɕɿ:ju {puṛittɕi ku: / puṛi fi:ru} ('puṛittei' is a <i>shite</i> - continuative; 'puṛi' in 'puṛi fi:ru' is an <i>ari</i> -continuative.)	S,M
N-167-1	Standard Japanese	<i>niwa-ni nimotsu-o dasu.</i> yard-LOCATIVE luggage-ACCUSATIVE to.put.out 'I put my things in the yard.'	
N-167-1	Ikema	minakaŋkai ja:nu ('house-GENITIVE') dauvu ('tool-ACCUSATIVE') idaɕi	N,N,D,U
N-167-1	Karimata	a:raŋkai {muɕi / mɔɕi} ki	N,D,U
N-167-1	Yonaha	minakanke: nimuttsuba: idasɿ	H
N-167-1	Kurima	minakaŋke: nimuttsu idaɕe: ('k' is pronounced quite towards the back and easily misheard as 'h'.)	K,I,T
N-167-1	Miyaguni	niwaŋkai {nimotɕsu / nimotɕsu} idaɕi ('minaka' ('front yard') is also used.)	T,N
N-167-1	Uruka	minakaŋkai ni:ju idasɿ	N,U,D
N-167-1	Bora	ufu:ba utuṭunudu idasɿ ('My (younger) brother will put that out.')	S,M
N-167-2	Standard Japanese	<i>ame-o toki-ni-wa soto-ni-wa nimotsu-o dasa-nai.</i> ra.in-GENITIVE time-LOCATIVE-TOPIC outside-LOCATIVE-TOPIC luggage- ACCUSATIVE to.put.out-NEGATIVE 'When it's raining, I don't put my things outside.'	
N-167-2	Ikema	aminu tukjanna minakaŋkai ('yard-LOCATIVE') idanaN	N,N,D,U
N-167-2	Karimata	NR / nimutɕba idasɿna ('to.put.out-NEGATIVE.IMPERATIVE'; a simple negative was not obtained.)	N,D,U

N-167-2	Yonaha	amifuunu tukjanna nimuttsuba ara:nke: idasan	H
N-167-2	Kurima	ami fnna pukaŋ keε {idasarŋ (third person) / idasad'a : ŋ (first person)} ('εε' is an ambiguous diphthong.)	K,I,T
N-167-2	Miyaguni	ameno tʰok'a:nna pukaŋkai nimotʂu idasad'a:ŋ	T,N
N-167-2	Uruka	aminu tukja:nna pukaŋkaija ni:juba idasarŋ	N,U,D
N-167-2	Bora	aminu tukja:nna ara:ŋkaija attauban idasan (atta 'geta')	S,M
N-167-3	Standard Japanese	<i>tomodachi-ga nimotsu-o soto-ni dashi-ta.</i> friend-NOMINATIVE luggage-ACCUSATIVE outside-LOCATIVE to.put.out-PAST 'I put my friend's things outside.'	
N-167-3	Ikema	dusŋnu davvu idasitai	N,N,D,U
N-167-3	Karimata	*snudu nimutʂuba: a:raŋkai idasi	N,D,U
N-167-3	Yonaha	dusŋnu nimuttsu ara:nke: idasita:	H
N-167-3	Kurima	dusunudu nimutʂu pukaŋke: idastan	K,I,T
N-167-3	Miyaguni	dosu nodo/dosuno nimotʂu pukaŋkai {idasita / idasita}	T,N
N-167-3	Uruka	dusŋnudu ni:ju pukaŋkai idasitaʔ	N,U,D
N-167-3	Bora	dusŋnudu issu ara:ŋkai idasuta: (iss 'chair')	S,M
N-167-4	Standard Japanese	<i>nimotsu-o soto-ni dashite, sore-kara kaer-e.</i> luggage-ACCUSATIVE outside-LOCATIVE to.put.out, that-ABLATIVE to.return.home-IMPERATIVE 'Put your things outside; then, go home.'	
N-167-4	Ikema	minakaŋkai davvu idasikara ja : ŋ kai ('house-ALLATIVE') iki ('to.go-IMPERATIVE')	N,N,D,U
N-167-4	Karimata	a : ra ŋ k ' ai idasite {jukui ('to.rest-IMPERATIVE') / ŋ, g i ru ('to.return.home-IMPERATIVE')}	N,D,U
N-167-4	Yonaha	nimuttsu ara:nke: idasitti piri	H
N-167-4	Kurima	nimutʂu huŋaŋkeε idasiti pire ('εε' is an ambiguous diphthong.)	K,I,T
N-167-4	Miyaguni	nimotʂu pukaŋkai idasitei kara pʰiri	T,N
N-167-4	Uruka	ni:ju pukaŋkai idafitti uŋkara piri	N,U,D
N-167-4	Bora	issu ara:ŋkai idasitei nnamakara piri (iss 'chair')	S,M
N-167-5	Standard Japanese	<i>hayaku nimotsu-o dashite ko-i.</i> to.be.early luggage-ACCUSATIVE to.put.out to.come-IMPERATIVE 'Quickly go put your things outside.'	
N-167-5	Ikema	hajamariti: nimutʂi idaci: ku:	N,N,D,U
N-167-5	Karimata	isgi idasi ku:	N,D,U
N-167-5	Yonaha	pja:kariti nimuttsu idasitti kuu (A <i>shite</i> -continuative was obtained, but not an <i>ari</i> -continuative.)	H
N-167-5	Kurima	p'a:kari nimutʂu idasi ku: (The first 'k' is pronounced quite towards the back and easily misheard as 'h'.)	K,I,T

N-167-5	Miyaguni	pja:pja:tei nimottsu idaei ku:	T,N
N-167-5	Uruka	pja:pja:ti ni:ju {ida:fi / idafitti} ku:	N,U,D
N-167-5	Bora	pja:pja:tei issu idaei ku: (iss 'chair')	S,M
N-168-1	Standard Japanese	<i>otooto-wa itsumo nimotsu-o hitori-de motsu.</i> younger.brother-TOPIC always luggage-ACCUSATIVE one.person-INSTRUMENTAL to.carry 'My brother always carries his things by himself.'	
N-168-1	Ikema	utugama: itsimai tavka:ci: muti: fu	N,N,D,U
N-168-1	Karimata	mainits {tafk'ja: / tafg'ja:} si:du nimotsuba mutsu	N,D,U
N-168-1	Yonaha	ututa: itsu:me: nimuttsu tauke:si: mutsu	H
N-168-1	Kurima	utu:ua itsume: nimutsuba tafk'ja:sidu mutsu ('ua' is an ambiguous diphthong.)	K,I,T
N-168-1	Miyaguni	ot'hu:oo itsa:mai {tavk'ja:ei / tauk'ja:ei} nimottsu motsi	T,N
N-168-1	Uruka	utsuto: itsi:mai ni:ju tavk'ja:fi mutfu:4 ('to.carry-STATIVE'; mutsi 'to.carry')	N,U,D
N-168-1	Bora	utu:ha: itsa:mai issuba to:k'ja:ei:du mutsu (iss 'chair')	S,M
N-168-2	Standard Japanese	<i>sobo-wa nimotsu-o mota-nai.</i> grandmother-TOPIC luggage-ACCUSATIVE to.carry-NEGATIVE 'My grandmother doesn't carry anything.'	
N-168-2	Ikema	ha: mma: ni:juba: mutsan	N,N,D,U
N-168-2	Karimata	NR / ni:ba mutsna ('to.carry-NEGATIVE.IMPERATIVE'; a simple negative was not obtained.)	N,D,U
N-168-2	Yonaha	mma: nimuttsuba: mutan	H
N-168-2	Kurima	pa:mma nimutsuba {mutsuna / mutsan}	K,I,T
N-168-2	Miyaguni	mma: {nimottsu / nimottsu} motadza:n	T,N
N-168-2	Uruka	mma: {ni:juba / ni:ju} mutadza:n ('mutan' is used in other villages; mutadi 'to.carry-VOLITIONAL'; mutatfa: 'I will carry it.')	N,U,D
N-168-2	Bora	mma: kabannuba mutan (kaban 'bag')	S,M
N-168-3	Standard Japanese	<i>sofu-ga mushiro-o mot-ta.</i> grandfather-NOMINATIVE straw.mat-ACCUSATIVE to.carry-PAST 'My grandfather carried the straw mat.'	
N-168-3	Ikema	ujaga mussuuba muttai	N,N,D,U
N-168-3	Karimata	{su:gado / su:gadu} musso:ba:da mutsu	N,D,U
N-168-3	Yonaha	sju:ga mussuu mutsita:	H
N-168-3	Kurima	su:ga mussu: mutsiu	K,I,T
N-168-3	Miyaguni	su:ja mussu: motsi:ta:	T,N
N-168-3	Uruka	{fu:ga / fu:gadu} mussu: mutsita:4	N,U,D
N-168-3	Bora	su:gadu mussu u mutsu:ta:(.)	S,M

N-168-4	Standard Japanese	<i>chichi-ga sake motte, haha-ga tabemono-o motsu.</i> father-NOMINATIVE liquor to.carry, mother-NOMINATIVE food-ACCUSATIVE to.carry 'My father carries the liquor; my mother carries the food.'	
N-168-4	Ikema	uza _{ga} saki muti: mma: faimunu muttai	N,N,D,U
N-168-4	Karimata	ɕu:ga _{adu} ('grandfather-NOMINATIVE') {ɕaki _{ba} / ɕakeba} mutɕi: usaijuba: oba:ga ('grandmother-NOMINATIVE') mutɕi	N,D,U
N-168-4	Yonaha	ujaga sakju: mutɕitti annaga fo:munuu mutsɔta:	H
N-168-4	Kurima	ujaga sakju: mutɕɔ: annaga to:munu: mutɕɔ	K,I,T
N-168-4	Miyaguni	o _{ja} a sak ^{he} o motɕu anna {ɕoomono / ɕoumono} motɕu	T,N
N-168-4	Uruka	uja: sakju: {mutɕitti / mutɕi} anna: faumunu: mutɕi	N,U,D
N-168-4	Bora	ujaga sakju mutɕittɕi annaga fau munu[u mutɕɔ ('fau' can also be interpreted as 'ɕ:'.)]	S,M
N-168-5	Standard Japanese	<i>hayaku sake-o motte ko-i.</i> to.be.early liquor-ACCUSATIVE to.carry to.come-IMPERATIVE 'Quickly bring the liquor.'	
N-168-5	Ikema	hajamari: sakju: muti: ku:	N,N,D,U
N-168-5	Karimata	p'a:riti ɕaki mutɕi {k'u: / gu:}	N,D,U
N-168-5	Yonaha	pja:kariti sakju: mutɕi ku:	H
N-168-5	Kurima	p'a:ŋkari sakju: mutɕi ku:	K,I,T
N-168-5	Miyaguni	p'a:p'a:ɕi sak ^{he} u motɕi ku:	T,N
N-168-5	Uruka	pja:pja:ti sakju: mutɕi ku:	N,U,D
N-168-5	Bora	p'a:p'a:ɕi sakju mutɕi ku:	S,M
N-169-1	Standard Japanese	<i>Taroo-wa itsumo tabako-o kau.</i> Taro-TOPIC always tobacco-ACCUSATIVE to.buy 'Taro always buys tobacco.'	
N-169-1	Ikema	taro:ja itsɕimai tabuku: kau	N,N,D,U
N-169-1	Karimata	ba: ('I-TOPIC') issɕimai tabakudu ko: ('ɔ' in 'issɕimai' begins frictionless.)	N,D,U
N-169-1	Yonaha	taro:ja itsu:me: tabako: ko:	H
N-169-1	Kurima	taro:ja itsume: tabuku:du ko:	K,I,T
N-169-1	Miyaguni	tarooja itsi ^u mai tabuk ^u kau	T,N
N-169-1	Uruka	taro:ja itsi:mai {tabako: / tabaku:du} {kau / kaiu ⁴ ('to.buy-PROGRESSIVE')}	N,U,D
N-169-1	Bora	taro:ja itsɔ:mai tabakoudu k ^{ha} u	S,M
N-169-2	Standard Japanese	<i>daremo imo-o kawa-nai.</i> anyone sweet.potato-ACCUSATIVE to.buy-NEGATIVE 'No one buys sweet potatoes.'	
N-169-2	Ikema	tafumi n:nuba ka:N	N,N,D,U
N-169-2	Karimata	taɕumi mɕmuba ka:ŋ	N,D,U

N-169-2	Yonaha	to:me: m:muba ka:n	H
N-169-2	Kurima	ʔto:me: mmuba ka:ŋ	K,I,T
N-169-2	Miyaguni	toʔomai mmo ka:n	T,N
N-169-2	Uruka	to:mai m:uba ka:ŋ	N,U,D
N-169-2	Bora	taʊmai m:ba k ^h a:N	S,M
N-169-3	Standard Japanese	<i>kinoo sakana-o kat-ta.</i> yesterday fish-ACCUSATIVE to.buy-PAST 'I bought some fish, yesterday.'	
N-169-3	Ikema	nnu zz: kautai	N,N,D,U
N-169-3	Karimata	ksno: ɹʔnudu kai (The first 'ɹ' in 'ɹʔ' starts frictionless.)	N,D,U
N-169-3	Yonaha	ksna: zzuu ko:ta:	H
N-169-3	Kurima	ʔɹnu z:ba: ko:taŋ	K,I,T
N-169-3	Miyaguni	kʔnoo zzu: kauta:	T,N
N-169-3	Uruka	kʔnu: ɪzu: kautaʔ	N,U,D
N-169-3	Bora	ʔɹnu: ɹzuʃu kaʊta(:) ('ɹzu' is also pronounced 'zzu'.)	S,M
N-169-4	Standard Japanese	<i>watashi-ga sakana-o katte, tomodachi-wa niku-o kat-ta.</i> I-NOMINATIVE fish-ACCUSATIVE to.buy, friend-TOPIC meat-ACCUSATIVE to.buy-PAST 'I bought the fish; my friend bought the meat.'	
N-169-4	Ikema	baɣa ʔi: kai dusija butaniku kaʊtai	N,N,D,U
N-169-4	Karimata	ba: ɹʔ kai dussa {mʔ:du / mʊ:du} kai (The friction of 'mʔ:' is weak; 'mʊ:' is frictionless.)	N,D,U
N-169-4	Yonaha	baɣa zzuu kaitti dussa nikuu ko:ta:	H
N-169-4	Kurima	aba: zzu:kai dussa niku:du ko:taŋ	K,I,T
N-169-4	Miyaguni	{baɣa / baja} zzu: kau doɣsa niku kauta:	T,N
N-169-4	Uruka	baja ɪzuu {kautaʔ / kau / kaittidu} dussa niku: kautaʔ	N,U,D
N-169-4	Bora	baja: ɹzu: kaitʔɹi(du) dussa ʊa:ju kaʊta(:) (ʊa: 'pig/pork')	S,M
N-169-5	Standard Japanese	<i>abura-o katte ko-i.</i> oil-ACCUSATIVE to.buy to.come-IMPERATIVE 'Go buy some oil.'	
N-169-5	Ikema	avvau kaiku:	N,N,D,U
N-169-5	Karimata	ʔakʲu: ('liquor-ACCUSATIVE') kai k'u:	N,D,U
N-169-5	Yonaha	avvo: ke: ku:	H
N-169-5	Kurima	avva kai ku:	K,I,T
N-169-5	Miyaguni	avvaʊ k ^h ai ku:	T,N
N-169-5	Uruka	aʊʊau kai ku: ('ʊ' is a weak labiodental.)	N,U,D
N-169-5	Bora	avvau kai ku:	S,M
N-170-1	Standard Japanese	<i>mainichi yasai-o uru.</i> every.day vegetable-ACCUSATIVE to.sell 'I sell vegetables every day.'	

N-170-1	Ikema	sĩ:ju vvi:ju:	N,N,D,U
N-170-1	Karimata	mainiṣ su:nu pa:idu ʊ: ('ʊ' is frictionless.)	N,D,U
N-170-1	Yonaha	mainitsɾ jasaiju {ʊ:ta: / u:ta:} (It appears to be pronounced with 'ʊ:', but 'u:' is also accepted.)	H
N-170-1	Kurima	mainiṣɾ su:judu v:	K,I,T
N-170-1	Miyaguni	maʔiniṣi su:ju {u: / uv} ('v' in 'uv' is weak.)	T,N
N-170-1	Uruka	iṣi:mai su:ju {ʊ: / ʊʊu}	N,U,D
N-170-1	Bora	iṣɾ:mai su:judu vʋɔ	S,M
N-170-2	Standard Japanese	<i>kare-wa jibun-no buta-o ura-nai.</i> he-TOPIC self-GENITIVE pig-ACCUSATIVE to.sell-NEGATIVE 'He doesn't sell his pig.'	
N-170-2	Ikema	kafa: nafaɣa ʊa:juba: vʋaŋ	N,N,D,U
N-170-2	Karimata	NR / {kaʔja: / kanu} psto: waiba ʊʋadaɾaŋ (ɕu:do:)	N,D,U
N-170-2	Yonaha	kaʔja: unaɣaduunu wa:juba {vʋaŋ / vʋadja:n}	H
N-170-2	Kurima	kaʔja: nafa wa:juba vʋaŋ	K,I,T
N-170-2	Miyaguni	kaʔja: do:a wa:iba ʊʋaŋ	T,N
N-170-2	Uruka	kaʔja: du:nu {ʋa:ju / ʋa:uba} ʊʋaŋ	N,U,D
N-170-2	Bora	kaʔja: du:ga ʋa:juba: vʋaŋ	S,M
N-170-3	Standard Japanese	<i>kyonen yagi-o ut-ta.</i> last.year goat-ACCUSATIVE to.sell-PAST 'I sold a goat, last year.'	
N-170-3	Ikema	kuɕzu ɕindɕau vvitai	N,N,D,U
N-170-3	Karimata	{kuɕɾdu / kɕɾdu} pinzo: {ʊ:daɕɾ / ʊʊi / ʊ:dan}	N,D,U
N-170-3	Yonaha	kudza: pinzo:ba ʊ:duɾta:	H
N-170-3	Kurima	kuzu pindɕau u:taɪ ('au' is an ambiguous diphthong.)	K,I,T
N-170-3	Miyaguni	kuɕzu pʰindɕau {u:ta: / uʷta: / uʊta:}	T,N
N-170-3	Uruka	kuɕzu pindɕau ʊ:taʔ	N,U,D
N-170-3	Bora	kududu pindau vvita(:)	S,M
N-170-4	Standard Japanese	<i>yagi-o utte, buta-o kat-ta.</i> goat-ACCUSATIVE to.sell, pig-ACCUSATIVE to.buy-PAST 'I sold a goat and bought a pig.'	
N-170-4	Ikema	ɕindɕau vvi: ʊa:ju: kaitai	N,N,D,U
N-170-4	Karimata	pinzo: ʊʋiɕitidu waju ko:taɕɾ (The friction of 'ɕɾ' is weak.)	N,D,U
N-170-4	Yonaha	pinza: vvittidu wa:ju ko:ta:	H
N-170-4	Kurima	pindɕao vvitti wa:ju ko:taɪ ('ao' is an ambiguous diphthong.)	K,I,T
N-170-4	Miyaguni	pʰindɕau uvittɕi wa:ju kauta:	T,N
N-170-4	Uruka	pindɕau ʊittidu ʋa:ju kautaʔ	N,U,D
N-170-4	Bora	pindau vvittɕidu ʋa:ja kaʊta:	S,M

N-170-5	Standard Japanese	<i>sono buta-o utte kudasa-i.</i> that pig-ACCUSATIVE to.sell to.give(honorific)-IMPERATIVE 'Please sell that pig to me.'	
N-170-5	Ikema	kunu ʉa:ju vvi: fi: samati	N,N,D,U
N-170-5	Karimata	kanu ba:ju uʉʉi fi:ru	N,D,U
N-170-5	Yonaha	unu wa:ju vvi firu	H
N-170-5	Kurima	unu wa:ju vvifi:ru	K,I,T
N-170-5	Miyaguni	unu wa:ju uvi ʃiiru	T,N
N-170-5	Uruka	unu {ʉa:ju / ʉa:u} {ʉʉi fi:ru ('to.sell to.give-IMPERATIVE') / ʉʉaʃa:na ('to.sell to.give-POLITE-NEGATIVE-INTERROGATIVE')}	N,U,D
N-170-5	Bora	unu ʉa:ju vvi(:) ffi:ru ('ffi:ru' is also pronounced 'fi:ru'.)	S,M
N-170B-1	Standard Japanese	<i>itsumo watashi-wa ootoo-ni okashi-o yaru.</i> always I-TOPIC younger.brother-DATIVE sweets-ACCUSATIVE to.give 'I always give my brother sweets.'	
N-170B-1	Ikema	iʃmai ba: uttuN ka:ssu {fi: / fi: ui / fi: jui}	M,Y,S,T
N-170B-1	Karimata	iʃmai utuduŋgaɖu ka:s {fi / fi} ('ʃ' has strong aspiration; the voicing of 'fi' is weak.)	N,D,U
N-170B-1	Yonaha	itsʉ:me: banun ututa: ka:sɾ firu (Possibly 'my (younger) brother gives me sweets' instead.)	H
N-170B-1	Kurima	iʃme: aba: ututuŋ ko:suba fi:ɾ	K,I,T
N-170B-1	Miyaguni	iʃmai baja: ʉʃʉtu ŋ koosu ʃi: (The word for 'sweets' is pronounced 'koosʉ' in isolation.)	T,N
N-170B-1	Uruka	iʃmai baja: {ututuŋkai / uʃʉtuŋkai} ko:sɿ {ffiuʔ / ffjuʔ}	N,U,D
N-170B-1	Bora	iʃmai baja: ututuŋkaidu ka:ssu ffi:	S,M
N-170B-2	Standard Japanese	<i>otooto-wa ani-ni okashi-o yara-nai.</i> younger.brother-TOPIC older.brother-DATIVE sweets-ACCUSATIVE to.give-NEGATIVE 'The younger brother doesn't give sweets to the older brother.'	
N-170B-2	Ikema	uttu: suʃʃanna ka:ssuba: fi:N	M,Y,S,T
N-170B-2	Karimata	NR / ba: azanna ka:sɖa fi:ɖaŋ ('to.give-POTENTIAL-NEGATIVE')	N,D,U
N-170B-2	Yonaha	ututa: adzanke: ka:sɾ fudja:n ('to.give-NEGATIVE' is here a negative intentional; a simple negative was not obtained.)	H
N-170B-2	Kurima	utuʃʃoa {aʃanna / suʃʃanna} ko:suba: fu:ŋ ('oa' is an ambiguous diphthong.)	K,I,T
N-170B-2	Miyaguni	ʉʃʃʉoo aʃʃan koosuba ʃu:ŋ	T,N
N-170B-2	Uruka	uʃʃʉo: aʃʃkai ko:ssu ffʉʃʃaŋ	N,U,D
N-170B-2	Bora	utuʃʃa sudaŋkaija ka:ssuba fu:N ('s' in 'suda' is pronounced somewhat forcefully; also 'ʃuda'.)	S,M

N-170B-3	Standard Japanese	<i>kinoo ootoo-ni ame-o yat-ta.</i> yesterday younger.brother-DATIVE candy-ACCUSATIVE to.give-PAST 'I gave my brother some candy, yesterday.'	
N-170B-3	Ikema	ηnu: uttuN am'u: fi:tai	M,Y,S,T
N-170B-3	Karimata	ksnudu utuduŋ amidzato: fi:t'aŋ	N,D,U
N-170B-3	Yonaha	ksna: ututun amjo: fi:ta:	H
N-170B-3	Kurima	ʒanu: ututuŋna amiu fi:taŋ	K,I,T
N-170B-3	Miyaguni	kʰnu: otʰutuŋ am'u: ɸi:ta:	T,N
N-170B-3	Uruka	kʰnu: utʰutuŋkai amju: ɸitaʔ	N,U,D
N-170B-3	Bora	ʒanu: ututuŋkai am'u: ɸi:ta:	S,M
N-170B-4	Standard Japanese	<i>uma-ni kusa-o yatte, hatake-ni it-ta.</i> horse-DATIVE grass-ACCUSATIVE to.give, field-LOCATIVE to.go-PAST 'I gave the horse some grass and went to the field.'	
N-170B-4	Ikema	nu:man ɸsa: fi: haiŋkai ikitai	M,Y,S,T
N-170B-4	Karimata	nu:manpu ifso: fi:ʒiŋ paŋŋkai {iftaŋ / istaŋ} ('r' is frictionless; the friction of 'taŋ' is weak.)	N,D,U
N-170B-4	Yonaha	nu:man ɸsa: fitti paŋinke: pi:ta:	H
N-170B-4	Kurima	nu:maŋ ɸsa: fi:tti paŋinke: piztaŋ	K,I,T
N-170B-4	Miyaguni	nuumaŋ ɸsau ɸittɕi paŋiŋkai ikʰta:	T,N
N-170B-4	Uruka	nu:maŋkai ɸsau ɸitti paŋiŋkai ikʰtaʔ	N,U,D
N-170B-4	Bora	nu:maŋkai ɸsau fi:ttɕi(du) paŋiŋkai ikʰta(:) ('ikʰta:' can also be interpreted as 'ikʰtaŋ'.)	S,M
N-170B-5	Standard Japanese	<i>ushi-ni kusa-o yatte goran.</i> cow-DATIVE grass-ACCUSATIVE to.give to.see(honorific).IMPERATIVE 'Try giving the cow some grass.'	
N-170B-5	Ikema	{uʒiN / usʌN} ɸsau fi: mi:ru	M,Y,S,T
N-170B-5	Karimata	{usʌ / usʌŋ} {isso / ifso} fi: ku: ('to.come-IMPERATIVE')	N,D,U
N-170B-5	Yonaha	usʌn fso: fi: mi:ru	H
N-170B-5	Kurima	usʌŋ fsoa fi:mi:ru ('oa' is an ambiguous diphthong.)	K,I,T
N-170B-5	Miyaguni	usʌn ɸsau ɸi: mi:ru	T,N
N-170B-5	Uruka	usʌŋkai ɸsau ɸfi mi:ru	N,U,D
N-170B-5	Bora	usʌŋkai ɸsau fi: mi:ru	S,M
N-171-1	Standard Japanese	<i>ryooshi-kara sakana-o morau.</i> fisherman-ABLATIVE fish-ACCUSATIVE to.receive 'I get some fish from the fisherman.'	
N-171-1	Ikema	iŋʒakafa zzu: dɕʒitai	M,Y,S,T
N-171-1	Karimata	imɸuripstuʔʔ:kafadu immunu iziʔaŋ	N,D,U
N-171-1	Yonaha	zzusja:kafa zzuu zzita:	H
N-171-1	Kurima	imʒa:kafa z: mufoa ('oa' is an ambiguous diphthong.)	K,I,T

N-171-1	Miyaguni	imboo kafa zzu: morauta:	T,N
N-171-1	Uruka	imbo:kafa {izuu / zzu: / zuu} mufau <cf> mufauta ⁱ ('to.receive-PAST') / mufa:dakanafan ('to.receive-OBLIGATIVE')	N,U,D
N-171-1	Bora	iʔa:maidu impɔʔukafa izuu i: (iʔa:maidu 'always')	S,M
N-171-2	Standard Japanese	<i>chiisai kani-wa daremo morawa-nai.</i> to.be.small crab-TOPIC anyone to.receive-NEGATIVE 'No one takes the small crab.'	
N-171-2	Ikema	imi:imi kannuba: tafu:mai {zziN / dɕziN}	M,Y,S,T
N-171-2	Karimata	imi:n kanu kamnuba tafumai iziŋ (The sonority of the first 'i' in 'iziŋ' is low.)	N,D,U
N-171-2	Yonaha	imi:nu kannuba: to:me: zzun	H
N-171-2	Kurima	imi:nu kannuba: to:me: mufan	K,I,T
N-171-2	Miyaguni	imi ⁱ inu k ^h annuba to'omai mofa:n	T,N
N-171-2	Uruka	imi:nu kanju:ba to:mai mufa:n	N,U,D
N-171-2	Bora	imi:ʔa:nu kannuba: taɔmai ju(:)N ('taɔ' can also be interpreted as 'ɔ:'.)	S,M
N-171-3	Standard Japanese	<i>tonari-no ie-kara daikon-o morat-ta.</i> next.door-GENITIVE house-ABLATIVE daikon.radish-ACCUSATIVE to.receive-PAST 'I got a daikon radish from my neighbors.'	
N-171-3	Ikema	tunainu ja:kafa uɸun ^u au dɕzita ⁱ	M,Y,S,T
N-171-3	Karimata	tananu pstukaʔadu uɸun ^u : izita ^ŋ (The sonority of the first 'i' in 'izita ^ŋ ' is low.)	N,D,U
N-171-3	Yonaha	tunaŋnu pstukafa upunju: zzita:	H
N-171-3	Kurima	tunaŋnu ja:kafa upniu muro:taŋ ('k' is pronounced quite towards the back and easily misheard as 'h'.)	K,I,T
N-171-3	Miyaguni	{tuna ⁱ / tunal} nu ja:kafa upuniu {morauta: / moroota:}	T,N
N-171-3	Uruka	tuna ⁱ nu ja:kafa upunju: {mufauta ⁱ / mufouta ⁱ }	N,U,D
N-171-3	Bora	tunaŋunu ja:kafa upuniu i:ta	S,M
N-171-4	Standard Japanese	<i>ookina sakana-o moratte, minna-de wake-ta.</i> to.be.large fish-ACCUSATIVE to.receive, everyone-INSTRUMENTAL to.divide-PAST 'We got a large fish and divided it among ourselves.'	
N-171-4	Ikema	gaba:zzu dɕzi: n:naɕi: bakitai	M,Y,S,T
N-171-4	Karimata	uɸo:binu izidu {m:naɕi / n:naɕi} {bagəʔ'aŋ / bagədaŋ}	N,D,U
N-171-4	Yonaha	upo:nu zzuu zzitti m:nasi: bakita:	H
N-171-4	Kurima	upo:nu z: mufai m:nasi bakitaŋ	K,I,T
N-171-4	Miyaguni	upu ^u unu 'zu: moraitɕi m'naɕi naka:ʔta:	T,N
N-171-4	Uruka	upu:nu {zzuu / zzu: / izuu} mufaittidu m:naŋkai bakita ⁱ	N,U,D

N-171-4	Bora	upu:upunu ɾzu: i:ttɛidu m:naci: bakita(:)	S,M
N-171-5	Standard Japanese	<i>sinseki-kara miso-o moratte ki-ta.</i> relative-ABLATIVE miso-ACCUSATIVE to.receive to.come-PAST 'I got some miso paste from a relative.'	
N-171-5	Ikema	hafaɯɿkafa nʂu: dɔɔzittai	M,Y,S,T
N-171-5	Karimata	ujakigaradu nʂu: ɪzɪftaɾ (The friction of 'ɾ' is weak.)	N,D,U
N-171-5	Yonaha	utudzakafa ntsuu zzi ksta:	H
N-171-5	Kurima	utɛudzakafa msu: muraitʂɿtaɾ ('k' is pronounced quite towards the back and easily misheard as 'h'.)	K,I,T
N-171-5	Miyaguni	utɛudza kafa du mʂu morai {kʰ:ta: / kʰ:ta: / kʰ:ta}	T,N
N-171-5	Uruka	utɛɪdzakafa msu: murai kʰ:taɪ	N,U,D
N-171-5	Bora	utɔdakafa msu[u i: kɾta(:)]	S,M
N-172-1	Standard Japanese	<i>nodo-ga kawaita-ra mizu-o nomu.</i> throat-NOMINATIVE to.dry.up-CONDITIONAL water-ACCUSATIVE to.drink 'When I'm thirsty, I drink water.'	
N-172-1	Ikema	nudunu ka:kitiga: middɕu {numi / nuN}	M,Y,S,T
N-172-1	Karimata	nudunudu kafa:ʔidu mitɛi {nuŋtaɾ ('to.drink-PAST') / numafi}	N,D,U
N-172-1	Yonaha	ubui nu ka:rakika: middzu num	H
N-172-1	Kurima	nodu ka:kiba:nna miʔtɛudu num	K,I,T
N-172-1	Miyaguni	nubuinu ka:kitsika: middɕu noɱa: ('middɕi' in isolation.)	T,N
N-172-1	Uruka	nudunu ka:rakʰtika: {mittɕu / mittʂu} num	N,U,D
N-172-1	Bora	nudunudu {ka:rakʰu:taribadu / ka:raki uɾibadu} mizuu num	S,M
N-172-2	Standard Japanese	<i>watashi-no otto-wa sake-o noma-nai.</i> I-GENITIVE husband-TOPIC liquor-ACCUSATIVE to.drink-NEGATIVE 'My husband doesn't drink.'	
N-172-2	Ikema	baɣa butu: sɔkju:ba: numaN	M,Y,S,T
N-172-2	Karimata	ba: bigidumɱa ɕɔkiuba: numafɿ	N,D,U
N-172-2	Yonaha	baɣa bikiduma: sakju:ba: numan	H
N-172-2	Kurima	baɣa bikidumuu sɔkju:ba: numafɿ	K,I,T
N-172-2	Miyaguni	baɣa bikidumma sakʰjuba noɱafɿ	T,N
N-172-2	Uruka	baɣa buto: sɔkju:ba numafɿ	N,U,D
N-172-2	Bora	{baɣa / baɣa} bikidumma sɔkiuba numaN	S,M
N-172-3	Standard Japanese	<i>ocha-wa sakki non-da.</i> tea-TOPIC just.now to.drink-PAST 'I just drank tea.'	
N-172-3	Ikema	tɕa:ja kiʂadu nuntai	M,Y,S,T
N-172-3	Karimata	tɕa:juba mainɖu numi (A form like 'nuntaɾi' was not obtained.)	N,D,U
N-172-3	Yonaha	tɕa:juba: {sadaridu/pja:sidu} numta:	H

N-172-3	Kurima	ṭaiba: nnamaḡatadu numutaṭ	K,I,T
N-172-3	Miyaguni	ṭa:ja k ^{ja} a'atu nomṭa:	T,N
N-172-3	Uruka	ṭja:ja nnamadu numtaʔ	N,U,D
N-172-3	Bora	ṭa:juba: kiṣa:du numta	S,M
N-172-4	Standard Japanese	<i>kusuri-o nonde, hayaku ne-ro.</i> medicine-ACCUSATIVE to.take, to.be.early to.sleep-IMPERATIVE 'Take some medicine and go to bed early.'	
N-172-4	Ikema	ffṭija numi: {haimari / hajamari} n ^{iv} vi	M,Y,S,T
N-172-4	Karimata	fṭṭṭdu {numiṣiti / numiṣiti} p'a:ṣi niṭi	N,D,U
N-172-4	Yonaha	fsu ⁷ zuba numitti pja:pja:ti nivvi	H
N-172-4	Kurima	fsuzu numitti p'a:ṭkari nivvi	K,I,T
N-172-4	Miyaguni	ḡsuzu nomittṭi p'a:pia:ṭi nivvi	T,N
N-172-4	Uruka	{fṭṭṭz / fṭṭṭzu} numitti pja:pja:ti nivvi	N,U,D
N-172-4	Bora	fsuṣzu numittṭi p'a:pia:ṭi n ^{iv} vi	S,M
N-172-5	Standard Japanese	<i>kono kusuri-wa amai-kara nonde mi-nasai.</i> this medicine-TOPIC to.be.sweet-because to.take to.see-IMPERATIVE 'This medicine is sweet, so try taking it.'	
N-172-5	Ikema	kunu ffṭija azṭmajaiba numi: mi:ru	M,Y,S,T
N-172-5	Karimata	unu a ⁷ maṇḡdiba numi mi:ru	N,D,U
N-172-5	Yonaha	unu fsu ⁷ za adzṭma:nu jariba numi: mi:ru	H
N-172-5	Kurima	kunu fsuzza azumakariba numimi:ru	K,I,T
N-172-5	Miyaguni	kunu ḡsuzza aḡzṭma:nu jaiba nomimi:ru	T,N
N-172-5	Uruka	kunu {fṭṭṭzza / fṭṭṭzu} amakariba numi mi:ru	N,U,D
N-172-5	Bora	kunu fsuṣza azumakaṣja numi mi:ru	S,M
N-172B-1-1	Standard Japanese	<i>koko-de-wa hechima-o taberu.</i> here-LOCATIVE-TOPIC sponge.gourd-ACCUSATIVE to.eat 'We eat sponge gourd here.'	
N-172B-1-1	Ikema	kumanna {nab'a:rau / nab'a:raṭ} {fau / faṭ} (Both forms with the bilabial fricative 'ɸ' and forms with the labiodental fricative 'f' exist.)	M,Y,S,T
N-172B-1-1	Karimata	fumanja nab'a:radu {fo: / ɸo:}	N,D,U
N-172B-1-1	Yonaha	kumanna nabja:fo: fo:duṣ (As an answer to 'What do you eat?': sato:du fo: 'We eat sugar.')	H
N-172B-1-1	Kurima	kumanna nabja:roa fo: ('oa' is an ambiguous diphthong.)	K,I,T
N-172B-1-1	Miyaguni	kumanna nab'a:raoba {ɸooduṣ: / ɸaoduṣ:}	T,N
N-172B-1-1	Uruka	kumaṇ nabja:rau fau	N,U,D
N-172B-1-1	Bora	kumanna nab'a:raudu ɸṭ	S,M

N-172B-1-2	Standard Japanese	<i>hondo-no hito-wa hechima-o tabe-nai.</i> mainland.Japan-GENITIVE person-TOPIC sponge.gourd-ACCUSATIVE to.eat-NEGATIVE 'Mainland Japanese people don't eat sponge gourd.'	
N-172B-1-2	Ikema	jamatunu çitu: nab'a:rauba: fa:N	M,Y,S,T
N-172B-1-2	Karimata	jamatu pstō: nab'arawa {φαη / faη}	N,D,U
N-172B-1-2	Yonaha	jamatunu psta: nabja'o:ba: fa:n	H
N-172B-1-2	Kurima	jamatunu piŋoa nabea'oaba fa: η ('oa' and 'ea' are ambiguous diphthongs.)	K,I,T
N-172B-1-2	Miyaguni	naiɬei pʰto: nab'a:raoɬa ɬa:η	T,N
N-172B-1-2	Uruka	jamatunu pʰto: nabja:rauba fa:η	N,U,D
N-172B-1-2	Bora	jamatu(nu) pŋta: nab'a:rauba fa:N	S,M
N-172B-1-3	Standard Japanese	<i>nigauri-wa kinoo tabe-ta.</i> bitter.melon-TOPIC yesterday to.eat-PAST 'Yesterday, I ate bitter melon.'	
N-172B-1-3	Ikema	gaufau nnu {faitai / fautai / faʊtai}	M,Y,S,T
N-172B-1-3	Karimata	go:fo:ba ksnudu {fo:taɾ / ɬo:taɾ} (The friction of 'ɾ' is weak.)	N,D,U
N-172B-1-3	Yonaha	go:fo:ba: ksnudu fo:ta:	H
N-172B-1-3	Kurima	go:fo ^o a ɬsnudu fo:taɾ (' ^o a' is an ambiguous diphthong.)	K,I,T
N-172B-1-3	Miyaguni	gaufaɬa kʰno:do ɬoota:	T,N
N-172B-1-3	Uruka	gaufa: kʰnu:du {fo:taɾ / fautaɾ}	N,U,D
N-172B-1-3	Bora	ɡʊʊfauba: kʰnu:du ɬʊta	S,M
N-172B-1-4	Standard Japanese	<i>hirugohan-o tabete, ne-ro.</i> lunch-ACCUSATIVE to.eat, to.sleep-IMPERATIVE 'Have lunch and get some sleep.'	
N-172B-1-4	Ikema	jamatunu çitu: nab'a:rauba: fa:N	M,Y,S,T
N-172B-1-4	Karimata	jamatu pstō: nab'arawa {φαη / faη}	N,D,U
N-172B-1-4	Yonaha	jamatunu psta: nabja'o:ba: fa:n	H
N-172B-1-4	Kurima	jamatunu piŋoa nabea'oaba fa: η ('oa' and 'ea' are ambiguous diphthongs.)	K,I,T
N-172B-1-4	Miyaguni	naiɬei pʰto: nab'a:raoɬa ɬa:η	T,N
N-172B-1-4	Uruka	jamatunu pʰto: nabja:rauba fa:η	N,U,D
N-172B-1-4	Bora	jamatu(nu) pŋta: nab'a:rauba fa:N	S,M
N-172B-1-5	Standard Japanese	<i>yuugohan-wa tabete ki-ta.</i> dinner-TOPIC to.eat to.come-PAST 'I've eaten dinner.'	
N-172B-1-5	Ikema	juiju faittai	M,Y,S,T
N-172B-1-5	Karimata	ju:ɾba faidu kuɬi	N,D,U

N-172B-1-5	Yonaha	ju:ŋba fe:tidu ksta: (Apparently, both ‘fe:tti’ and ‘fe:ti’ are possible. The form used in ‘fe: mi:ru’ is the <i>ari</i> -continuative.)	H
N-172B-1-5	Kurima	ju:zuba faitti ʔaŋa	K,I,T
N-172B-1-5	Miyaguni	juzzuba ɸaido kʰta:	T,N
N-172B-1-5	Uruka	juzza faidu kʰtaʰ	N,U,D
N-172B-1-5	Bora	juzza faitʔaidu kʰta: (‘faitʔai’ is a <i>shite</i> -continuative.) <cf> ɡʊʔrau fai mi:ru (‘Try eating a bitter melon’; ‘fai’ is an <i>ari</i> -continuative.)	S,M
N-172B-2-1	Standard Japanese	<i>yagi-wa kusa-o kuu.</i> goat-TOPIC grass-ACCUSATIVE to.eat ‘Goats eat grass.’	
N-172B-2-1	Ikema	ɕindʒa: {fsaudu / fsaʊdu} {fau / faʊ}	M,Y,S,T
N-172B-2-1	Karimata	pinza: {isso:ba: / ifso:ba:} {ffo:ʰzuŋ / ffo:ʰzŋ}	N,D,U
N-172B-2-1	Yonaha	pindza: fso:du fo:	H
N-172B-2-1	Kurima	pinʒa: fso:du fo:	K,I,T
N-172B-2-1	Miyaguni	pinʒa: ɸsaodo ɸau	T,N
N-172B-2-1	Uruka	pinʒa: fuʂaudu {fou / fau}	N,U,D
N-172B-2-1	Bora	pinda: fsaudu ɸʊ	S,M
N-172B-2-2	Standard Japanese	<i>yagi-wa kami-o kuwa-nai.</i> goat-TOPIC paper-ACCUSATIVE to.eat-NEGATIVE ‘Goats don’t eat paper.’	
N-172B-2-2	Ikema	ɕindʒa: kabijuba: {fa:N / ffa:N}	M,Y,S,T
N-172B-2-2	Karimata	Not obtained. Reportedly, the same word is used for eating by animals and eating by humans.	N,D,U
N-172B-2-2	Yonaha	pindza: kabʰzuba fa:n	H
N-172B-2-2	Kurima	pinʒa: kabzba fa:ŋ	K,I,T
N-172B-2-2	Miyaguni	pinʒa: kʰabizoba ɸa:ŋ	T,N
N-172B-2-2	Uruka	pinʒa: kabʰzuba fa:ŋ	N,U,D
N-172B-2-2	Bora	pinda: kabŋʊba fa:N	S,M
N-172B-2-3	Standard Japanese	<i>neko-ga sakana-o kut-ta.</i> cat-NOMINATIVE fish-ACCUSATIVE to.eat-PAST ‘The cat ate the fish.’	
N-172B-2-3	Ikema	majun zzu: {fautai / faʊtai}	M,Y,S,T
N-172B-2-3	Karimata	Not obtained. Reportedly, the same word is used for eating by animals and eating by humans.	N,D,U
N-172B-2-3	Yonaha	majunudu zzu: fo:ta:	H
N-172B-2-3	Kurima	majunudu zz:ba: fo:taŋ	K,I,T

N-172B-2-3	Miyaguni	maju: zzu:ba ɸoodosi:	T,N
N-172B-2-3	Uruka	majunudu {zzu: / ɪzuu} {foutaʔi / fautaʔi}	N,U,D
N-172B-2-3	Bora	maju:nudu ɪzuu ɸɔta ('fɔta' can also be interpreted as 'fo:ta'.)	S,M
N-172B-2-4	Standard Japanese	<i>sakana-o kutte, sugu-ni nige-ta.</i> fish-ACCUSATIVE to.eat, right.away-LOCATIVE to.escape-PAST 'It ate the fish and ran off right away.'	
N-172B-2-4	Karimata	Not obtained. Reportedly, the same word is used for eating by animals and eating by humans.	N,D,U
N-172B-2-4	Kurima	zza: fe:ttidu pja:pja:ti pi:ta:	K,I,T
N-172B-2-4	Miyaguni	zz: faitte sugu piŋgitaŋ	T,N
N-172B-2-4	Uruka	zzu: ɸi:du sugu {pʰiŋgita: / ɸiŋgita:}	N,U,D
N-172B-2-4	Bora	ɪza: faitteɪdu nnama piŋgita (Perhaps 'ɪza:' corresponds to 'fish-TOPIC'.)	S,M
N-172B-2-5	Standard Japanese	<i>zenbu kutte shimat-ta.</i> completely to.eat to.finish-PAST 'It ate it all up.'	
N-172B-2-5	Ikema	nʌnai fai n'a:N	M,Y,S,T
N-172B-2-5	Karimata	Not obtained. Reportedly, the same word is used for eating by animals and eating by humans.	N,D,U
N-172B-2-5	Yonaha	m:nadu fo:ta:	H
N-172B-2-5	Kurima	{mu:stu / mu:ɾdu} fain'a:ŋ ('n' is not palatalized as much as 'ɲ'.)	K,I,T
N-172B-2-5	Miyaguni	mʰnado ɸaido {pʰi:ta: / ɸiita:}	T,N
N-172B-2-5	Uruka	m:nadu {fai nja:ŋ / foutaʔi ~ fautaʔi ('to.eat-PAST')}	N,U,D
N-172B-2-5	Bora	m:na fai n'a:N	S,M
N-173-1	Standard Japanese	<i>kuraku naru-made soto-de asobu.</i> to.be.dark to.become-TERMINATIVE outside-LOCATIVE to.play 'I play outside until it gets dark.'	
N-173-1	Ikema	ffaɸnai {k'ata:çi: / kita:çi:} araN {aɕibi ui / aɕibu:i}	M,Y,S,T
N-173-1	Karimata	faffu: nask'a:du ɸukaŋgi asuɔi	N,D,U
N-173-1	Yonaha	ffa:ffa naŋkja:gamidu minakan appɪta:	H
N-173-1	Kurima	ffafu naŋk'a pukaŋ aspi	K,I,T
N-173-1	Miyaguni	ɸaʷaɸɸa {naʊk'a: / nazk'a:} pʰukaN asʷpiu:	T,N
N-173-1	Uruka	f'fa:ffa naʔkja:du pukaŋ asɪpʔ	N,U,D
N-173-1	Bora	ffa:ffa suk'a:du ara:N asɪpɪŋ ('asɪpɪŋ' can also be interpreted as 'asɪbɪŋ'.)	S,M

N-173-2	Standard Japanese	<i>kuraku nat-ta-ra, daremo asoba-nai.</i> to.be.dark to.become-PAST-CONDITIONAL, anyone to.play-NEGATIVE 'When it gets dark, no one plays.'	
N-173-2	Ikema	ffa: nai tu: taʔumai aʔibaN	M,Y,S,T
N-173-2	Karimata	fafu nadiga: {taʔmai / taʔumai} asu:baŋ	N,D,U
N-173-2	Yonaha	ffa:ffa nakka: to:me: appan	H
N-173-2	Kurima	ffa:ffa naʔkka: to:me: aspaŋ	K,I,T
N-173-2	Miyaguni	ɸʷaʔaʔa nazʔika: toʔomai asipaŋ	T,N
N-173-2	Uruka	ff:ffa naʔtika: to:mai asipaŋ	N,U,D
N-173-2	Bora	ffa:ffa naʔʔika: taʔmai asʔpaN ('asʔpaN' can also be interpreted as 'asʔbaN'.)	S,M
N-173-3	Standard Japanese	<i>kinoo-wa itoko-to ason-da.</i> yesterday-TOPIC cousin-COMITATIVE to.play-PAST 'Yesterday, I played with my cousin.'	
N-173-3	Ikema	nʔu: itʔuʔtu {aʔibitai / aʔu:tai}	M,Y,S,T
N-173-3	Karimata	*sno: {itʔsaʔido / itʔsaʔidu} asʔda	N,D,U
N-173-3	Yonaha	ksna: itsaʔʔja:na appʔta:	H
N-173-3	Kurima	ʔanu: itʔʔfu:tu: aspaʔa	K,I,T
N-173-3	Miyaguni	kʔnu:ja {itʔʔʔunukʔa:tu / itʔʔʔutudo} asʔpʔta:	T,N
N-173-3	Uruka	kʔnu:ja itʔʔfutu asʔpʔtaʔ	N,U,D
N-173-3	Bora	kʔnu:ja itʔʔʔutudu asʔʔʔa: ('asʔʔʔa:' can also be interpreted as 'asʔʔʔa:'.)	S,M
N-173-4	Standard Japanese	<i>gakkoo-de asonde, ie-ni kaet-ta.</i> school-LOCATIVE to.play, house-LOCATIVE to.return.home-PAST 'I played at school and went home.'	
N-173-4	Ikema	gakko:N aʔibi: ja:ŋkai ikitai	M,Y,S,T
N-173-4	Karimata	gakko:ŋgi asʔbiʔʔi ja:ŋkai kstaʔ (The friction of 'ʔ' is weak.)	N,D,U
N-173-4	Yonaha	gakko:ndu appitti ja:nke: ksta: ('to.come-PAST' instead of 'to.return.home-PAST'.)	H
N-173-4	Kurima	gakkʷo:ŋ aspaʔti ja:ŋke: ʔʔaʔ ('ʷo' is an ambiguous diphthong.)	K,I,T
N-173-4	Miyaguni	gakko:ŋ asʔpittʔidu ja:ŋkai kʔta:	T,N
N-173-4	Uruka	gakko:ŋ asʔpittidu jaŋkai kʔ:taʔ	N,U,D
N-173-4	Bora	gakko:ndu asʔpittʔi: ja:ŋkai kʔta: ('asʔpittʔi:' can also be interpreted as 'asʔpittʔi:'.)	S,M

N-173-5	Standard Japanese	<i>soto-de asonde ko-i.</i> outside-LOCATIVE to.play to.come-IMPERATIVE 'Go play outside.'	
N-173-5	Ikema	afaN aʒibi: ku:	M,Y,S,T
N-173-5	Karimata	pukaŋgi aʒbi ku:	N,D,U
N-173-5	Yonaha	afa: iki appi ku:	H
N-173-5	Kurima	puʔkaŋ aspɿ ku:	K,I,T
N-173-5	Miyaguni	pʰuʔkaN aʒpi ku:	T,N
N-173-5	Uruka	pukaŋ aʒpi ku:	N,U,D
N-173-5	Bora	afa:ŋki aʒpi: ku: ('aʒpi:' can also be interpreted as 'aʒbi:'.)	S,M
N-174-1	Standard Japanese	<i>kono sake-wa sugu-ni you.</i> this liquor-TOPIC right.away-LOCATIVE to.get.drunk 'This liquor gets you drunk quickly.'	
N-174-1	Ikema	kunu saʔja: suʒu bi:u:i	M,Y,S,T
N-174-1	Karimata	ʒuʔja: piŋkanu ma:ʒinai bi:u:	N,D,U
N-174-1	Yonaha	kunu saʔja: nnamantidu bju:	H
N-174-1	Kurima	kunu saʔja: suʒudu bi:u:	K,I,T
N-174-1	Miyaguni	kunu saʔʒa suʒu bi:u: duʒ:	T,N
N-174-1	Uruka	kunu saʔja: sɿʒudu bju:	N,U,D
N-174-1	Bora	kunu saʔja: suʒudu bi:u:	S,M
N-174-2	Standard Japanese	<i>kare-wa donnani nonde-mo yowa-nai.</i> he-TOPIC how.much to.drink-even.when to.get.drunk-NEGATIVE 'No matter how much he drinks, he doesn't get drunk.'	
N-174-2	Ikema	kaʔa: iŋʒi: numammai bi:u:iN	M,Y,S,T
N-174-2	Karimata	kanu psto: uposa numumai {bi:u:iŋ / bi:u:iŋ}	N,D,U
N-174-2	Yonaha	kanu psta: no:si numja:me: bja:n	H
N-174-2	Kurima	kaʔa: no:si numja:me: bio:ŋ	K,I,T
N-174-2	Miyaguni	kaʔea noʔobaʒi noŋibam bio:ŋ	T,N
N-174-2	Uruka	kaʔja: isaʔi numibaŋ bjo:ŋ	N,U,D
N-174-2	Bora	kaʔa: nabaʒi: numaʒa:maidu b'a:N (numaʒa:maidu 'to.drink-CAUSATIVE-even.when')	S,M
N-174-3	Standard Japanese	<i>ototoi-wa takusan nonde yot-ta.</i> day.before.yesterday-TOPIC much to.drink to.get.drunk-PAST 'The day before yesterday, I drank a lot and got drunk.'	
N-174-3	Ikema	mi:kanainna ippai numi: bi:u:itai	M,Y,S,T
N-174-3	Karimata	putuduŋza upo:sa numidu bi:u:taŋ	N,D,U
N-174-3	Yonaha	ututuzza masje: numittidu bju:ta:	H
N-174-3	Kurima	butuʔu:za maʒa:ŋ numitti bi:u:taŋ	K,I,T
N-174-3	Miyaguni	butuʔuzza jaʔudake noŋmittʒido bio:ta:	T,N

N-174-3	Uruka	{buʔʔutuzza / bututuzza} jaudaki numittidu bju:taʔ	N,U,D
N-174-3	Bora	bututuŋza upa:ʔɛi numittɛidu bju:ta: ('ututuŋza' is used for 'day before yesterday' as well, as is 'jamakaʃa' for 'much'.)	S,M
N-174-4	Standard Japanese	<i>kare-wa yotte, kinoo-no koto-o wasure-teiru.</i> he-TOPIC to.get.drunk, yesterday-GENITIVE thing-ACCUSATIVE to.forget-STATIVE 'He got drunk, so he has forgotten about yesterday.'	
N-174-4	Ikema	mi:kanainna ippai numi: bju:itai	M,Y,S,T
N-174-4	Karimata	putuduŋza upo:sa numidu bju:taŋ	N,D,U
N-174-4	Yonaha	ututuzza masje: numittidu bju:ta:	H
N-174-4	Kurima	butuʔu:za maʃa:ŋ numitti bju:taŋ	K,I,T
N-174-4	Miyaguni	bututuzza jaʔudake ɲomittɛido bio:ta:	T,N
N-174-4	Uruka	{buʔʔutuzza / bututuzza} jaudaki numittidu bju:taʔ	N,U,D
N-174-4	Bora	bututuŋza upa:ʔɛi numittɛidu bju:ta:	S,M
N-174-5	Standard Japanese	<i>sake-o nonde yotte shimat-ta.</i> liquor-ACCUSATIVE to.drink to.get.drunk to.finish-PAST 'I had a drink and ended up drunk.'	
N-174-5	Ikema	sakja: numi: bju:i nja:N	M,Y,S,T
N-174-5	Karimata	bju:i nja:ŋ	N,D,U
N-174-5	Yonaha	sakja: numittidu bju:i uta:	H
N-174-5	Kurima	sakja: numitti bju:inja:ŋ	K,I,T
N-174-5	Miyaguni	sak ^h ɛo nomittɛi (du) bio:jo:ta:	T,N
N-174-5	Uruka	sakju: numi:du bju:i nja:ŋ	N,U,D
N-174-5	Bora	sakja: numittɛidu bju:i nja:N	S,M
N-175B-1	Standard Japanese	<i>mainichi kami- arau.</i> every.day hair-ACCUSATIVE to.wash 'I wash my hair every day.'	
N-175B-1	Ikema	mainitɛi akau arau	M,Y,S,T
N-175B-1	Karimata	mainitɛtu kafa t ɛba aro:	N,D,U
N-175B-1	Yonaha	mainitsɿ karaddzu aro:	H
N-175B-1	Kurima	mainitsɿ karattɛu aroa ('oa' is an ambiguous diphthong.)	K,I,T
N-175B-1	Miyaguni	maʔinitsɿ karaddzɔ arau	T,N
N-175B-1	Uruka	mainitɛidu karattɛu arau	N,U,D
N-175B-1	Bora	itsɿ:maidu kafazuu aɾɔɔ	S,M
N-175B-2	Standard Japanese	<i>sofu-wa mainichi-wa kami-o arawa-nai.</i> grandfather-TOPIC every.day-TOPIC hair-ACCUSATIVE to.wash-NEGATIVE 'My grandfather doesn't wash his hair every day.'	
N-175B-2	Ikema	uja: mainitɛi akauba: afa:N	M,Y,S,T
N-175B-2	Karimata	obaja gabamɿma: karattɛɿba mainitsɿ afa:ŋ	N,D,U

N-175B-2	Yonaha	sju:ja mainitsɿ karaddzuba: ara:n	H
N-175B-2	Kurima	ɕu:ja mainitsɿ karattɕuba ara:ŋ	K,I,T
N-175B-2	Miyaguni	ɕu:ja maʔinittsa karadzuba ara:ŋ	T,N
N-175B-2	Uruka	ʃu:ja mainittsa karattɕuba ara:ŋ	N,U,D
N-175B-2	Bora	ɕu:ja {mainʔittsa / mainʔitsa:} karazu:ba ara:N ('mainʔitsa:' is a newer pronunciation.)	S,M
N-175B-3	Standard Japanese	<i>te-to ashi-o arat-ta.</i> hand-COMITATIVE foot-ACCUSATIVE to.wash-PAST 'I washed my hands and feet.'	
N-175B-3	Ikema	ti:tu haddzu afaɪtai	M,Y,S,T
N-175B-3	Karimata	ti:du pagʔudu {aro:dan / aro:daŋ}	N,D,U
N-175B-3	Yonaha	ti:tu pagzzuba: {aro: dusɪta:/aro:ta:}	H
N-175B-3	Kurima	ti:tu pazutu: aro:taŋ	K,I,T
N-175B-3	Miyaguni	tsi:tu pagʔ:tu afaɪta:	T,N
N-175B-3	Uruka	ti:tu pagʔ:zu afaɪtaʔ	N,U,D
N-175B-3	Bora	tsi:tu pazɪudu aʔɔta(:)	S,M
N-175B-4	Standard Japanese	<i>te-o aratte, gohan-o tabe-ro.</i> hand-ACCUSATIVE to.wash, meal-ACCUSATIVE to.eat-IMPERATIVE 'Wash your hands and eat.'	
N-175B-4	Ikema	ti:ju aɪai: munu: fai	M,Y,S,T
N-175B-4	Karimata	ti:ja aɪaɪɕi: munu: {ɸai / fai}	N,D,U
N-175B-4	Yonaha	ti:ba: aɪe:ttidu munu:ba: fe:	H
N-175B-4	Kurima	ti: aɪaɪtti munu fe:	K,I,T
N-175B-4	Miyaguni	tsi:ɔ aɪaɪtti kafa monoba ɸai	T,N
N-175B-4	Uruka	ti:ju {aɪaɪtti / aɪaɪttikafa} {mazzu / maʔzu} fai	N,U,D
N-175B-4	Bora	tsi:ju aɪaɪtti munu:ba fai	S,M
N-175B-5	Standard Japanese	<i>kao-mo aratte ko-i.</i> face-too to.wash to.come-IMPERATIVE 'Go wash your face, too.'	
N-175B-5	Ikema	mihanaumai {aɪai / sɿmi: / sɿɰmi:} ku:	M,Y,S,T
N-175B-5	Karimata	mipano: aɪai ku:	N,D,U
N-175B-5	Yonaha	mipano:me: aɪe: ku:	H
N-175B-5	Kurima	mipanoa aɪai ku: ('oa' is an ambiguous diphthong.)	K,I,T
N-175B-5	Miyaguni	mipanao {aɪaɪtti / aɪai} ko:	T,N
N-175B-5	Uruka	mipanaɪ aɪai ku:	N,U,D
N-176-1	Standard Japanese	<i>atsuitoki-wa boosi-o kaburu.</i> to.be.hot time-TOPIc hat-ACCUSATIVE to.put.on(headwear) 'When it's hot, I put a hat on.'	
N-176-1	Ikema	aɕukai tukʲanna {bo:ɕu: / bu:ɕu:} {kavvi / kaɕɕi}	M,Y,S,T

N-176-1	Karimata	aʦik̤ai tuk̤inna bo:ɕiu kavvi	N,M
N-176-1	Uruka	aʦikaʔi tuk̤ja:na bo:ʃu: kaʊ	N,U,D
N-176-1	Bora	aʦa:aʦanu tuk̤ja:n̩na bo:ɕu: {kaʊ / kaf}	K,K,Y,M
N-176-1	Kuninaka	aʦa: tuk̤ja:n̩na bo:ɕoo kaʊ (According to the speaker, 'u' corresponds to the Standard Japanese <i>kana</i> for 'u'.)	N
N-176-2	Standard Japanese	<i>daremo kubagasa-o kabura-nai.</i> anyone fan.palm.leaf.hat-ACCUSATIVE to.put.on(headwear)-NEGATIVE 'No one puts on a fan palm leaf hat.'	
N-176-2	Ikema	taʃumai kubaɕasauba: {kavvaN / kaʊʊaN}	M,Y,S,T
N-176-2	Karimata	taʃumai kasauba kavvaN	N,M
N-176-2	Uruka	to:mai kubaɕasauba kaʊʊaŋ	N,U,D
N-176-2	Bora	ta:mai kubaɕasauba: kavvaŋ	K,K,Y,M
N-176-2	Kuninaka	taʃuʔmai koɕaɕasao kavvaN	N
N-176-3	Standard Japanese	<i>wakai koro-wa kubagasa-o kabut-ta.</i> to.be.young time.period-TOPIC fan.palm.leaf.hat-ACCUSATIVE to.put.on(headwear)-PAST 'When I was young, I used to put on a fan palm leaf hat.'	
N-176-3	Ikema	bakakaik̤a: kubaɕasauba: kavvitai	M,Y,S,T
N-176-3	Karimata	baka: siŋk̤ja:ja kasauba kaudai (kavvi utai 'to.put.on(headwear)-STATIVE-PAST')	N,M
N-176-3	Uruka	baxakaʔik̤ja:ja kubaɕasauba {kaʊtaʔi / kaʊdu} siŋtaʔi	N,U,D
N-176-3	Bora	baka:bakanu tuk̤ja:n̩na kubaɕasau kav̤ta:	K,K,Y,M
N-176-3	Kuninaka	bak̤aʃmununu ju:ɕiaNna koɕaɕasao kaʊtaʃi ('k ^h ' is close to 'x', somewhat towards back; when 'l' is pronounced the tip of the tongue is visible; the distinction between close 'o' and 'u' is not strict. This also holds for the rest of the data.)	N
N-176-4	Standard Japanese	<i>kubagasa-o kabutte, zoori-o hai-ta.</i> fan.palm.leaf.hat-ACCUSATIVE to.put.on(headwear), sandal-ACCUSATIVE to.put.on(footwear)-PAST 'I put on a fan palm leaf hat and sandals.'	
N-176-4	Ikema	kubaɕasa: kavvi: sabau mmitai	M,Y,S,T
N-176-4	Karimata	kasau kavvidu sabo: {fundai / hundai} (fummi 'to.put.on(footwear)-INTERROGATIVE')	N,M
N-176-4	Uruka	kubaɕasau kaʊʊitti sabau fun̤taʔi	N,U,D
N-176-4	Bora	kubaɕasau kavvitt̤ei sabau f̤uŋta:	K,K,Y,M
N-176-4	Kuninaka	kubaɕasao kavvi:du sabao f̤uŋtaʃi	N
N-176-5	Standard Japanese	<i>omae-mo kubagasa-o kabutte mi-ro.</i> you-too fan.palm.leaf.hat-ACCUSATIVE to.put.on(headwear) to.see-IMPERATIVE 'You try putting on a fan palm leaf hat, too. (imperative)'	
N-176-5	Ikema	vvaʃmai kubaɕasau kavvi mi:ʃu	M,Y,S,T

N-176-5	Karimata	vɤamai kasau kavvi mi:ru	N,M
N-176-5	Uruka	ʊʊamai kubaɣasau kaʊʊi mi:ru	N,U,D
N-176-5	Bora	vɤamai kubaɣasau kavvi: mi:ru	K,K,Y,M
N-176-5	Kuninaka	ʊvamai kubaɣasau kavvi: mi:ru	N
N-176B-1	Standard Japanese	<i>yoru-wa to-o tojiru.</i> night-TOPIc door-ACCUSATIVE to.close 'At night, I close the door.'	
N-176B-1	Ikema	junaka: jadu: ffi	M,Y,S,T
N-176B-1	Karimata	junainna jaduba ɕimiɾu	N,M
N-176B-1	Bora	junainna jadu:du fʊ: (The labiodental approximant functions like a vowel.)	K,K,Y,M
N-176B-1	Kuninaka	{julja / jullja} jaduɔ ɕimicɕi	N
N-176B-2	Standard Japanese	<i>kyoo-wa atsui-kara to-o toji-nai.</i> today-TOPIc to.be.hot-because door-ACCUSATIVE to.close-NEGATIVE 'Because it's hot today, I won't close the door.'	
N-176B-2	Ikema	kʉ:ja aɕsukaiba jadu:ba: ffaɕa:ɳ (volitional) <cf> kanu ɕitu: itɕmai jadu:ba: ffaɳ ('He never closes the door.')	M,Y,S,T
N-176B-2	Karimata	kju:ba aɕsikaɾiba {jadu:ba / jaduba ɕimiɳ}	N,M
N-176B-2	Bora	kʉ:ja aɕskaɾiba jadu:ba: ffaŋ	K,K,Y,M
N-176B-2	Kuninaka	kʉ:ja aɕɾakajba jadoɔ ɕimiɾu ('to.close-IMPERATIVE')	N
N-176B-3	Standard Japanese	<i>yuube-wa chichi-ga to-o toji-ta.</i> last.night-TOPIc father-NOMINATIVE door-ACCUSATIVE to.close-PAST 'Last night, my father closed the door.'	
N-176B-3	Ikema	jubja: zzaɣa jadu: ffitai	M,Y,S,T
N-176B-3	Karimata	ju:bja: uja:du jaduba ɕimidai	N,M
N-176B-3	Bora	jubja: ujaɣadu jadu: fʊ:ta:	K,K,Y,M
N-176B-3	Kuninaka	{ju:beja / jubja:} ojaɣadu jaduɔ ɕimeɾal	N
N-176B-4	Standard Japanese	<i>sensee-ga to-o tojite, saki-ni it-ta.</i> teacher-NOMINATIVE door-ACCUSATIVE to.close, before-LOCATIVE to.go-PAST 'The teacher closed the door and went first.'	
N-176B-4	Ikema	ɕiɕi:ɣa jadu: ffi: sadafi: hatai	M,Y,S,T
N-176B-4	Karimata	ɕiɕi:ɣadu jadu: ɕimi sakiŋ ŋɕi	N,M
N-176B-4	Bora	ɕinɕi:ɣadu jadu: ffitɕi satsaŋ pizta:	K,K,Y,M
N-176B-4	Kuninaka	ɕinɕi:ɣa jadoɔ ɕimii sadafɕ: pialtal	N
N-176B-5	Standard Japanese	<i>omae-ga tojite ko-i.</i> you-NOMINATIVE to.close to.come-IMPERATIVE 'You go close it.' (imperative)	
N-176B-5	Ikema	vvaɣa ffi: ku:	M,Y,S,T
N-176B-5	Bora	vvaɣa ffi ku:	K,K,Y,M

N-176B-5	Kuninaka	ʷvaɡa {ɕimii / ɕimi} koː	N
N-177-1	Standard Japanese	<i>otooto-wa hitori-de neru.</i> younger.brother-TOPIC one.person-INSTRUMENTAL to.sleep 'My brother sleeps alone.'	
N-177-1	Ikema	uttuː {taukaːçiː / taʊkaːçiː} nʲivvi	M, Y, S, T
N-177-1	Bora	utuʔaː taʊkʲaːdu nivʲ	K, K, Y, M
N-177-1	Kuninaka	oʔtoo taʲkʲaː do {nivviʷ / nivvijʷ / nivvʲʷlʲ} (This was confirmed to be the entire utterance.)	N
N-177-2	Standard Japanese	<i>imooto-wa hitori-de ne-nai.</i> younger.sister-TOPIC one.person-INSTRUMENTAL-TOPIC to.sleep-NEGATIVE 'My sister doesn't sleep alone.'	
N-177-2	Ikema	uttuː {taukaːçiːja / taʊkaːçiːja} nʲivvaN	M, Y, S, T
N-177-2	Bora	utuʔaː taʊkʲaːja nivʲaŋ	K, K, Y, M
N-177-2	Kuninaka	{ottoo / miduNna} taʲkʲaːdo nivvaN	N
N-177-3	Standard Japanese	<i>yuube-wa futari-de ne-ta.</i> last.night-TOPIC two.people-INSTRUMENTAL to.sleep-PAST 'Last night, they slept together.'	
N-177-3	Ikema	juːbʲaː ftaːçiː nʲuːtai	M, Y, S, T
N-177-3	Bora	jubʲaː {ftaːzdu / ftaːdu} niʊtaː	K, K, Y, M
N-177-3	Kuninaka	jubeʲaa ʔutaːlɔdo nivtaʲ	N
N-177-4	Standard Japanese	<i>kujī-ni nete, hachijī-ni oki-ta.</i> nine.o'clock-LOCATIVE to.sleep, eight.o'clock-LOCATIVE to.get.up-PAST 'I went to bed at nine and got up at eight.'	
N-177-3	Ikema	kudʒiN nivviː hatsidʒiN ukitai	M, Y, S, T
N-177-3	Bora	kudʒiN nivvitʲeidu hatsidʒiN ukitaː	K, K, Y, M
N-177-3	Kuninaka	kudʒiN nivvii hatsidʒiN okitaʲ	N
N-177-4	Standard Japanese	<i>kyoo-wa hitori-de nete mi-ro.</i> today-TOPIC one.person-INSTRUMENTAL to.sleep to.see-IMPERATIVE 'Today, try sleeping alone.'	
N-177-4	Ikema	kiuːja {taukʲaːçiː / taʊkʲaːçiː} nivvi miːru	M, Y, S, T
N-177-4	Bora	kiuːja taʊkʲaː nivvi miːru	K, K, Y, M
N-177-4	Kuninaka	kiuːja taʲkʲaː nivviː miːru	N
N-178-1	Standard Japanese	<i>sofu-wa mainichi rokuji-ni okiru.</i> grandfather-TOPIC every.day six.o'clock-LOCATIVE to.get.up 'My grandfather gets up at six every day.'	
N-178-1	Ikema	ujaː mainitʲe rukudʒiN ukiː	M, Y, S, T
N-178-1	Bora	ɕuːja mainitʲɕa rokudʒiNdu uki	K, K, Y, M
N-178-1	Kuninaka	ɕuːja mainitʲɕa rokudʒiN {okiʲ / okiʲli}	N

N-178-2	Standard Japanese	<i>otooto-wa mada oki-nai.</i> younger.brother-TOPIC yet to.get.up-NEGATIVE 'My brother won't wake up yet.'	
N-178-2	Ikema	uttu: nna:ŋ'a: ukiN	M, Y, S, T
N-178-2	Bora	utuŋa: nŋ'ada ukuŋ	K, K, Y, M
N-178-2	Kuninaka	oŋtoo mŋmada okiNni:	N
N-178-3	Standard Japanese	<i>chichi-mo rokuji-ni oki-ta.</i> father-too six.o'clock-LOCATIVE to.get.up-PAST 'My father got up at six, too.'	
N-178-3	Ikema	zzamai rukudziN ukitai	M, Y, S, T
N-178-3	Bora	ujamai rokudziNdu ukiŋa:	K, K, Y, M
N-178-3	Kuninaka	ojamai rokudziN okitaŋ	N
N-178-4	Standard Japanese	<i>hayaku okite, sore-kaa hatake-ni it-ta.</i> to.be.early to.get.up, that-ABLATIVE field-LOCATIVE to.go-PAST 'I got up early; then, I went to the field.'	
N-178-4	Ikema	ça:çi: uki: uikara haiŋkai ikiŋtai	M, Y, S, T
N-178-4	Bora	p'a:ŋi uki:ŋaidu uikara paŋiŋkai ikŋta:	K, K, Y, M
N-178-4	Kuninaka	p'a:ŋi: okii uikara paiNkai p'aŋtaŋ	N
N-178-5	Standard Japanese	<i>omae-mo hayaku okite ko-i.</i> you-too to.be.early to.get.up to.come-IMPERATIVE 'You get up and come early, too.' (imperative)	
N-178-5	Ikema	vvamai ça:çi: uki: ku:	M, Y, S, T
N-178-5	Bora	vyamai p'a:p'a: uki: ku:	K, K, Y, M
N-178-5	Kuninaka	vvamai p'a:ŋi: okii ko:	N
N-179-1	Standard Japanese	<i>kookoossee-wa seifuku-o kiru.</i> high.school.student-TOPIC uniform-ACCUSATIVE to.put.on 'High school students wear uniforms.'	
N-179-1	Ikema	ko:ko:ŋeija ŋe:ŋku:du {ŋa: / ŋa:i}	M, Y, S, T
N-179-1	Bora	ko:ko:ŋeija ŋeifku:du kŋa:	K, K, Y, M
N-179-1	Kuninaka	ko:ko:s'eija {s'eifukudu / s'eifukuu} {ŋa: / ŋa:i}	N
N-179-2	Standard Japanese	<i>sono fuku-wa furui-kara daremo ki-nai.</i> that clothes-TOPIC to.be.old-because anyone to.put.on-NEGATIVE 'Because those clothes are old, no one puts them on.'	
N-179-2	Ikema	unu fku: jaŋimunujaiba taŋumai tŋaŋ	M, Y, S, T
N-179-2	Bora	unu ŋka: gaŋakariba ta:mai kŋŋaŋ	K, K, Y, M
N-179-2	Kuninaka	unu ŋukuu jaŋimunujaiba taŋumai ŋtaŋ	N
N-179-3	Standard Japanese	<i>sore-wa kinoo ki-ta.</i> that-TOPIC yesterday to.put.on-PAST 'I put that on yesterday.'	

N-179-3	Ikema	ufa: nnu ʔitai	M, Y, S, T
N-179-3	Bora	unu fɰa: ('that clothes-TOPIc') ʔinu:du kʂʂta:	K, K, Y, M
N-179-3	Kuninaka	ufa: {ʔinu / ʔinu / ʔinudu} ʔi:ta:	N
N-179-4	Standard Japanese	<i>watashi-wa akai fuku-o kite, imooto-wa aoi fuku-o ki-ta.</i> I-TOPIc to.be.red clothes-ACCUSATIVE to.put.on, younger.sister-TOPIc to.be.blue clothes-ACCUSATIVE to.put.on-PAST 'I put on red clothes, while my sister put on blue clothes.'	
N-179-4	Ikema	ba: akafku: tti: uttu: aufku: {ʔitai / titai}	M, Y, S, T
N-179-4	Bora	baja: aka fɰa: kiʂitʂidu utuʔa: ao fɰu:du kʂʂta:	K, K, Y, M
N-179-4	Kuninaka	ba: akaju: ʔukuu ʔi:du ottonna aaju: ʔukuu ʔi:ta:	N
N-179-5	Standard Japanese	<i>omae-mo chotto kite mi-ro.</i> you-too a.little to.put.on to.see-IMPERATIVE 'You try it on, too.' (imperative)	
N-179-5	Ikema	vvamai ʔi:ʔagama tti: mi:ru	M, Y, S, T
N-179-5	Bora	vvamai pi:tta kiʂi mi:ru	K, K, Y, M
N-179-5	Kuninaka	vvamai ipi:ʔagama ʔi: mi:ru	N
N-180-1	Standard Japanese	<i>soko-ni-wa sensee-ga suwaru.</i> there-LOCATIVE-TOPIc teacher-NOMINATIVE to.sit.down 'The teacher sits there.'	
N-180-1	Ikema	umaŋŋa ʔiʔi:nudu biʔi	M, Y, S, T
N-180-1	Bora	umaŋŋa ʔiŋʂi:gaɰu bɰa:	K, K, Y, M
N-180-1	Kuninaka	omaŋŋa ʔiŋʂi:ga {bɰa: / biʔi / bɰa}	N
N-180-2	Standard Japanese	<i>zashiki-ni-wa daremo suwara-nai.</i> drawing.room-LOCATIVE-TOPIc anyone to.sit.down-NEGATIVE 'No one sits in the drawing room.'	
N-180-2	Ikema	umaŋŋa ʔiʔi:nudu biʔi	M, Y, S, T
N-180-2	Bora	ʔaskɰŋŋa ta:mai {bizzaŋ / bɰaŋ}	K, K, Y, M
N-180-2	Kuninaka	omaŋŋa ʔiŋʂi:ga {bɰa: / biʔi / bɰa}	N
N-180-3	Standard Japanese	<i>kinoo-wa koochoosensee-ga suwat-ta.</i> yesterday-TOPIc principal-NOMINATIVE to.sit.down-PAST 'Yesterday, the principal sat.'	
N-180-3	Ikema	nnu: ko:ʔo:ʔiʔi:nudu bi:tai	M, Y, S, T
N-180-3	Bora	ʔinu:ja ko:ʔo:ʔiŋʂi:gaɰu {bɰa:ta: / bz:ta:}	K, K, Y, M
N-180-3	Kuninaka	ʔinu: ko:ʔo:ʔiŋʂi:ga bɰa:ta:	N
N-180-4	Standard Japanese	<i>sensee-wa suwatte, kodomo-tachi-wa tat-teiru.</i> teacher-TOPIc to.sit.down, child-PLURAL-TOPIc to.stand.up-STATIVE 'The teacher is sitting, while the children are standing.'	
N-180-4	Ikema	ʔiʔi:ja biʔi: jafaimma: tatɰu:i	M, Y, S, T

N-180-4	Bora	ḡiḡi:ja biʒʒiṭṭeḡidu ḡi:ta: taṭṭu:ta:	K, K, Y, M
N-180-4	Kuninaka	ḡiḡi:ja biʒi:do {jaʀabiḡmʲaa / jaʀabitaʲ} {taṭṭii oṭaṭ / taṭṭioṭaṭ } (It appears 'i' was only long when uttered slowly.)	N
N-180-5	Standard Japanese	<i>omae-mo suwatte mi-ro.</i> you-too to.sit.down to.see-IMPERATIVE 'You try sitting, too.' (imperative)	
N-180-5	Ikema	vʋamai biʒi: mi:fu	M, Y, S, T
N-180-5	Bora	vʋamai biʒi: mi:fu	K, K, Y, M
N-180-5	Kuninaka	ṹvamai biʒi: mi:fu	N
N-181-1	Standard Japanese	<i>mainichi terebi-o miru.</i> every.day television-ACCUSATIVE to.see 'I watch television every day.'	
N-181-1	Ikema	mainiṭṭi terebiu: mi:jui	M, Y, S, T
N-181-1	Bora	mai:nitiṭ terebiu:du mi:	K, K, Y, M
N-181-1	Kuninaka	{mainiṭṭa / mainiṭṭi} terebio / miolṭ <cf> kjuuja terebio mi:ḡi ('I won't watch television today.')	N
N-181-2	Standard Japanese	<i>chichi-wa yakuu-wa mi-nai.</i> father-TOPIC baseball-TOPIC to.see-NEGATIVE 'My father doesn't watch baseball.'	
N-181-2	Ikema	zza: jaku:juba: mi:N	M, Y, S, T
N-181-2	Bora	uja: jaku:juba: mʲu:ṇ	K, K, Y, M
N-181-2	Kuninaka	oja: {jaku:jubaa / jaku:juba} mi:N	N
N-181-3	Standard Japanese	<i>kinoo niji-o mi-ta.</i> yesterday rainbow-ACCUSATIVE to.see-PAST 'I saw a rainbow, yesterday.'	
N-181-2	Ikema	ṇnu: imbauju mi:ta	M, Y, S, T
N-181-2	Bora	ṭṭnu: ṭṭimbavvu mi:ta:	K, K, Y, M
N-181-2	Kuninaka	ṭṭnnoo {niḡio / niḡoo} mi:taṭ	N
N-181-4	Standard Japanese	<i>eega-o mite, ie-ni kaet-ta.</i> film-ACCUSATIVE to.see, house-LOCATIVE to.return.home-PAST 'I watched a film and went home.'	
N-181-4	Ikema	eigau mi: ja:ṇkai ikitai	M, Y, S, T
N-181-4	Bora	eigau mi:ṭṭeḡidu ja:ṇkai kʲa:ta:	K, K, Y, M
N-181-4	Kuninaka	e:ga: mi:du ja:Nkai ṇgitaṭ	N
N-181-5	Standard Japanese	<i>shinpaida-kara fune-o mite ko-i.</i> to.be.worried-because ship-ACCUSATIVE to.see to.come-IMPERATIVE 'Go take a look at the ship, because I'm worried.'	
N-181-4	Ikema	ḡibajaiba fiu: mi: ku:	M, Y, S, T

N-181-4	Bora	sa: ja:ri:ba fɯ̃u: mi: ku:	K, K, Y, M
N-181-4	Kuninaka	{suwa: / siwa:} si:du:iba fɯ̃u: mi: ku: si	N
N-182-1	Standard Japanese	<i>kare-wa mainichi onaji koto-o iu.</i> he-TOPIC every.day same thing-ACCUSATIVE to.say 'He says the same things every day.'	
N-182-1	Ikema	kafa: maini:tei junukutu: addzi	M, Y, S, T
N-182-1	Bora	ka:ʃa: maini:ʃa junu munuzzu du az	K, K, Y, M
N-182-1	Kuninaka	kafa: maini:ʃa jonogo: no k ^h otoodo al	N
N-182-2	Standard Japanese	<i>sobo-wa uso-wa iwa-nai.</i> grandmother-TOPIC lie-TOPIC to.say-NEGATIVE 'My grandmother doesn't lie.'	
N-182-2	Ikema	ha:mma: da:ra:kauba: azzaN	M, Y, S, T
N-182-2	Bora	m̥ma: da:ra:ku:ba: azzaŋ	K, K, Y, M
N-182-2	Kuninaka	m̥maa da:ra:ɸuba {azzaN / alzaN} ('z' is not dental but approaches the alveolar ridge; it seems to be the result of a weakening of the articulation of 'l'.)	N
N-182-3	Standard Japanese	<i>tomodachi-wa uso-o it-ta.</i> friend-TOPIC lie-ACCUSATIVE to.say-PAST 'My friend lied.'	
N-182-3	Ikema	du:ʃa: da:ra:kau aitai	M, Y, S, T
N-182-3	Bora	du:ʃa da:ra:ku:du azʃa:	K, K, Y, M
N-182-3	Kuninaka	do:ʃa da:ra:ɸudu al (This was confirmed to be the entire utterance.)	N
N-182-4	Standard Japanese	<i>'arigatoo'-to itte, kaet-ta.</i> 'thank.you'-QUOTATIVE to.say, to.return.home-PAST 'I said "thank you" and went home.'	
N-182-4	Ikema	sdigaɸu: tti addzi: {ikiʃai / hatai}	M, Y, S, T
N-182-4	Bora	puka:assa tsi:du azzi:ʃi pizta:	K, K, Y, M
N-182-4	Kuninaka	puka:assa tsi alʃi:ŋ gital ('l' in 'alʃi:' is weak.)	N
N-182-5	Standard Japanese	<i>chichi-ni 'yuuhan-da-yo'-to itte ko-i.</i> father-DATIVE 'dinner-COPULA-EMPHATIC'-QUOTATIVE to.say to.come-IMPERATIVE 'Go tell your father it's dinner time.'	
N-182-5	Ikema	zzaŋkai juido: ti addzi: ku:	M, Y, S, T
N-182-5	Bora	ujaŋ kai ju:ʃu fai: tsi ('dinner-ACCUSATIVE to.eat-IMPERATIVE-QUOTATIVE') azzi: ku:	K, K, Y, M
N-182-5	Kuninaka	ojaŋkai ju:ʃ tsi aʃzi: ku:	N

N-184-1	Bora	maɳnudu upa:ɕi aɳ	K, K, Y, M
N-184-1	Kuninaka	maɳ nodo opa:sa aɳuɳ	N
N-184-3	Standard Japanese	<i>mukashi koko-ni-wa ido-ga at-ta.</i> long.ago here-LOCATIVE-TOPIc well-NOMINATIVE to.be-PAST 'There was a well here a long time ago.'	
N-184-3	Ikema	ŋkia:ndu umanna ka:nu aɳu:tai	M, Y, S, T
N-184-3	Bora	ŋkia:ŋna kumanna ɕa:ɕia:nudu ataɳ	K, K, Y, M
N-184-3	Kuninaka	ŋkia:Nna komaNna ka:nodo ataɳ	N
N-184-4	Standard Japanese	<i>higashi-ni gakkoo-ga atte, nishi-ni koominkan-ga aru.</i> east-LOCATIVE school-NOMINATIVE to.be, west-LOCATIVE community.center-NOMINATIVE to.be 'There's a school to the east and a community center to the west.'	
N-184-4	Ikema	aɕaiN gakkō:nu ari: ŋɕa:ŋna ko:miŋkandu ari:jui	M, Y, S, T
N-184-4	Bora	aɕaŋ gakkō:ja ('school-TOPIc') ariɕidu izŋna bummja:nudu ataɳ	K, K, Y, M
N-184-4	Kuninaka	aɕaɳ Nna gakkō:ga arii {iljiNna / ilNna} ko:miNkaN nodo aɳ	N
N-184-5	Standard Japanese	<i>kusuri-ga atte, tasukat-ta.</i> medicine-NOMINATIVE to.be, to.be.saved-PAST 'I was lucky to have some medicine.'	
N-184-5	Ikema	ffɕinu ari: taskaitai	M, Y, S, T
N-184-5	Bora	fsuŋnu ari:du taɕkaɳta:	K, K, Y, M
N-184-5	Kuninaka	kɕsul {nu / ga} ariido taskaɳioɳ ('ga' is more natural.)	N
N-185-1	Standard Japanese	<i>shio-ga nai.</i> salt-NOMINATIVE to.be.absent 'I don't have any salt.'	
N-185-1	Ikema	ma:sunu nja:N	M, Y, S, T
N-185-1	Bora	ma:sunudu nja:ŋ	K, K, Y, M
N-185-1	Kuninaka	ma:so ga nja:N	N
N-185-2	Standard Japanese	<i>satoo-mo nakat-ta.</i> sugar-too to.be.absent-PAST 'I didn't have any sugar, either'	
N-185-2	Ikema	saɕamai {nja:ntaN / nja:ttaN / nja:ndaN / nja:ddaN}	M, Y, S, T
N-185-2	Bora	saɕamai nja:ttamɳ	K, K, Y, M
N-185-2	Kuninaka	sata mai nja:N	N
N-185-3	Standard Japanese	<i>hoochoo-ga nakute, ki-re-nakat-ta.</i> kitchen.knife-NOMINATIVE to.not.be, to.cut-POTENTIAL-NEGATIVE-PAST 'I didn't have a kitchen knife, so I couldn't cut it.'	
N-185-3	Ikema	kaɕananu na:da tɕaddaɳ	M, Y, S, T
N-185-3	Bora	kaɕananu nja:danaɕidu kidamaɕuttamɳ	K, K, Y, M

N-185-3	Kuninaka	k ^h aṭana no n̄a:N niba kiṛatta:N ('k ^h ' is close to 'x', towards back.)	N
N-186-1	Standard Japanese	<i>wagaya-ni-wa inu-ga iru.</i> our.house-LOCATIVE-TOPIC dog-NOMINATIVE to.be 'We have a dog.'	
N-186-1	Ikema	bantiḡa ja:nna innu {uriḡui / uri:ui}	M, Y, S, T
N-186-1	Bora	banṭaḡa ja:n̄na in̄nudu uz̄	K, K, Y, M
N-186-1	Kuninaka	banṭsiḡa ja:Nna iN nodo ol̄	N
N-186-2	Standard Japanese	<i>tonari-no ie-ni-wa inu-wa i-nai.</i> next.door-GENITIVE house-LOCATIVE-TOPIC dog-TOPIC to.be-NEGATIVE 'My neighbors don't have a dog.'	
N-186-2	Ikema	tunainu ja:nna inna mi:N	M, Y, S, T
N-186-2	Bora	tunaṽnu ja:n̄na in̄na ufaṽ	K, K, Y, M
N-186-2	Kuninaka	satono ja:Nna iNna miiN	N
N-186-3	Standard Japanese	<i>mukashi-wa neko-mo i-ta.</i> long.ago-TOPIC cat-too to.be-PAST 'Back in the day, we had a cat, too.'	
N-186-3	Ikema	ṽkia:nna majumai ufu:tai	M, Y, S, T
N-186-3	Bora	ṽkia:n̄na majumai uta:	K, K, Y, M
N-186-3	Kuninaka	Nkia:Nna maju mai do oṭal̄	N
N-186-4	Standard Japanese	<i>kare-wa otooto-ga ite, watashi-wa ani-ga iru.</i> he-TOPIC younger.brother-NOMINATIVE to.be, I-TOPIC older.brother-NOMINATIVE to.be 'He has a younger brother, while I have an older brother.'	
N-186-4	Ikema	kafa: uttunu uri: ba: suṭṭzanu {uru:i / uriḡui}	M, Y, S, T
N-186-4	Bora	kain̄na utuṭa: uritṭsiḡu ban̄na suduanudu uz̄	K, K, Y, M
N-186-4	Kuninaka	kafa: ottono ore:do ba: {ada / a:da} ḡa ol̄	N
N-186-5	Standard Japanese	<i>koko-ni ite kudasa-i.</i> here-LOCATIVE to.be to.give(honorific)-IMPERATIVE 'Please stay here.'	
N-186-5	Ikema	umaN uri {fi: / ffi:} samati	M, Y, S, T
N-186-5	Bora	kumaṽ uri fi:ru	K, K, Y, M
N-186-5	Kuninaka	koṽmaN ore: φi:ru	N
N-187-1	Standard Japanese	<i>kare-wa sake-o nomu-to henna koto-o shimasu.</i> he-TOPIC liquor-ACCUSATIVE to.drink-CONDITIONAL to.be.strange thing-ACCUSATIVE to.do 'When he has had a drink, he acts strangely.'	
N-187-1	Ikema	kafa: saḡu: numutu: ḡinnakutu: {assṽ / aṭṭei}	M, Y, S, T
N-187-1	Bora	kaṽja: saḡu: numṭsiḡka: pin̄na kuṭu:du sṽ:	K, K, Y, M
N-187-1	Kuninaka	k ^h area: saḡ ^{he} o nom̄ ṭsiḡaa pin̄nak ^h oṭoodo asṽ (The boundary in 'ea' is ambiguous.)	N

N-187-2	Standard Japanese	<i>kare-wa kyoo-wa nanimo shi-nai.</i> he-TOPIC today-TOPIC anything to.do-NEGATIVE 'He won't do anything today.'	
N-187-2	Ikema	kafa: ki:u:ja naumai φuN	M, Y, S, T
N-187-2	Bora	kaʔia: ki:u:ja na:mai su:ŋ	K, K, Y, M
N-187-2	Kuninaka	karea: ki:u:ja naʔja: tomma {ahoN / asoN} (The boundary in 'ea' is ambiguous.)	N
N-187-3	Standard Japanese	<i>kinoo-wa takusan shigoto-o shi-ta.</i> yesterday-TOPIC much work-ACCUSATIVE to.do-PAST 'Yesterday, I did a lot of work.'	
N-187-3	Ikema	unu: ha:sa şkamau {asɪtai / aʃitai}	M, Y, S, T
N-187-3	Bora	ʃanu:ja upa:ʃidu sɪgutu: sɪ:ta:	K, K, Y, M
N-187-3	Kuninaka	ʃanoo {opa:sia / opa:sa} sɪgoʔoo {asɪa:l / asta:l}	N
N-187-4	Standard Japanese	<i>takusan shigoto-o shite, asobi-ni it-ta.</i> much work-ACCUSATIVE to.do, to.play-DATIVE to.go-PAST 'After doing a lot of work, I went and had some fun.'	
N-187-4	Ikema	ha:sa şkama: ʧi: aʃu:ga ikitai	M, Y, S, T
N-187-4	Bora	upa:ʃi skuta: ʃi:ttʃidu appsga piʔta:	K, K, Y, M
N-187-4	Kuninaka	opa:sa sɪgoʔoo ʃi:do asoʔga pʰaʔaʔ	N
N-187-5	Standard Japanese	<i>yasun-de-naide shigoto-o shi-ro.</i> to.rest-PROGRESSIVE-NEGATIVE work-ACCUSATIVE to.do-IMPERATIVE 'Don't rest; work.'	
N-187-5	Ikema	juku:da şkamau assu	M, Y, S, T
N-187-5	Bora	juka:danaʃi: skutu: ʃi:ru	K, K, Y, M
N-187-5	Kuninaka	jukuu da sɪgoʔoo asso	N
N-187-6	Standard Japanese	<i>gakkoo-de benkyooshite ko-i.</i> school-LOCATIVE to.study to.come-IMPERATIVE 'Go study at school.'	
N-187-6	Ikema	juku:da şkamau assu	M, Y, S, T
N-187-6	Bora	gakko: iki beŋkio:ju ʃi: ku:	K, K, Y, M
N-187-6	Kuninaka	jukuu da sɪgoʔoo asso	N

Editors:

Nobuko KIBE (National Institute for Japanese Language and
Linguistics)

Thomas PELLARD (French National Centre for Scientific Research)

Yuka HAYASHI (Kyoto University)

Yosuke IGARASHI (Hiroshima University)

Shigehisa KARIMATA (University of the Ryukyus)

Toshio MATSUURA (Hokusei Gakuen University)

Yumi NAKAJIMA (Hitotsubashi University)

Akiko TOKUNAGA (Hitotsubashi University)

Daigo MOROOKA (Hitotsubashi University)

NINJAL Collaborative Research Project Reports 12-02

General Research for the Study and Conservation of Endangered Dialects in Japan

Research Report on the Miyako Dialects of Southern Ryukyuan

First Published: August 1, 2012

English Edition: May 23, 2019

Edited by Nobuko KIBE (NINJAL)

Translated by Rudy TOET (Nagasaki University)

National Institute for Japanese Language and Linguistics

10-2 Midori-cho, Tachikawa City, Tokyo, 190-8561

Tel. +81-42-540-4300

<http://www.ninjal.ac.jp>

(c) National Institute for Japanese Language and Linguistics

ISBN:978-4-906055-21-0

ISSN: 2185-0127