## An Introduction to Ryukyuan languages

 edited by Shimoji Michinori \& Thomas Pellard
# An Introduction to Ryukyuan Languages 

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Michinori Shimoji and Thomas Pellard

# Ryukyuan languages: an introduction 

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## 1 Introduction

This book, entitled An Introduction to Ryukyuan Languages (IRL), is a collection of grammatical sketches of six Ryukyuan languages: Ura and Yuwan (Amami Ryukyuan), Tsuken (Okinawan), Ikema and Ōgami (Miyako Ryukyuan), and Hateruma (Yaeyama Ryukyuan). The target readers of IRL are not limited to specialists of Ryukyuan; IRL is open to both specialists and non-specialists including theoretical linguists, typologists, and linguists working on non-Ryukyuan languages. In fact, IRL is deliberately organized in such a way that common typological topics likely to be asked by a non-specialist of a given language (e.g. word order, case alignment, morphological typology, property-concept encoding, etc.) are addressed by all authors (see § 3 of this introduction for more detail). IRL is, literally, an introduction to Ryukyuan languages.

In this introductory chapter I will aim to provide some basic background information of Ryukyuan languages (such as geographic, genealogical, and sociohistorical information) and a typological summary of Ryukyuan languages.

## 2 Basic background of Ryukyuan

Ryukyuan is a group of languages belonging to the Japonic Family, spoken in the southern extreme of Japan archipelago called the Ryūkyū Islands. From north to south lie four major groups of islands that form the Ryūkyū Islands: the Amami Islands, Okinawa Islands, Miyako Islands, and Yaeyama Islands (Amami belongs to Kagoshima Prefecture, whereas the others belong to Okinawa Prefecture, thus there is an administrative border crosscutting the Ryūkyū Islands). ${ }^{1}$ IrL thus covers the languages of all these major island groups. It

[^0]is true that there is a considerable internal variation both in phonology and grammar within the languages of each island group and that the six varieties included in this book do not fully sketch out this variation, but IRL will nevertheless serve as a useful summary of the typological diversity found in Ryukyuan languages (see §3 for a typological summary on Ryukyuan languages).

The total number of speakers of Ryukyuan languages is unknown, as there is no statistical data available for this information. The total population of the areas where Ryukyuan languages are spoken is $1,452,288$ (as valid in 2005: 85,434 for Amami Region, 1,366,854 for Okinawa Prefecture including Mainland Okinawa and Miyako-Yaeyama). ${ }^{2}$ As all the authors of this volume report, proficient speakers are limited to old generations, typically in their 50's and older, which means that the total number of speakers of Ryukyuan should be much smaller than the figure of $1,452,288$.

It is useful at this stage to make brief notes on the socio-political and historical issues surrounding Ryukyuan languages, even though this book is intended to promote the understanding of synchronic and typological characteristics of Ryukyuan languages as compared with other languages.

As mentioned above, Ryukyuan languages are Japonic languages, with Ryukyuan being in sister relationship with Japanese (which, of course, falls into several divisions). A currently widely accepted hypothesis about the genealogical grouping is that Ryukyuan falls into two major subdivisions, Northern Ryukyuan (Amami-Okinawa) and Southern Ryukyuan (Miyako-Yaeyama). Further subgrouping is far beyond the focus of this chapter or of this entire book. Readers interested in more detailed discussions of Ryukyuan (or Japonic) historical linguistics are referred to vast literature on Ryukyuan (or Japonic) historical linguistics which include the following: Hattori (1959, 1978-1979) inter alia, Thorpe (1983), Uemura (1997), Serafim (2003), Lawrence (2000, 2006), Bentley (2008), and Pellard (2009a,b).

Early Japonic speakers from Mainland Japan are believed to have come southward to the north parts of the Ryūkyū archipelago sometime between the $2^{\text {nd }}$ and $6^{\text {th }}$ centuries (Uemura 1997), or the $8^{\text {th }}$ to the $9^{\text {th }}$ centuries (Serafim 2003). The crucial issue here is that the period during which the protoRyukyuan separated (in terms of historical linguistics) from other Japonic languages do not necessarily coincide with the period during which the protoRyukyuan speakers actually settled on the Ryūkyū Islands. That is, it is possible that the proto-Ryukyuan was spoken on south Kyūshū for some time and the proto-Ryukyuan speakers then moved southward to arrive eventually in the Ryūkyū Islands.

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Figure 1: Ryūkyū Islands and the Ryukyuan languages

After the proto-Ryukyuan speakers settled on the Ryūkyū Islands, there was no massive and continuous socio-cultural contact between the Ryūkyū Islands and Mainland Japan until the $17^{\text {th }}$ century, when the Ryūkyū Islands were conquered by the Satsuma Domain from Kyūshū, the southernmost large island of Mainland Japan.

The Miyako and Yaeyama Islands (collectively called the Sakishima Islands) and their history are full of uncertainties both in terms of archaeology and historical linguistics. Recent archaeological and anthropological studies have revealed that there had been no major population movement from Okinawa to the Sakishima Islands until the $13^{\text {th }}$ century (Asato and Dohi 1999). Until the $13^{\text {th }}$ century, there may have been some indigenous people on the Sakishima Islands, who were decimated by the Ryukyuan newcomers, or gradually assimilated by them to become Southern Ryukyuan speakers. The question of exactly who the indigenous people were is controversial. Some researchers assert that they came from Indonesia or the Philippines (Kanaseki 1976, Asato and Dohi 1999). Linguistically speaking, a different prediction is made: all evidence available so far seems to be that Amami-Okinawan and Southern Ryukyuan are in sister relationship, both branching off from Proto-Ryukyuan.

## 3 Ryukyuan languages: typological summary

One striking feature of Ryukyuan languages is their typological diversity. Also, some languages have turned out to exhibit features that call attention of general linguists and typologists. In what follows I give an outline of these typological features, focusing both on phonology and morphosyntax.

### 3.1 Phonology

Basically, Ryukyuan languages share a number of phonological characteristics with Japanese, such as voicing opposition for obstruents, basic CV(C) structure, moraic rhythm, and pitch accent. However, there is considerable variation within Ryukyuan languages, and some languages show considerable divergence in terms of the above-mentioned general phonological characteristics usually found in Japonic languages. For example, Ögami (Pellard, this volume) has no voice opposition for obstruents, and has a possible syllable shape of CCVC as well as a surprisingly rich inventory of syllabic consonants, some of which may even carry an onset, as in /kff/ [kf:] 'make'.

### 3.1.1 Phonemes and phonotactics

Let us start with typological characteristics of phoneme inventories and phonotactics of Ryukyuan languages, focusing mainly on the six languages covered
in IRL. Amami Ryukyuan (Niinaga and Shigeno, this volume) is characterized by the existence of central vowels (high and mid) and a number of glottalized consonants (which are phonemically analyzed as a laryngeal phoneme +C ). The laryngeal phoneme, according to Niinaga and Shigeno, bears a mora and comes only root-initially. Thus in Yuwan, for example, /?ma/ ['ma] 'horse' has the structure LCV where L(aryngeal) and CV each have one mora. Tsuken (Central Okinawan) also has glottalization phenomena, but it is much more restricted, restricted to glides and two vowels /a/ and /i/ (see Matayoshi, this volume).

Southern Ryukyuan languages generally lack, or have only a limited number of, glottalized consonants, even though there are certain exceptions to this generalization (e.g. Yonaguni). Some Miyako Ryukyuan varieties have a very limited number of glottalized consonants. In Irabu, for example, glottalization occurs only with /t/ and /c/, as in /ttjaa/ [ ${ }^{\text {t }} \mathrm{t}^{\mathrm{j}} \mathrm{a}$ :] 'then' and /ccir/ [ ${ }^{ } \mathrm{t}$ cil] 'pipe'. What characterizes Southern Ryukyuan languages instead is a rich inventory of syllabic consonants. Syllabic consonants are so prominent in Miyako Ryukyuan that Shimoji (2006b) posited the syllable template $\mathrm{O}+\mathrm{N}+\mathrm{C}$ (Onset, Nucleus, and Coda) rather than $\mathrm{C}+\mathrm{V}+\mathrm{C}$ (Consonant and Vowel) for Irabu, to reflect the fact that the categories consonant and vowel in this language do not necessarily correspond to syllable margin and syllable nucleus. As illustrated in the Irabu examples in (1), whereas vowels are inherently nucleic (i.e. they only occur as syllable nuclei), resonant and fricative consonants may be contextually nucleic: on the one hand, they occur in syllable margins when adjacent to a vowel or vowels (see $/ \mathrm{m} /$ in (1a) below); on the other, they are nucleic if no vowel is adjacent (see $/ \mathrm{m} /$ in (1b) and (1c)). A syllabic consonant may even carry an onset, as illustrated in (1d-e).
(1) Irabu

| a. $/$ nam/ | $[$ nam $]$ | 'wave' | nam | ONC |
| :--- | :--- | :--- | :--- | :--- |
| b. $/ \mathrm{mna} /$ | $[\mathrm{mna}]$ | 'shell' | m.na | N.ON |
| c. $/ \mathrm{mm} /$ | $[\mathrm{m}:]$ | 'potato' | mm | NN |
| d. $/$ zžtu/ | [pstu] | 'man' | pž.tu | ON.ON |
| e. $/$ prrma/ | [pl:ma] | 'daytime' | prr.ma | ONN.ON |

The following examples come from Ōgami (Pellard, this volume). In this language, too, syllable slots (nucleus and margins) and vowel/consonant features do not show one-to-one correspondence. The following examples show that the fricative /s/ is contextually nucleic.
(2) Ōgami

| a. | /us/ | [us] | 'cow' | us | NC |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b. | /ss/ | [s:] | 'dust' | ss | NN |
| c. | /kss/ | [ks:] | 'breast' | kss | ONN |

See Pellard's description in this volume for a more detail on syllabic consonants in Ōgami, a language having a typologically striking feature of syllabic fricatives.

### 3.1.2 Suprasegmentals

Let us now turn to suprasegmental characteristics that Ryukyuan languages manifest. Mora is crucial in most (all?) Ryukyuan languages, and this is clearly seen in each sketch of this book. Most Ryukyuan varieties have the crosslinguistically common minimality constraint, which requires a phonological word to have at least two morae. There is some internal variation in this regard, however. In Irabu (Miyako Ryukyuan, Shimoji 2008a), this minimality constraint (MC in (3) below) applies to a non-cliticized word form (i.e. MC applies before cliticization occurs). As shown in (3), the noun root $t i$ 'hand' is always subject to lengthening of the vowel to meet the minimality constraint without respect to whether it is followed by a clitic.
(3) Irabu
a. ti $\rightarrow$ [MC] $\rightarrow$ tii
b. ti $\rightarrow$ [MC] $\rightarrow t i i+=n u$ (GEN) $\rightarrow t i i=n u$

By contrast, in Hateruma (Aso, this volume) the constraint applies to a cliticized form (i.e. MC applies after cliticization occurs). Thus in (4) below the root si 'hand' is not lengthened when attached by a clitic, since the root + clitic satisfies the minimality constraint.
(4) Hateruma (examples by courtesy of Aso Reiko; see also her chapter in this volume)
a. si $\rightarrow$ [MC] $\rightarrow$ sii
b. $s i+=n u$ (GEN) $\rightarrow \quad[\mathrm{MC}] \quad \rightarrow \quad s i=n u$

One common view on clitics is that they are grammatical words that are phonologically bound (see Zwicky 1977, Haspelmath 2002, Dixon and Aikhenvald 2002). This simple generalization may entail that phonological boundedbess is of either-or kind rather than of more-or-less kind. However, linguists all know that this is untrue. The clitic is a cross-linguistically swing category, exhibiting an intermediate status between an affix and a full word. Thus it is a meaningful, and in fact an important, question to what extent (as opposed to whether) a clitic is phonologically bound to the host. In Hateruma, clitics are bound both in terms of word minimality and accent (see Aso this volume). In Irabu, whereas clitics come outside of the phonological word domain in terms of minimality constraint, other prosodic evidence shows that clitics are integrated into the host, e.g. with respect to tone assignment (Shimoji 2009c). Thus Hateruma clitics are phonologically more integrated into the host than Irabu clitics.

As compared with mora, syllable seems to play a marginal role in Ryukyuan languages, even though it still remains unclear to what extent and in what way syllable is crucial in Ryukyuan languages. Pellard (this volume) clearly argues for postulating the phonological unit syllable in addition to mora, in explaining a certain morphophonemic alternation. Shimoji (2006b, 2009c) notes that rising pitch within a syllable is dispreferred in Irabu, a fact that also supports the view that syllable plays a role in Ryukyuan phonology.

Word-level prosody of Ryukyuan languages have been relatively well studied (see Uwano 1999, Matsumori 2001, Lawrence 2001 for useful summaries written in English). This area also presents phenomena that will attract the attention of theoretical phonologists. Typically, Ryukyuan languages have a lexically contrastive pitch accent system built on moraic rhythm, where a specific mora within a word is accented (i.e. serves as locus for a distinctive pitch event such as abrupt falling/rising pitch) and the locus of accent is lexically determined. ${ }^{3}$ Many Ryukyuan languages have an accentual system with two or three contrastive pitch patterns (two-pattern or three-pattern accent). Exploring Ryukyuan accentual systems brings a number of interesting and difficult issues to linguistic theory (see Lawrence 2001), but I would like here to focus on one such issue only. Most of the accentual systems of Ryukyuan languages have been described by referring to mora/syllable rather than higher prosodic constituents such as foot. In some Ryukyuan languages, however, foot plays a crucial role in the organization of word-level prosody. For example, Nakijin (Northern Ryukyuan, Lawrence 1990) has an iambic rhythm of short and long vowels based on feet. The prosodic organization of some Miyako Ryukyuan languages is also highly noteworthy. In these languages, the basic prosodic unit is clearly mora, but there is a higher prosodic constituent, or bimoraic foot, to which tone is assigned (Shimoji 2009c). Thus, these languages have a tonal foot (Leben 1997), a prosodic unit not common cross-linguistically. In Irabu, for example, $\mathrm{H}(\mathrm{igh})$ tone appears at regular intervals by grouping four feet into two 'foot groups' in which each foot group has one H-toned foot. Thus Irabu prosody is characterized by a foot-based alternating rhythm of tone features ( $H$-L alternation, Shimoji 2009c). Ikema (Hayashi, this volume) is interesting in that this H-L alternation conspires with lexical tones (type $\alpha$ and type $\beta$, see Hayashi et al. 2008 for detail). The Ikema fact suggests that H-L alternation and lexical word tone are independent processes (i.e. they occur in different layers of prosodic organization). In Irabu lexical word tone is absent (i.e. Irabu words are accentless) and H-L alternation directly manifests itself in its word-level prosody.

[^2]
### 3.2 Morphosyntax

### 3.2.1 Clause structure

As in other Japonic languages, Ryukyuan languages are verb-final languages with a modifier-head order and a dependent-marking system. They prefer SV as an unmarked word order for intransitive clauses, and AOV as an unmarked word order for transitive clauses. As "pro-drop" languages, however, ellipsis of core arguments is quite common.

### 3.2.2 Case alignment system

Most Ryukyuan languages display a nominative-accusative case alignment system, but Hateruma (Aso, this volume) is noteworthy in that case marking for $\mathrm{S} / \mathrm{A}$ and O is neutralized (both types of core arguments are zero-marked).
pïtu $=\varnothing \quad$ budur-ja-ta-n
person = CORE dance-PRF-PAST-RLS
'People danced.' [Intransitive: S marked by = $\varnothing$ ]
(6)
$a b o a=\emptyset \quad i j a=\emptyset \quad$ mir-i $\quad b i r-j a-t a-n$
mother = CORE father $=$ CORE look-MED PROG-PRF-PAST-RLS
'(My) mother was looking at (my) father.' [Transitive: A/O marked by = Ø]

In this language, the relative order of A and O marks the grammatical relations, according to Aso. Thus if the first and second words in (6) is switched, the result is that the A is interpreted as father, and the O as mother.

In those Ryukyuan languages which have a nominative-accusative system, even though S/A marking and O marking are distinct by definition, several interesting characteristics are observed for S/A marking on the one hand, and O marking on the other.

S/A marking (by nominative case) and possessor marking (by genitive case) are formally syncretized in many Ryukyuan languages (more precisely, the same case marker is used for both S/A and NP modifier). ${ }^{4}$ This kind of identical marking for subject and possessor is well attested cross-linguistically, for example in Austronesian languages, and this marking pattern is crucially related to nominalization processes. What is more interesting cross-linguistically in Ryukyuan languages is their elaborate system of S/A/Poss marking sensitive

[^3]to animacy hierarchy. In many Ryukyuan languages the syncretized S/A/Poss marker is $=g a /=n u$ (or similar forms), and the choice between these two is based on animacy-definiteness of the NP to which the marker is attached (see Niinaga and Pellard, this volume). Niinaga reports an interesting case marking strategy found in Yuwan. Here, S/A is marked by $=g a /=n u$, whereas a possessor is marked by an adnominal word (which never carries any case marker), $=g a$, $=n u$, or $=\emptyset$. These elaborate distinctions in S/A/Poss marking are explained by referring to animacy hierarchy, according to Niinaga. His account of the nominative $=g a /=n u$ and the genitive $=g a /=\varnothing /=n u$ in terms of animacy hierarchy is summarized as follows (see Niinaga, this volume, for detail).
human demonstratives elder kinship others nouns
pronouns
terms
$=g a \quad>\quad=n u$
Figure 2: Nominative hierarchy


Figure 3: Adnominal and genitive hierarchy

Miyako Ryukyuan languages have an interesting object marking system, where $O$ in a dependent clause of clause-chaining constructions may receive a special marking (Koloskova 2007, Shimoji 2008a; see also Pellard and Hayashi this volume). Koloskova and Shimoji argue that this special object marker primarily marks low transitivity of O. Shimoji further states that the restriction of this marking to chained clauses is explained by the fact that this marking helps disambiguate the foreground-background discourse functions of the chained clause in which it occurs. Thus, this object marking seems to demonstrate Hopper and Thompson (1980)'s well-known Transitivity Hypothesis, which says that low transitivity marking in natural language functions to secure the distinction of discourse grounding. Interestingly, this marker is identical in form to a topic marker. Shimoji interprets the object marker as second accusative case marker homophonous to a topic marker, whereas Hayashi (this volume) argues that this object marking may be interpreted as yet another function of a topic marker.

### 3.2.3 Word class assignment

Nominals and verbs are unambiguously distinguished in all Ryukyuan languages. A nominal is defined syntactically as it lacks inflectional morphology,
whereas a verb is defined by its inflection. Many authors of this volume define a noun as a word that only heads an NP, and a verb as a word that inflects.

As is common cross-linguistically, the word class assignment of property concept words (PC words) varies in Ryukyuan languages. However, certain patterns do emerge by examining the six languages of Ryukyuan dealt with in this volume.

In these languages most PC roots are bound, and certain morphological strategies are necessary to make them stand as a word. One such strategy is nominal compounding where a PC root and a noun root are compounded to for a nominal word. In Yuwan (Niinaga, this volume), for example, the PC root kjura'beautiful' may be compounded with the noun root ?kin 'kimono', and the resulting word form is kjura-gin 'beautiful kimono'. Likewise, in Ikema (Hayashi, this volume) the PC root imi- 'small' may be compounded with the noun root ffa 'child', and we get imi-ffa 'small child'. This type of compounding seems to be widespread both in Northern and Southern Ryukyuan, but in Hateruma (Aso, this volume), this kind of compounding is generally absent, and Aso (p.c. 2010) gave just a few examples that she encountered: bu-zara (big-plate) 'big plate', bu-bi (big-finger) 'thumb', and aga-pana (red-flower). Here, the PC roots participating in compounding have different shapes from those that occur elsewhere (cf. busa- 'big', aka- 'red'), indicating that this kind of compounding is lexicalized. In Miyako Ryukyuan at least, the noun root may be a formal noun munu, which is often de-substantivized and only serves as a structural head. In Irabu (Shimoji 2008a, 2009a), for example, there are expressions like imi-munu (small-D.SUB) 'small (thing)' and sabic-munu (lonely-D.SUB) '(I feel) lonely'.

Another very common morphological strategy found in Ryukyuan languages for word formation of PC roots is verbalization. That is, a PC root is transformed into a verb stem by a verbalizer affix, to which a verbal inflectional affix (es) is attached. All the languages dealt with in this book have this strategy. In traditional Ryukyuan linguistics, PC words created by this process have been analyzed as adjectives based mainly on their semantic properties, but a stricter word class assignment reveals that the word form in question is nothing but a verb, since the set of inflectional affixes is identical to that for other verbs (see each sketch of this book). In many Ryukyuan languages this verbalization strategy and the compound nominal formation noted above are the only two major word formation processes for PC words. ${ }^{5}$ That is, in these languages PC words are either nouns or verbs, and there is no need to postulate the word class adjective (see Niinaga, Shigeno, Matayoshi, Hayashi, and Aso, this volume).

Miyako Ryukyuan is quite interesting in the word class assignment of PC words. They typically have a distinct word class adjective, which is morphosyn-

[^4]tactically distinct from nominal and verb, and the adjective class in these languages mainly functions as NP modifier (see Shimoji 2009a for a detailed discussion). The adjective in Miyako Ryukyuan is formed by reduplicating a PC root (or a derived PC stem) with lengthening of the final segment of the reduplicant. Thus in Irabu, from the PC root imi- 'small' it is possible to form the adjective imii-imi. In Ōgami, there are two types of adjectives. One is a reduplicated form as noted above. The other is what Pellard (this volume) calls similative adjective, where a PC root is affixed by the similative $-k i$, as in $k s s i t i-k i$ (beautiful-sIMIL) 'seems to be beautiful'. Ikema lacks the reduplication strategy for PC roots, so this language lacks the adjective class in effect (Hayashi, this volume).

### 3.2.4 Topic and focus marking

Ryukyuan languages have an interesting system of information structure marking with their rich inventory of topic and focus markers. Topic marking is typically done by $=(j) a$ or a similar form. In Southern Ryukyuan, object topic is distinctively marked by $=b a$ (Hayashi, Pellard, and Aso, this volume). Or conversely, this distinct marking justifies the postulation of the grammatical relation direct object in these languages (see, for example, Shimoji 2008a). A focus marker is typically $=d u$ (or a similar form, like $=t u$ in Ogami) but some Ryukyuan languages have a more elaborate inventory of focus markers. Irabu (Shimoji 2008a) is one such language, where focus marking morphology is sensitive to sentential type (declarative and interrogative): $=d u$ for declarative clauses, $=r u$ for Yes-No interrogative clauses, and $=g a$ for Wh interrogative clauses. Yuwan (Niinaga, this volume) lacks $=r u$, but the distinction between $=d u$ and $=g a$ is observed. In Ikema, the single focus marker $=d u$ is used for all sentential types (Hayashi, this volume). In Hateruma, focus marking is done by $=d u$ or $=r u$, and according to Aso, the choice between these two is based not on sentential type but on argument status (see her chapter).

Ryukyuan languages have a typologically remarkable focus construction, which is traditionally called kakari-musubi (literally "governing-and-concordance") in Japanese linguistics. The standard definition of kakari-musubi in the literature of Japanese and Ryukyuan linguistics is that kakari-musubi is a syntactic construction in which the use of a focus particle triggers the use of specific inflection (i.e. adnominal form or izen form), instead of the expected conclusive form (based on Shinzato and Serafim 2003: 189). This construction has been lost in Standard Modern Japanese, but is still active in many Ryukyuan languages. In Yuwan (Niinaga, this volume) the specific inflection in the presence of a focus marker is a special form, rather than an adnominal form. The Yuwan Kakari musubi thus presents an interesting divergence from a standard kakari-musubi in that the special verb form is not an adnominal form, as Niinaga points out. In Irabu (Shimoji in press) there is negative concordance (as
opposed to positive concordance where the presence of a focus marker triggers the use of a specific verbal form as is usual in a standard kakari-musubi and in the Yuwan kakari-musubi), where the presence of a focus marker blocks the use of a specific verb form, i.e. a realis form. Thus Ryukyuan languages show synchronic and typological variation with regard to the syntactic organization of kakari-musubi.

## 4 Organization of IRL

IRL is a product of the collaborative research project Toward an easy access to research outcomes of Ryukyuan studies. The Project was a two-year project with eight collaborators, and ended with completion of two research outcomes: IRL and the Project website (see below for more detail). Our Project was one of the three projects accepted and granted by Collaborative Research Development Program, Linguistic Dynamics Science Project (LingDy) in Research Institute for Languages and Cultures of Asia and Africa (ILCAA), Tokyo University of Foreign Studies. ${ }^{6}$

Each grammatical sketch of IRL adopts the same descriptive format, which is designed to address common typological features such as phoneme inventory, syllable structure, the definition of word, affix, and clitic, word classes, coordination-subordination distinction, etc. When this book project started I asked each contributor to choose one of two descriptive formats, Standard set and Concise set. The Standard set consists of nine to eleven sections, whereas the Concise set consists of seven sections. Three contributors chose SS (Niinaga, Pellard, and Aso), and the other three chose CS (Shigeno, Matayoshi, and Hayashi). These sets overlap in important typological topics such as basic clause structure and word class assignment. Of course, some sections have been added or deleted by the author of a language, where such addition/deletion turns out to be necessary. But it was emphasized that all contributors try to follow the descriptive format they chose. This uniformity in section organization in each sketch was intended to allow readers to do a quick and clear comparison of typological features among the six languages.

Each grammatical sketch is followed by a sample text. This text is based on the same visual stimulus, or the Pear story, a silent movie devised by Wallace Chafe to serve as stimulus for eliciting a narrative (Chafe 1980). Each author collected a narrative text in the field by using the Pear story movie, and transcribed the text with interlinear glossing. Thus each text goes with the same story line, but different discourse organization strategies may be found in different languages (this is an interesting future research topic that we did not pursue for the purpose of our Project). The wav sound file of the Pear story of

[^5]each language together with the pdf version of the grammatical sketch can be downloaded for free at the following website which was created by our Project: http://lingdy.aacore.jp/PearStory/.

## Abbreviations

| AVLZ | adverbializer | POSS | possessive |
| :--- | :--- | :--- | :--- |
| CORE | core argument | PRF | perfect |
| D.SUB | de-substantive | PROG | progressive |
| GEN | genitive | PAST | past |
| MED | medial verb | RLS | realis |
| NLZ | nominalizer |  |  |

## Ura (Amami Ryukyuan)

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Figure 1: Amami Islands

## Introduction

Ura has seven vowels of which three are central vowels, and fourteen consonants. In addition, there is a laryngeal phoneme (§ 2.3). The plural affix -nta shows concord with the predicate verb according to the degree of honorification (§5.2).

The topic marker =ja shows a peculiar morphophonological characteristic, where the sequence /n.ja/ [n.ja] (which is ill-formed in most Ryukyuan varieties) is a well-formed sequence (§6.2).

There are two past tense forms, the "default" -ta and the marked -ti, the latter of which basically appears in a subordinate clause but may be used in a main clause (§7.2).

## 1 The language and its speakers

Amami Ryukyuan is spoken in the Amami Islands (Map 1), one of the island groups of the Ryukyu archipelago situated to the South-West of the Japanese islands. The number of inhabitants of the Amami Ōshima is 67,533 , whereas that of the Ura village is 645 (November, 2009).

Amami Ryukyuan is a sub-branch of Northern Ryukyuan, and Amami Ryukyuan itself falls into North Ōshima dialects and South Ōshima dialects. These two major dialect groups have mutual intellegibility, and the differences are largely lexical and phonological. Ura is one of the North Ōshima dialects.

Fluent speakers of Ura are mostly over sixty years old, many are in their seventies. The younger generations normally choose to speak Japanese, and the generations under thirty only speak Japanese fluently.

## 2 Phonology

This section summarizes the phonological system of Ura. Long vowels are phonemically analyzed as vowel sequences.

### 2.1 Vowels

The inventory of vowel phonemes is shown in table 1.

Table 1: Vowels in Ura

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| High | i | $\dot{\mathrm{i}}$ | u |
| Mid | e | $\partial$ | o |
| Low |  | a |  |

### 2.2 Consonants

The inventory of consonant phonemes is as follows.

Table 2: Consonants in Ura

|  |  | Labial | Alveolar | Velar |
| :--- | :--- | :---: | :---: | :---: |
| Stops | voiceless | p | t | k |
|  | voiced | b | d | g |
| Affricates | voiceless |  | c |  |
|  | voiced |  | z |  |
| Fricatives |  |  | s |  |
| Sonorants | nasal | m | n |  |
|  | approximant | w | j |  |
|  | flap |  | r |  |

Several comments are necessary for consonant phonemes. First, obstruents have voice opposition. Second, the affricate /c/ is usually realized as [ts], and as [tc] when palatalized. The voiced phoneme /z/ is pronounced as [dz]. Third, the glottalized stops are not analyzed as unitary phonemes (e.g. $/^{\circ} \mathrm{k} /$ ) but as a sequence of a laryngeal and a consonant (e.g. / $\mathrm{hk} /$, see § 2.3).

Glottalized consonants are distinguished from geminates, e.g. /?kwa/ [ ${ }^{ } \mathrm{kwa}$ ] 'child' vs. /-kkwa/ [-kkwa] 'diminutive marker'.
(1) $m a j a=n u$ ? $k w a\left[{ }^{[1} \mathrm{kwa}\right]$
cat $=$ GEN child
'kitten'
(2) $m a j a=n u$ ?kwa-kkwa [kkwa]
cat $=$ GEN child-DIM
'kitten'
Root-initial $/ \mathrm{\imath k} /\left[{ }^{2} \mathrm{k}\right]$ and $/ \mathrm{kk} /[\mathrm{kk}]$ are thus differentiated.

### 2.3 Laryngeal

Laryngeal refers here to / $\mathrm{i} /$. It could be analyzed as just another consonant, but compared to other consonants it is unique in the following ways:

- it is the only stop with no voice opposition
- it can be moraic
- it can only appear in the root-initial position

Therefore, I consider /R/ not as a consonant but as a different "laryngeal" class of phoneme. By contrast, the phonemes $/ \mathrm{j} /$ and $/ \mathrm{w} /$ are not considered
as a special class of "glides" distinct from consonants but as approximants, a sub-class of consonants. ${ }^{1}$ The laryngeal can appear before voiceless consonants, nasals and approximants. There are some minimal pairs that are distinguished by the presence vs. absence of $/ T /$. However, the glottal stop appearing before vowels is interpreted not as a phoneme but as an empty onset, which contrasts with vowels preceded by an approximant onset.
(3) Consonants: /2kwa/ ['kwa] 'child' vs /-kkwa/ [kkwa] (DIM) Nasals: /?nama/ [nama] 'now' vs /nama/ [nama] 'raw' Approximants: /?juu/ [ju:] 'fish' vs /juu/ [ju:] 'hot water' /utu/ [Tutu] 'sound' vs /wutu/ [utu] 'husband'

### 2.4 Syllable and mora

The syllable template is given as follows.
(4) $((\# \mathrm{~L}) \mathrm{C}(\mathrm{G})) \mathrm{V}_{1}\left(\mathrm{~V}_{2}\right)\left(\mathrm{C}_{\text {coda }}\right)$

The mora is counted as follows, where the symbol $\mu$ indicates that the syllable slot so marked has one mora. Words in Ura are minimally bimoraic.
(5) $\quad\left(\begin{array}{llllll}(\# \mathrm{~L}) & \mathrm{C} & (\mathrm{G})\end{array}\right) \quad \mathrm{V}_{1} \quad\left(\mathrm{~V}_{1}\right) \quad\left(\mathrm{C}_{\text {coda }}\right)$
$(\mu) \quad-\quad-\quad \mu \quad \mu \quad \mu$
"\#" indicates root-initial position. The L and G slots can only be filled if the C slot is filled. The relationship between the different slots and the phoneme classes that can fill them is given below.
(6) Syllable slot Phoneme class

L Laryngeal
C, G, C Coda Consonant
$\mathrm{V}_{1}, \mathrm{~V}_{2} \quad$ Vowel
Both the C(coda) and G slots can be filled by consonants, but only /j,w/ can fill G and the same consonant cannot appear at the same time in both C and G (e.g. */ww/, */jj/). The table 3 lists examples of monosyllabic words.

### 2.5 Tone/accent

Ura does not have lexically distinctive pitch. The default pitch pattern is LH for bimoraic words, LHH for trimoraic words, and so on.

[^6]Table 3: Monosyllabic words

|  |  |  | ((\#L) | C | (G)) | V1 | (V2) | (Ccoda) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /ii/ | [i:] | 'stomach' |  |  |  | i | i |  |
| /in/ | [in] | 'dog' |  |  |  | i |  | n |
| /juu/ | [ju:] | 'hot water' |  | j |  | u | u |  |
| /wan/ | [wan] | 'I' |  | w |  | a |  | n |
| /miì/ | [mi:] | 'eyes' |  | m |  | i | i |  |
| /sjaa/ | [ca:] | 'under' |  | s | j | a | a |  |
| /gan/ | [gan] | 'crab' |  | g |  | a |  | n |
| /gwan/ | [gwan] | 'wish' |  | g | w | a |  | n |
| /Rci/ | [ ${ }^{\text {t }} \mathrm{C}$ i] $]$ | 'blood' | ? | c |  | i |  |  |
| /?waa/ | [²wa:] | 'pig' | ? | w |  | a | a |  |
| /Rkjuu/ | [ ${ }^{2} \mathrm{k}^{\mathrm{j}} \mathrm{u}$ ]] | 'today' | ? | k | j | u | u |  |
| /Rkin/ | [ ${ }^{\text {kin }}$ ] | 'kimono' | ? | k |  | i |  | n |

### 2.6 Sequential voicing

In compounds, the root-initial consonant of the second member undergoes sequential voicing.
(7) a. kjora- 'beautiful' + ?kin 'kimono' $\rightarrow$ kjora + gin 'beautiful kimono'2
b. mukoo 'opposite' + sini 'shank' $\rightarrow$ mukoo $+z i n i$ 'face of the shank'

## 3 Basic clause structure and phrase structure

### 3.1 Basic clause structure

The basic word order of transitive clauses is SOV. In declarative clauses, there is no special marking required as in (8) below. In interrogative clauses, a question marker is attached clause-finally, as in (9) below. In imperative clauses, the predicate verb must be inflected for the imperative mood, as in (10) below.
(8) $w a n=g a \quad k a k-j u r-i$
$1 \mathrm{SG}=$ NOM write-IPFV-NPST
'I write.'

[^7](9) $\quad$ wan $=g a \quad k a k-j u-\emptyset-n=j a$ ?

1SG = NOM write-IPFV-NPST-ADN = Q
'Should I write?'
(10) 2jaa=ga kak-i!
$2 \mathrm{SG}=\mathrm{NOM}$ write-IMP
‘Write!'
Subordinate clauses fall into three major types: adverbial clauses, as in (11), relative clauses, as in (12), and nominal (or complement) clauses, as in (13).
(11) ?cjaa num-igacina hon jum-i
tea drink-CVB.SIM book read-NPST
'(I) am reading a book while drinking tea.'
(12) boosi kahu-ti $\quad$ Pmo-n $\quad$ ?cju $=g a \quad$ $\quad$ cjan $=d o o$
hat put.on-MED PROG.HON-ADN person = NOM father = EMP
'The person who is wearing a hat is my father.'
(13) ?waa kam-icja-ka-n=cci=ja umuw-an $=d o o$
pig eat-OPT-VLZ-ADN $=$ QT $=$ TOP think-NEG $=$ EMP
'(I) do not think that (I) want to eat the pig.'

### 3.2 Basic phrase structure

The noun phrase consists of a head and an optional modifier, with a modifierhead constituent order.

- Nominal-modifier + Nominal-head:
(14) $? k w a a=n u$ hon
child = GEN book
'child's book'
- Adnominal + Nominal:
(15) a. kun hon
this book
'This book'
b. $w a=g a \quad k a-s j a-n \quad h o n$ $1 \mathrm{SG}=$ NOM write-PST-ADN book 'The book that I wrote.'

As shown schematically below, the verb phrase consists of a lexical verb and optionally an auxiliary or a second lexical verb. In addition, the complement of VP is also required in certain cases.
(16) (VP complement + ) [lexical verb1 ( + auxiliary verb/lexical verb2) $]_{\mathrm{VP}}$

Example (17) shows the minimal VP, where there is only a lexical verb.
(17) hon=ba jum-jur-i
book $=$ ACC read-IPFV-NPST
'(I) am reading a book.'
Here is an example of a complex VP with an auxiliary verb:
(18) $\quad a n m a=j a \quad$ wan $=z i \quad$ hon $=b a \quad j u-d \dot{i} \quad$ kurer-ju-n
mother $=$ TOP 1SG $=$ ALL2 book $=$ ACC read-MED give-IPFV-ADN
'Mother reads a book for me.'
The following example illustrates a complex VP with two lexical verbs.
(19) $\quad n j a a=d a k a \quad$ ippai tu-tí $\quad k$-ju-n
shellfish = AMBG many take-MED come-IPFV-ADN
'(I) caught many shellfishes, etc.' VP complement
(20) oi $m \partial=d u$ mir- $!$
hey front = FOC look-IMP
'Hey,look at the front!'

## 4 Word classes

Three major word classes can be identified by the following morphosyntactic criteria.
(A) They have the ability to head an NP
(B) They carry an NP-modifying function
(C) They can be inflected

Table 4: Word classes: distinctive criteria

|  | (A) | (B) | (C) |
| :--- | :---: | :---: | :---: |
| Nominal | + | - | - |
| Adnominal | - | + | - |
| Verb | - | - | + |
| Other word classes | - | - | - |

The noun is a word that only fills the head slot of an NP. In the NP $w a r a b i=n u$ mun (child = GEN thing) 'a child's thing', for example, the word warabí constitutes an NP itself, as it carries the genitive case clitic. Thus, this word fills the head slot of an NP, which in turn fills the modifier of the larger NP warabi=nu mun.

By contrast, the adnominal is a word that only fills the modifier slot of an NP. In the NP kun hon (this book) 'this book', for example, the adnominal kun directly fills the modifier of the NP, as it does not carry a case clitic, which is attached per NP.

The verb is a word class that inflects. In the verb jum-jur-i (read-IPFV-NPST) 'read', for example, the final affix - $i$ is the non-past tense affix.

As shown in table 4, Ura does not have the word class "adjective", as the word designating property concept infects just like a verb. That is, property concept words are a subclass of verb (see §5.3.3).

The category "other word classes" include various minor word classes such as interjections (e.g. agee 'oh dear', oi 'hey', oo 'Yes', aai 'No', ugamisjooran 'hello', obokori 'thank you', dii 'now', ure 'see; here it is').

## 5 Basic morphology

This section summarizes the basic word formation processes.

### 5.1 Morphological typology

Affixation morphology in Ura is mostly suffixal.
gina-sa-n
small-vLZ-ADN
'small'
In addition to affixation, compounding and reduplication are also productive in Ura.
a. $\underset{\text { beautiful (nominal root) }}{\text { kjora }}+\underset{\text { thing }}{\text { mun }} \rightarrow$ kjora + mun
'beautiful woman' [compounding (root + root)]
b. $a m u=n u \quad$ fur- $o o+f u r-o o=c c i \quad s-j u r-i$
rain $=$ NOM fall-INT + fall-INT $=$ QT do-IPFV-NPST
'It starts raining.'

### 5.2 Basic nominal morphology

The internal structure of nouns is schematized as Root(-DIM)(=APPR), where DIM is diminutive and APPR is approximative plural.

- DIM: -kkwa, e.g. maga-kkwa'grandchild', maja-kkwa'cat'
- APPR: $=n k j a$ or $-n t a^{3}$

The $/ \mathrm{n}$ / is deleted when attaching to a stem ending in a consonant, e.g. wan = kja 'we', an ?cju-nta'those people', at-ta'they'.

An interesting fact about Ura plurals is that the selection of the plural affix depends both on the animacy hierarchy and honorification. With regard to the animacy hierarchy, the $=n k j a$ form is used for first and second person pronouns and common nouns. The -nta form is restricted to third person pronouns (i.e. pronominal demonstratives), proper names, and kinship terms that can be used as terms of address (e.g. nee 'elder sister'). With regard to honorification, the -nta form is restricted to occurring with the honorific verb form. ${ }^{4}$
a. an ?cju=nkja=ja icu=raga kuma=nan ur-i=joo?
that person $=$ APPR $=$ TOP when $=$ ABL here $=$ LOC1 exist-NPST $=\mathrm{Q}$ 'What time did those people get here?'
b. an ?cju-nta=ja icu=raga kuma=nan imor- $i=j o o$ ? that person-APPR $=$ TOP when $=$ ABL here $=$ LOC1 exist. $\mathrm{HON}-\mathrm{NPST}=\mathrm{Q}$ 'What time will those people come here?'
c. $2 k w a n=k j a / *-n t a=g a$ ason-di ur-i child $=$ APPR $/ *-$ APPR $=$ NOM play-MED PROG-NPST 'The children are playing.'
d. sense*=nkja/-nta=ga aso-n-di $\quad$ Pmor- $i$ teacher* $=$ APPR $/-A P P R=$ NOM play-ADN-MED PROG.HON-NPST 'The teachers are playing.'

### 5.3 Basic verbal morphology

The internal structure of verbs is schematically shown as: Stem-Inflection (see § 5.3.4 for the internal structure of the stem). Finite inflection and non-finite inflection are distinguished depending on the inflectional categories.

### 5.3.1 Finite inflection

Finite inflection consists of tense, aspect, and mood. Table 5 lists the regular conjugational pattern, and table 6 lists the irregular conjugational pattern.

[^8]Table 5: Finite inflection (regular)

|  | Affirmative Negative Root: jum- 'read' |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Indicative NPST | $-j u r-i /-j u-n$ | $-a n-\emptyset$ | jum-jur-i 'read', jum-an- $\varnothing$ 'not read' |  |
|  | PST | $-t a$ | $-a n-t a$ |  | | ju-da 'read', jum-an-ta 'did not read' |
| :--- |
| INT |
|  |
| IMP |

Table 6: Finite inflection (irregular)

| Affirmative Negative Root: k-'come' |  |  |  |
| :---: | :---: | :---: | :---: |
| Indicative NPST | -jur-i/-ju-n | -u-n-Ø | $k$-jur-i 'come', $k$-u-n 'not come' |
| PST | -ja | -n-ta | cja- 'came', $k$-un-ta 'did not came' |
| INT | -o |  | $k$-o 'let's come' |
| IMP | -00 | $-u=n a$ | $k$-oo 'come!', $k$-u=na 'don't come!' |

### 5.3.2 Non-finite-inflection

Non-finite inflection consists of conjunctive relation marking only. Non-finite verb forms are labeled converbs, verb forms that serve as the predicate of an adverbial subordinate clause.

Table 7: Non-finite inflection

|  | Affirmative | Root: jum- 'read' |
| :--- | :--- | :--- |
| sequential | -ti | ju-dí 'reading/read!' |
| anterior | -untomaazin | jum-untomaazin 'at once when reading' |
| simultaneous | -igacina | jum-igacina 'while reading' |
| conditional/causal | -ba | jum-u-ba 'if you read' |
| conditional | -i-batitin-kara | jum-i-batitin-kara 'if you read' |

### 5.3.3 Property concept verb (PC verb)

A root designating a property concept (PC root) is verbalized by the suffix -sa, and the derived verbal stem carries the same set of inflectional affixes as ordinary verbs. Thus compare:

| - plain verb: | jum-jur-i <br>  <br> read-IPFV-NPST | $j u-d a$ |
| :--- | :--- | :--- |
| read-PST |  |  |

```
- PC verb: Pma-sar-i Pma-sa-ta
    sweet-VLZ-NPST sweet-VLZ-PST
```

Table 8: Negative forms of PC verbs

| Negative |  |  |
| :--- | :--- | :--- |
| NPST | -sa nen | Pma-sa nen 'not sweet' |
|  | -sja nen | fu-sja nen 'not want' |
| PST | -sa nen-ta | Pma-sa nen-ta 'was not sweet' |
|  | -sja nen-ta | fu-sja nen-ta 'did not want' |

### 5.3.4 Derivational morphology of verbs

The stem has the structure Root(-CAUS)(-PASS/POT)(-POL)(-NEG), where the parenthesized components are optional.

- CAUS (causative): -as- jum-as-jur-i 'make (sb) read' read-CAUS-IPFV-NPST
- PASS (passive)/POT (potential): -ar- jum-ar-i ‘be read’ read-PASS-NPST
- POL (polite): -jo- jum-jor-i 'read’ (polite form) read-POL-NPST
- NEG (negative): -an- jum-an-Ø ‘doesn’t read’ read-NEG-NPST


## 6 Argument marking

### 6.1 Case marking

The case alignment system of Ura is nominative-accusative, where S/A and O are differentiated by different case marking. As is common in other Ryukyuan varieties, however, S/A marking and NP modifier marking are formally syncretized.

### 6.2 Information structure marking

In Ura, as in other Ryukyuan varieties, focus and topic are formally marked by focus clitics and topic clitics.
(24) $\quad$ ?jaa $=g a=d u \quad$ num-icja-sa- $n=n a$ ?
$2 \mathrm{SG}=\mathrm{NOM}=$ FOC drink-OPT-VLZ-ADN $=\mathrm{Q}$
'You want to drink?'

Table 9: Case forms and their functions

| Name | Form | Function (case) | Function (limiter) |
| :--- | :--- | :--- | :--- |
| Nominative | $n u / g a$ | S/A |  |
| Genitive | $n u / g a$ | NP modifier |  |
| Accusative | $b a$ | O |  |
| Dative | $n z i$ | benefactive,etc |  |
| Allative 1 | $c i$ | goal of locomotion |  |
| Allative 2 | $z i$ | goal of action |  |
| Locative 1 | $n a n$ | place of static action |  |
| Locative 2 | $n t i$ | place of active action |  |
| Instrumental | $s i$ | instrument |  |
| Associative | tu | associated motion |  |
| Comparative | $k u m a$ | standard of comparative ('than') |  |
| Ablative | raga | source | Emphasis |
| Limitative | $g a d i$ | limit('as far as') |  |

(25) $\quad$ wan $=j a \quad t a=c c i \quad i k-j u-n$ $1 \mathrm{SG}=\mathrm{TOP}$ field = ALL1 go-IPFV-ADN
'I go to the field.'

## 7 Predicate categories (finiteness; tense, aspect, and mood)

### 7.1 Negation

The negative form of the existential verb is formed by stem alternation, i.e. the negative stem form, as in (26), whereas other verbs are regularly negated by the negative affix -an, as in (27).
(26) $w a n=n u$ hon $=g a \quad n e-n$
$1 \mathrm{SG}=$ GEN book $=$ NOM not.exist-NEG.NPST
'My book is lost.'
(27) $w a n=j a$ assja jaa=zi ur-an=doo
$1 \mathrm{SG}=\mathrm{TOP}$ tomorrow house $=$ ALL2 exist-NEG $=\mathrm{EMP}$
'I will not be at home tomorrow.'

### 7.2 Tense, aspect and mood

### 7.2.1 Tense and aspect

The tense system of Ura is a binary system of past vs. non-past, and this system interacts with the aspect system where perfect, progressive, and resultative are distinguished.

Table 10: Tense

|  |  | Non-past | Past |
| :--- | :--- | :--- | :--- |
| Declarative | Perfect | $n u m-i$ | $n u m-j u-t a / n u d-a$ |
|  | Progressive | $n u-d u r-i$ | $n u-d u-t a$ |
|  | Resultative | $n u-d \dot{i}$ | $n u-d \dot{t}$ |

The expression nudi may encode past meaning. The suffix -tit is a subordinator, but may be used as a past marker in a main clause predicate.

### 7.2.2 Mood

The clitics $=n a$ and $=n j a$ mark interrogation. These may be absent in conversations where the interrogation may be marked by rising intonation. The two markers $=n j a$ and $=n a$ are in complementary distribution, they are thus analyzed as allomorphs of the same morpheme. This difference is interpreted as the result of assimilation: $-i=n a(\operatorname{NPST}=\mathrm{Q})$ is palatalized to $-i=n j a$, and the non-past suffix then undergoes nasalization to $-n=n j a$ [ $\mathrm{N} . \mathrm{nja}$ ].
(28) $k u r i=j a \quad h o n=n a$ ?
this = TOP book $=\mathrm{Q}$
'Is this a book?'
(29) $j a a=z i \quad u-n=n j a$ ?
house $=$ all2 exist-ADN $=\mathrm{Q}$
'Are you at home (now)?'
Prohibition is encoded by $=n a$.
(30) $u m a=n a n=z i \quad u-n=n a$ !
this $=$ LOC1 $=$ ALL2 exist-ADN $=$ PRH
'Don't be here!'
Self-question is encoded by $=k a i$.
(31) an $2 c j u=j a \quad$ taru $=k a i$ ?
that person $=T O P$ who $=Q$
'Who is that person?'

Persuasion is encoded by $=j a$.
(32) wan $=$ tu maazin $i k-o o=j a!$
$1 \mathrm{SG}=\mathrm{ASC}$ together go-INT $=$ SOL
'Let's go with me!'
Speaker's desired future is encoded by $=b a$.
(33) $h i k k u i k-i=b a$
early go-IMP = MOD
'It's better if (you) go early.'
Hearsay evidentials are encoded by $=c i=b a$.
(34) ?jaa $=n u$ hon $=j a \quad$ gakkoo $=n z i a-n=c i=b a$
$2 \mathrm{SG}=\mathrm{GEN}$ book $=\mathrm{TOP}$ school $=$ DAT exist- $\mathrm{ADN}=\mathrm{QT}=\mathrm{MOD}$
'There is your book in the school.'

### 7.3 Voice

The active, passive and causative voices are exemplified below.
a. $h a b u=b a \quad k u c c j-u-n$ habu = ACC kill-IPFV-ADN
'(I) killed a snake.' [active]
b. wan=ja habu=nzi kam-ar-ti=doo
$1 \mathrm{SG}=\mathrm{TOP}$ habu $=$ DAT bite-PASS-MED $=\mathrm{EMP}$
'I was bitten by the snake.' [passive]
a. $\quad 3 k w a=n k j a=n u \quad h a b u=b a \quad k u c c j-a-t t o o$
child $=$ APPR $=$ GEN habu $=$ ACC kill-PST-MOD
'The children killed the snake.' [active]
b. wan=ga $\quad 2 k w a=n k j a=n z i \quad h a b u=b a \quad k u c c j-a s-i=d o o$
$1 \mathrm{SG}=\mathrm{GEN}$ child $=\mathrm{APPR}=\mathrm{DAT}$ habu $=\mathrm{ACC}$ kill-CAUS-NPST $=\mathrm{EMP}$
'I asked the children to kill the snake.' [causative]

## Sample text: the Pear story

(т.1) jinga=nu $2 c j u u=n u \quad u r i=b a \quad h a m u c u k i-t i z$ tu-tí man $=$ GEN person $=$ NOM that $=$ ACC seriously-MED take-MED
3mo-n
PROG.HON-ADN
'A man is busy picking that (pear),'
(т.2) hamucuki-tí tur-i s-jor-ikata=jaa. tur-i s-jor-ikata seriously-MED take-NPST do-POL-DVLZ(?) = SOL take-NPST do-POL-DVLZ(?) '(He is) busy picking (that pear).'
(т.3) niban=jaa tur-i s-jor-ikata s-ii Pmo-n second $=$ TOP take-NPST do-POL-DVLZ(?) do-NPST PROG.HON-ADN
doroo $=c c i$
moment $=$ QT
'And now the second one (he's) picking.'
(т.4) nde jagi=ba curi-ta-n ozisan=ga too-tì Pmo-jo-n and goat $=$ ACC take-PST-ADN man $=$ NOM pass-MED PROG $\cdot$ HON-POL-ADN wake $=$ jaa
DSC = SOL
'And there came a person and a goat.'
(т.5) un.un. mo too-ti Pmo-jo-n wake
umm FIL pass-MED PROG.HON-POL-ADN DSC
'Yeah, (they) are walking along.'
(т.6) ugasi $=$ si too-te Pmos-ja-n $\quad a t u=g a=d u \quad$ kun
then $=$ INST pass-MED PROG.HON-PST-ADN after $=$ NOM $=$ FOC this
jingwa $=n u$ १ $k w a-k k w a=n u$
man = GEN child-DIM = NOM
'Then, after (they) passed through, a boy'
(т.7) si-cci tu mu-cci sa-ttu ik-ju-tto=jaa. uuun
come-MED FIL have-MED leave-MED go-IPFV-MOD = SOL umm
'came and got it (the pear), and left.'
(т.8) issjookenmee tu-ti̇ Pmo-n ozisan=no ijana
seriously take-MED PROG.HOM-ADN man = GEN FIL(?)
nan $=c j u u=$ no $\quad$ nankwai $=$ mo
what $=$ QT.say $=$ GEN often $=$ FOC
'The man (is) busy picking that (pear);'
(т.9) wəə mir-u=no $\quad n a n=c j u u=k a i$
up look-NPST = GEN what $=$ QT. say $=\mathrm{Q}$
'(I) wonder how to express the action of looking up again and again.'
(т.10) nis-jaar-i ni=si sjuucjuntuntunu joori-kkwa to-tiz jaa look-PST-(?) look = INST FIL(?) slowly-DIM take-MED FIL 'Yes,(he) looked carefully and picked (it) quietly.'
(т.11) hasir-ju-n=zja=ga=na=cjo=jaa. issjookenmee
run- $\mathrm{IPFV}-\mathrm{ADN}=\mathrm{COP}=\mathrm{FOC}(?)=\mathrm{MOD}=\mathrm{QT} . \mathrm{EMP}=$ SOL seriously
ozisan $=$ wa tor - ikata
man = TOP take-DVLz(?)
'(Then he) ran away.' 'The man is busy picking (it).'
(т.12) $u u=b a \quad n i s-j a a r-i \quad s$-jaa $=b a \quad n i s-j a a r-i \quad s$-ju-tit $\quad$ ozisan $=g a$ this = ACC look-PST-(?) do-PST $=$ ACC look-PST-(?) do-IPFV-MED man $=$ NOM tut-u-n=ba take-PROG-ADN = ACC
'This man is picking (the pear) while looking (down the ground) slowly;'
(т.13) ni-igaci=na nis-ju-n=ba joori-kkwa moo
look-CVB $=$ MOD look-IPFV-ADN $=$ ACC slowly-DIM FIL
nan $=c j u u=n o=k a n a$ ?
what $=\mathrm{QT} . \mathrm{say}=\mathrm{GEN}=\mathrm{Q}$
'hey, how should (I) express this?'
(т.14) dandori-kkwa=nu ic-cja-n $\quad k u t u=c c i=b a a$
procedure-DIM $=$ GEN good-OPT-ADN thing $=\mathrm{QT}=$ MOD
'(He) knows the correct procedure.'
(т.15) na un $3 c j u=g a$ sjuucjuu s-ju-n-kana un

FIL this person = NOM concentration do-IPFV-ADN-ABL this
mado $=z j a=g a a=c c i$
between $=\mathrm{COP}=\mathrm{FOC}(?)=\mathrm{QT}$
'(The boy stole pears) as the man was concentrating (on picking pears),'
(т.16) omo-ta-n $k a m o=j a a$
think-PST-ADN may $=$ SOL
'(I) guess.'
(т.17) uri $=b a \quad$ kondo uri un kago $=n o \quad m u-c c i \quad m u-c c i \quad m o-c c i$
that = ACC next that um basket = GEN have-MED have-MED have-MED sar-u
leave-NPST
'This time he's trying to carry the whole basket, right?'
(т.18) mu-cci ik-ju-n wake $=j o=j a a$ ?
have-MED go-IPFV-ADN DSC $=E M P=$ SOL. $Q$
(т.19) kagora $=$ sii kago mu-cci iz-i
basket.ABL $=$ INST basket have-MED went-NPST
'(The boy) took the basket.'
(т.20) gasi nakahodo $=$ dee $\quad$ wunagu $=n u ~ ? k w a-k k w a=n z i$ e een next in.the.middle $=$ CONJ woman $=$ GEN child-DIM $=$ ALL2 $\quad$ FIL mii + buri-ti
look + fascinate-MED
'But then while (he's) doing it he fascinated by a girl,'
(т.21) mii+buri-tï̈ un nasi=ba uffu nusu=de=zjaa nasi=ba
look + fascinate-MED um pear $=$ ACC uffu steal $=C O N J=C O P$ pear $=$ ACC
kobos-ju-n $\quad$ wake $=j o=j a a$
spill-IPFV-ADN DSC $=$ EMP $=$ SOL
'(But while carrying the basket away he) was distracted by a fascinating girl, and scattered the pears.'
(т.22) ugasi s-ja-ttuu sakki izja-n jingwa=nu ?kwa-kkwa=nu next do-PST-MOD just.now went-ADN man = GEN child-DIM = GEN
mis-jar- $i=s i \quad$ uun
look-PST-(?) = INST umm
'Then the boys who had passed the boy just now picked up the pears for him;'
(т.23) nasi=ba hira-tiz kuri-tiï soko muuru hohoemasii sugata=to pear $=$ ACC pick.up-MED give-MED there very heartwarming figure $=\mathrm{QT}$ cci omo-ju-tto
QT think-IPFV-MOD
'(I) thought it was heartwarming.'
(т.24) onna onna=no ko=ni mitore-te kobos-ja-n nasifu woman woman = GEN child $=$ DAT fascinate-MED spill-PST-ADN pear fu
$s a=$ tto $\quad$ jingw $a=n u$
$\mathrm{OMTP}=\mathrm{QT}$ man $=$ GEN
'Fascinated by a girl, (the boy) scattered the pears,'
(т.25) $\quad ? k w a-k k w a=n k j a=n u m i s-j a r-i=s i \quad c c i u r i=b a \quad$ hira-ti child-DIM $=$ APPR $=$ GEN look-PST-(?) $=$ INST QT that $=$ ACC pick.up-MED
kur-u-n $\quad$ tokoro $=w a$
come-NPST-ADN part = TOP
'and the boys helped him gather the pears.'
(т.26) hontoo =ni hohoemasii $=c c i \quad$ omo- $u=j o$ really $=$ DAT heartwarming $=$ QT think - NPST $=\mathrm{EMP}$
'(I) thought it was really heart warming.'
(T.27) mata sono ko=no kokoro=mo ii=to omo-tta=jo another that child $=$ GEN heart $=\mathrm{FOC}(?)$ good $=\mathrm{QT}$ think-PST $=\mathrm{EMP}$
'And then (I) thought that the boy was really tender of heart.'
(т.28) sosite tara hon uun hatesate uun sonotoki=ni ozisan unin=ga next then FIL umm now umm then=DAT man man=NOM $k i z u k-i=z j a$
notice-NPST $=$ COP
'Now the man realized (that the basket is gone).'
(т.29) uri-ti̇ $\quad$ hatesate ozisan $=$ wa kï̈-kara ori-te descend-MED come.HON = INST now man = TOP tree-ABL descend-MED
ki-te $\quad n a m a=n u$
come-MED now = GEN
'(He) came down, came down from the tree,'
(т.30) muи mu-cci izja-n uun kago=ba ni-ja=si
muu take-MED went-ADN umm basket $=$ ACC look-PST $=$ INST
$s$-jo- $n=b a \quad s$-jo- $n=b a$
do-POL-ADN = ACC do-POL-ADN = ACC
'and found that the basket was gone,'
(т.31) tar-an = cjun $\quad$ koto $=w a$ waka-ti̇ $\quad$ Pmo- $n=b a$
sufficent-NEG $=$ QT. say thing $=$ TOP understand-MED PROG.HON-ADN $=$ ACC
sabakur-oo $=$ cci sis-jor-an $\quad$ wake $=j o=j a a$
$\mathrm{do}(?)-\mathrm{INT}=\mathrm{QT} \quad$ do-POL-NEG DSC $=\mathrm{EMP}=$ SOL
'and realized that (the basket was stolen), but he did nothing with that.'
(т.32) ugasi $=$ si mata wəə $=$ cci noo-ti $\quad$ Pmos-ja-gana $=c c j o$ then = INST again up = QT climb-MED go.HON-PST-CVB(?) = QT.EMP 'And then he climbed (the tree) again.'
(т.33) uun nasi=ga sukuna-ku na nar-ju-n=cci kizuk-i umm pear $=$ NOM little-vLZ FIL become-IPFV-ADN $=$ QT notice-NPST
$s$-jo-n=ban
do-POL-ADN = ACC
'(He) doesn't seem to care about the fact that there are less pears now.'
(т.34) sagas-oo-tomo sis-jor-an $3 c j u$ search-INT-at.least do-POL-NEG person
'But (he) didn't try to look for (it).'
(т.35) ozisan = no kokoro = wa totte = mo ii hito $=d a=$ to omo-u man $=$ GEN heart $=$ TOP very $=$ FOC good person $=C O P=Q T$ think - NPST '(I) think that the man is a very good person.'
(т.36) waru-ku $i e=b a=w a \quad$ sonna $=n i$ hannin $=w o \quad$ sono sonomama wrong-vLZ say $=\mathrm{ACC}=\mathrm{FOC}$ that $=\mathrm{DAT}$ criminal $=\mathrm{ACC} 2$ that at.that oitok $-u=c c j u$ put-NPST = QT.say
'When you come right down to it,'
(т.37) $k o t o=w a \quad$ ika $-n \quad$ koto $=d e=w a \quad a r-u=j o=n e e$ thing $=$ TOP wrong-NPST thing $=\operatorname{COP}(?)=$ FOC exist-NPST $=$ EMP $=$ SOL
'it's bad of him to leave a criminal unaccused, though.'
(т.38) mata sore $m \dot{i}+b a e r-u=g a=n e$.
auun. ngee
because that sprout + grow-NPST $=$ FOC(?) $=$ sOL aumm ngee
'That (kind of bad idea of stealing things) could grow (in the boy's mind).'
(т.39) hannin $=w a$ wakar- $a-z u$ zima-i
criminal $=$ TOP understand-THM(?)-NEG end-NPST
'It will be left unclear (who stole the pears).'
(т.40) sore $=w o \quad n a n=t o=m o \quad i w-a n a-i . \quad$ hangee
that $=$ ALL 2 what $=$ QT $=$ FOC say-NEG-NPST hangee
'(The man) doesn't care about this... (that's) weird.'
(т.41) sore = wa ika-n=ccjo omo-u that $=$ TOP wrong-NPST $=$ QT.EMP think-NPST
'(I) think that is not a right thing.'
(т.42) jappasi $i$-tta $h o o=g a \quad i i=t o \quad o m o-u$ also $\quad$ say-PST than $=$ NOM good $=$ QT think-NPST
'(I) believe that he's better say something about this (to the boy).'
(т.43) okkake-te chase-MED
'by chasing (him) up.'
(т.44) sabaku-tta hoo =ga ii=to omo-u do(?)-PST than = NOM good= QT think-NPST
'(He) had better do this.'
(т.45) cugi=no hannin=wo cukur-an tame $=$ ni next $=$ GEN criminal $=$ ALL2 make-NEG sake $=$ DAT 'so that (this kind of) crime will never happen (again).'
(т.46) $\quad$ ci watasi $=$ ga omo- $u=n i=w a$ QT 1SG = NOM think-NPST $=$ DAT $=$ FOC 'That's what I thought.'

## Abbreviations

| - | affix boundary | DVLZ | deverbalizer | OPT | optative |
| :--- | :--- | :--- | :--- | :--- | :--- |
| + | clitic boundary | EMP | emphatic | PASS | passive |
| $=$ | stem boundary | FIL | filler | PL | plural |
| ABL | ablative | FOC | focus | POL | polite |
| ACC | accusative | GEN | genitive | POT | potential |
| ADN | adnominal form | HON | honorific | PRH | prohibitive |
| ALL1 | allative | IMP | imperative | PST | past |
| ALL2 | second allative | INT | intentional | PROG | progressive |
| AMBG | ambiguity | INST | instrumental | Q | question |
| APPR | approximative | IPFV | imperfective | QT | quotative |
| ASC | associative | LOC1 | locative | RLZ | relativizer |
| CAUS | causative | LOC2 | second locative | SG | singular |
| CONJ | conjunction | NEG | negative | SIM | simultaneous |
| COP | copula | MED | medial verb | SOL | solidarity |
| CVB | converb | MOD | modal | THM | thematic vowel |
| DAT | dative | NOM | nominative | TOP | topic |
| DIM | diminutive | NPST | non-past | VLZ | verbalizer |
| DSC | discourse marker | OMPT | onomatopeia |  |  |

## Yuwan (Amami Ryukyuan)

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Figure 1: Amami Islands

## Introduction

Yuwan is a verb-final language with modifier-head constituent order and a nominative-accusative case system. There are many features unique to Yuwan (and some other Amami dialects). First, Yuwan has a laryngeal phoneme /R/, which bears a mora in the syllable onset position (§2.3.2). Second, Yuwan has dual number in human pronouns (§3.4.1). Third, Yuwan has two phenomena
sensitive to the animacy hierarchy: the distribution of plural and approximative forms ( $\$ 4.2 .2 .1$ ), and the distribution of nominative case markers and possessive forms (§ 4.3.2). Fourth, Yuwan has special verbal suffixes that correlate with focused constituents in sentences, making a clear distinction between two types of questions; -ui (NPST) / -tarui (PST) for yes-no questions, and -u (NPST) $/$-taru (PST) for wh-questions (§5.2.1).

## 1 The language and its speakers

### 1.1 Geography

Yuwan is spoken in the Yuwan village, in the western district of Amami Ōshima, an island situated just south of mainland Japan. The size of Amami Ōshima is about $710 \mathrm{~km}^{2}$, and it is the biggest island in the Amami Islands, which includes seven other major islands.

Amami Ōshima is situated in the northern part of the Ryūkyū archipelago but belongs to the Kagoshima prefecture, while most of the other Ryūkyū islands belong to the Okinawa prefecture. Amami Ryukyuan is a Northern Ryukyuan language.

### 1.2 Affiliation

According to Shimoji (2008a: 21), 'Ryukyuan is a group of languages that forms a branch of the Japonic family, coordinate with Japanese. Ryukyuan falls into two primary subgroups, Northern Ryukyuan and Southern Ryukyuan. These two groups in turn have a number of subdivisions'. Yuwan is a dialect of Amami, which belongs to Northern Ryukyuan (see also Uemura 1997: 431).

### 1.3 Sociolinguistic overview

### 1.3.1 The number of speakers

The population of Yuwan is 521 (valid as of January $1^{\text {st }}, 2010$ ), but the people who can speak the traditional dialect are much less than this number. All inhabitants are monolingual Japanese speakers or speak Japanese as a second language.

### 1.3.2 Dialects

According to Uemura (1997), dialects of Amami fall into two major subgroups, Northern Amami and Southern Amami, and Yuwan (as well as some neighboring dialects) have some characteristics in common with both subgroups. A major difference between Yuwan and the other dialects is that the phonetic sequence [ri] in other dialects corresponds to [i] in Yuwan. Table 1 illustrates this
point with data from Yuwan, Suko, spoken in a village located about 800 meters apart from Yuwan, and Ura, a Northern Amami dialect spoken in a village located about 32 km apart from Yuwan.

Table 1: Dialectal variation in Amami

|  | Yuwan | Suko | Ura $^{1}$ |
| :--- | :--- | :--- | :--- |
| 'bird' | [tui] | [turi] | [turi] |
| 'lily' | [jui] | [juri] | [juri] |

### 1.3.3 Viability, education and documentation

The number of speakers who can speak traditional Yuwan is decreasing. Typically, people over seventy years old can speak traditional Yuwan, and people who are fifty to sixty years old can speak a more or less traditional Yuwan, but people under fifty years old are only passively bilingual. The younger generations cannot speak or understand the traditional dialect, but they use some traditional expressions, e.g. wan 'I', ama 'that place', hagi 'foot', etc.

### 1.4 Previous work

There are two previous works on Yuwan: Hirayama et al. (1966) and Uchima et al. (1976). The former compares the accent patterns and the lexicon between a number of Ryukyuan dialects, and the information about Yuwan is very restricted; actually, it contains only thirty or so nominal lexical entries with their prosodic information. The latter, Uchima et al. (1976), includes a list of several hundred lexical items and several verb paradigms. The phonology of Yuwan has thus hardly been investigated, and its morphology was only partly researched. The syntax of Yuwan has not been investigated at all, save for Niinaga (2008), which describes the case system of Yuwan.

## 2 Phonology

### 2.1 Segmentation

### 2.1.1 Grammatical word

The grammatical word is a morphosyntactic unit minimally consisting of a root (e.g. simple nominals, adverbs, and interrogatives), or it can consist of a root (or roots) plus an affix (or affixes) (e.g. nominals and verbs). Clitics can attach to grammatical words.

[^9](1)
a. Word (root)
warabí
child
'child'
b. Word (with affix) warabi-kkwa child-DIM 'little child'
c. Word (with affix) and clitic warabì-kkwa = nkja
child-DIM = APPR
'little children'

The term 'word' will usually refer to the grammatical word in this chapter, unless otherwise specified.

### 2.1.2 Phonological word

The phonological word is a phonological unit consisting of a grammatical word and a number of clitics. This phonological integration of clitics into the host is shown by the fact that the unit consisting of a grammatical word plus clitics is a prosodic domain to which accent is assigned (see §2.5).

### 2.2 Phonemic inventory

The phonemes in Yuwan can be divided into three phonological classes depending on their behaviour in larger phonological structure: vowels, consonants, and the laryngeal.

### 2.2.1 Vowels

Yuwan has seven vowel phonemes. Round brackets around the vowel /e/ indicate this phoneme rarely occurs.

Table 2: Vowels

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| High | i | $\dot{\mathrm{i}}$ | u |
| Mid | $(\mathrm{e})$ | $\partial$ | o |
| Low |  | a |  |

Phonetic long vowels are analyzed as sequences of vowel phonemes: [a:] is $/ \mathrm{aa} /$, o : $]$ is /oo/, and so forth (see (10) in §2.4.1 about this analysis).

### 2.2.2 Consonants

Yuwan has fifteen consonant phonemes.
The following four points must be noted: (A) Stops and affricates have phonological voice opposition; (B) /c/ is usually realized as [ts], and /z/ as [dz]; (C) /c/ and /z/ are palatalized before $/ \mathrm{i} /$ or $/ \mathrm{j} /$ and realized as $[\mathrm{t}$ ] $]$ and [dz] respectively; (D) $/ \mathrm{n} /$ is realized as [ N ] before a word boundary, a root boundary or a clitic boundary.

Table 3: Consonants

|  |  | Labial | Alveolar | Velar | Glottal |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Stops | voiceless | p | t | k |  |
|  | voiced | b | d | g |  |
| Affricates | voiceless |  | c |  |  |
|  | voiced |  | z |  |  |
| Fricatives |  |  | s |  | h |
| Resonants | nasal | m | n |  |  |
|  | approximant | w | j |  |  |
|  | flap |  | r |  |  |

### 2.2.3 Laryngeal

The laryngeal $/ R /$ is a phoneme that cannot appear independently but has to precede a voiceless, nasal or approximant consonant. The laryngeal / $/$ / can appear only in the root-initial position, and it makes the consonant that follows glottalized. Glottalized consonants phonetically undergo a laryngealization process, 'a process where the primary supralaryngeal articulation is accompanied by a secondary stricture at the glottal level' (Laver 1994: 330). Glottalized consonants are phonetically and phonologically distinct from geminates. See the examples in table 4.

Table 4: Glottalized consonants versus geminates

| Glottalized consonants | Geminates |
| :---: | :---: |
| /aa/ 'red' + /Rkwa/ 'child' | /warabí/ 'child' + /-kkwa/ (DIM) |
| $\rightarrow$ /aaikwa/ 'baby' [a: ${ }^{\text {? }} \mathrm{k}^{\text {w }} \mathrm{a}$ ] | $\rightarrow$ /warabikkwa/ 'child' [warabikk ${ }^{\text {wa }}$ ] |

The most salient difference between [ $\left.{ }^{2} \mathrm{k}\right]$ and [kk] is their phonetic duration; a glottalized consonant has roughly the same duration as a non-glottalized consonant, while a geminate is almost twice as long.

### 2.3 Syllable structure and phonotactics

### 2.3.1 The syllable structure

Yuwan has the following syllable structure:
(2) $((\# \mathrm{~L}) \mathrm{C}(\mathrm{G})) \mathrm{V}_{1}\left(\mathrm{~V}_{2}\right)\left(\mathrm{C}_{\text {coda }}\right)$

The L and G slots are not independent and always depend on the existence of a consonant within the C slot. The L slot can only be filled by the laryngeal
phoneme / $1 /$, which appears root-initially (indicated by the sharp symbol '\#'). The C and G slots can be filled by consonant phonemes, but the G slot can only host the approximants $/ \mathrm{w}, \mathrm{j} / ;^{2}$ and the coda slot of consonant ( $\mathrm{C}_{\text {coda }}$ ) can be only filled by $/ \mathrm{n} /$ in word-final position. The first vowel slot $\left(\mathrm{V}_{1}\right)$ can be filled by any vowel phoneme, but the second one $\left(\mathrm{V}_{2}\right)$ must be filled by the same vowel as $\mathrm{V}_{1}$ or by /i/.

Examples of monosyllabic root words are given in table 5, and examples of polysyllabic phonological words in table 6 . The only difference from the pattern described in the previous table is that the coda slot can be filled by any consonant except $/ \mathrm{h}, \mathrm{z}, \mathrm{r} /$. It is worth noting that the coda slot can be filled by a voiced stop only if the word is followed by a clitic. ${ }^{3}$ I will show some examples focusing on the difference from the above case.

There is a phonotactic constraint whereby $/ \mathrm{C}_{\text {coda }} \mathrm{C}_{\text {coda }}$ / sequences are avoided. The following constraint has to do with the phonological rule in (9) of §2.4.1.
(3) BAN ON $/ \mathrm{C}_{\text {coda }} \mathrm{C}_{\text {coda }} /$ SEQUENCES:
a coda consonant cannot follow another coda consonant.

### 2.3.2 Mora

Morae are counted as follows:
(4) Morae in a syllable


As can be seen from table 5, a monosyllabic root word cannot stand alone if it consists of a single mora; in other words, a phonological word is minimally bimoraic. In the following examples, parentheses indicate the phoneme does not contribute to weight.
(5) BIMORAIC CONSTRAINT
a. (C)(G)VV /mjaa/ [mªa] 'cat'
cf. *(C)(G)V *mja 'cat'
b. (C)(G)VC /mjan/ [mjan] 'will not look'
c. $\mathrm{L}(\mathrm{C})(\mathrm{G}) \mathrm{V} \quad / \mathrm{mja} /\left[{ }^{3} \mathrm{~m}^{\mathrm{j}} \mathrm{a}\right]$ 'k.o. shell fish'
d. (C)(G)VVC > (C)(G)VC /mjaa/ 'cat' + /=n/'also' > /mjan/

The above examples show that every well-formed phonological word must have two morae and that the laryngeal phoneme contributes to weight. In (5d),

[^10]Table 5: Examples of monosyllabic root words

|  |  |  | ( $\# \mathrm{~L}$ ) | C | (G)) | V1 | (V2) | ( $\mathrm{C}_{\text {coda }}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| /iid | [i:] | 'yes' |  |  |  | i | $\dot{\text { i }}$ |  |
| /an/ | [an] | 'ant' |  |  |  | a |  | n |
| /jaa/ | [ja:] | 'house' |  | j |  | a | a |  |
| /mai/ | [mai] | 'hip' |  | m |  | a | i |  |
| /mjaa/ | [m'a:] | 'cat' |  | m | j | a | a |  |
| /nan/ | [nan] | 'you.HON' |  | n |  | a |  | n |
| /Rma/ | ['ma] | 'horse' | $?$ | m |  | a |  |  |
| /Rcjan/ | [ ${ }^{2}$ tchan] | 'father' | ? | c | j | a |  | n |

Table 6: Examples of polysyllabic phonological words

the output bimoraic form is a contracted version of the input sequence which has three morae (see (10) in § 2.4.1). The output form (word plus a clitic) is a phonological word, which satisfies the bimoraic constraint.

## 2.4 (Morpho)phonological rules

### 2.4.1 Phonological rules

Yuwan has the following five phonological rules. The first rule is a flap deletion rule, whereby the flap $/ \mathrm{r} /$ is deleted before $/ \mathrm{i} /$ or $/ \mathrm{j} /{ }^{4}$ In other words, Yuwan does not have sequences such as /ri/ or /rj/ in any linguistic form, which is a major difference with other Amami Ōshima dialects.
(6) FLAP DELETION RULE: / $\mathrm{r} /$ is deleted before / $\mathrm{i} /$ or $/ \mathrm{j} /$

```
/jum-jur/ 'read-IPFV' + /-i/ (NPST) }->\mathrm{ /jum-ju-i/ (*/jum-jur-i/)
```

    /tur-/ 'take' \(\quad+/\)-jaa/ (NLZ) \(\rightarrow\) /tu-jaa/ (*/tur-jaa/)
    The second rule is the deletion of the laryngeal before a phonological voiced consonant (i.e. voiced stops and affricates, see table 3 in §2.2.2).
(7) LARYNGEAL DELETION RULE: / $/$ / is deleted before a phonological voiced consonant (see (11))

The third rule changes the alveolar stop /t/ into the affricate /c/.
(8) AFFrication rule: /t/ becomes /c/ before /i/ or /j/.

$$
\begin{array}{llll}
\text { /ut-/ 'hit' }+ & \text { /-i/ (NLZ) } & \rightarrow \text { /uc-i/ } & \text { 'hitting'’ } \\
\text { /ut-/ 'hit'i/ }+ \text { /-jaa/ (NLZ) } & \rightarrow \text { /uc-jaa/ } & \text { 'hiter' } & \text { (*/ut-jaa/) }
\end{array}
$$

The fourth rule is an epenthesis (cluster breaking) rule that avoids consonant sequences of the $/ \mathrm{C}_{\text {coda }} \mathrm{C}_{\text {coda }} /$ type (see (3) of $\S 2.3 .1$ above); the first coda consonant is then changed into the onset of a new syllable.
(9) EPENTHESIS (CLUSTER BREAKING): if the consonant /n/ is followed by another consonant that is not accompanied by a vowel, an epenthetic vowel $/ \mathrm{u} /$ is inserted between them.
$/$ in/ 'dog' $+/=\mathrm{n} /$ (DAT) $\rightarrow$ /i.nun/
The fifth rule involves the nasal consonant /n/ after a vowel sequence.
(10) VOWEL DELETION RULE: if the consonant $/ \mathrm{n} /$ is not accompanied by a vowel and follows a vowel-vowel sequence, one of the vowels is deleted. /səə/ 'alcohol' + /=n/ 'also' $\rightarrow$ /sən/
Because of this phonological phenomenon, the phonetic long vowel is not analyzed as a single long vowel like /ə:/, but analyzed as a vowel-vowel sequence like /əə/.

[^11]
### 2.4.2 Morphophonological rules

Yuwan has many morphophonological rules. Only three of them will be presented here. The first one is well-known within Japanese linguistics under the name of rendaku, "sequential voicing" (Shibatani 1990: 173).
(11) RENDAKU (SEQUENTIAL VOICING): the non-initial root of a compound may be voiced if its initial consonant is originally voiceless.

$$
\begin{array}{ll} 
& \text { /kjura-/ 'beautiful' }
\end{array}+/ \text { /kin/ 'kimono' }
$$

The following two rules concern the topic marker clitic $=j a$, which can undergo nasalization or contraction.
(12) TOPIC MARKER NASALIZATION RULE: if a topic marker $=j a$ follows a word-final consonant $/ \mathrm{n} /$, it is realized as $=n a$; on the other hand, if it follows a clitic whose final consonant is $/ \mathrm{n} /$, it is realized as $=n j a$.

$$
\begin{array}{ll}
\text { in 'dog' }+=j a \text { (TOP) } & \rightarrow \text { in }=n a(* i n=j a) \\
\text { in }{ }^{\prime} \operatorname{dog}^{\prime}+=n(\mathrm{DAT})+=j a(\mathrm{TOP}) & \rightarrow \text { in }-u=n=n j a^{5}(* i n-u=n=n a / j a)
\end{array}
$$

(13) TOPIC MARKER CONTRACTION: if a topic marker follows a single vowel, contraction occurs. ${ }^{6}$

$$
\begin{aligned}
& \text { /í/, /i/ or /e/ }+=\mathrm{ja} \rightarrow \text { /əə/ : /urì/ 'that' } \rightarrow \text { /urəə/ } \\
& / \mathrm{a} / \mathrm{L} / \mathrm{u} / \text { or } / \mathrm{o} / \mathrm{+}=\mathrm{ja} \rightarrow \text { /oo/ : /ura/'you' } \rightarrow \text { /uroo/ }
\end{aligned}
$$

### 2.5 Prosody

There are three distinctive lexical pitch patterns in Yuwan: final mora high, final mora low, and a fall at the word boundary. ${ }^{7}$ The tone-bearing unit is the mora and the domain of the pitch-accent is the phonological word (§ 2.1.2), which can contain a grammatical word followed by several clitic markers.

As shown in table 7, the tone-bearing unit is not the syllable but the mora; for example, $s \partial \partial=g a d i=n(d r i n k=L M T=a l s o)$ can be divided into syllables as /səə.ga.din/, and high pitch does not occur on the final syllable /din/ but on


[^12]Table 7: Examples of pitch patterns

|  | Form | Gloss | Pitch pattern |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | isolation | $\mathrm{x}=n u$ <br> (NOM) | $\mathrm{x}=$ gadi <br> (LMT) | $\mathrm{x}=$ gadi=n <br> (LMT=also) |
| 1 | saə | 'drink' | LH | LLH | LLLH | LLLLH |
|  | isi | 'stone' | LH | LLH | LLLH | LLLLH |
|  | kuuru | 'heart' | LLH | LLLH | LLLLH | LLLLLH |
| 2 | haa | 'leaf' | HL | HHL | HHHL | HHHHL |
|  | kazi | 'wind' | HL | HHL | HHHL | HHHHL |
|  | judai | 'saliva' | HHL | HHHL | HHHHL | HHHHHL |
| 3 | haa | 'teeth' | HL | HHL | HHLL | HHLLL |
|  | in | 'dog' | HL | HHL | HHLL | HHLLL |
|  | hikjai | 'light' | HHL | HHHL | HHHLL | HHHLLL |

## 3 Descriptive preliminaries

### 3.1 Basic clause structure and phrase structure

### 3.1.1 Basic clause structure

The constituent order in Yuwan is SOV for all types of clauses, whether finite or non-finite (see §5.2). S and O are always nominal phrases (see §3.1.2), and V is a predicate phrase (see §3.1.3). S and O are not obligatory, and they frequently undergo ellipsis if they are inferable from the context. ${ }^{8}$

### 3.1.2 Nominal phrase

Yuwan has the following nominal phrase (NP) structure.
(14) Modifier Head = Case

Syntactically, an NP can function either as a clausal modifier (argument; (15a)), as a clausal head (nominal predicate; (15b)), or as a phrasal modifier ( NP in genitive function; (15c)).
a. wan=ga habu=ba kuc-cja
$1 \mathrm{SG}=\mathrm{NOM}$ habu $=\mathrm{ACC}$ kill-PST
'I killed a habu (k.o. snake).' (argument NP)
b. $w a n=g a$ soncjoo $=d o o$
$1 \mathrm{SG}=$ NOM village. mayor $=\mathrm{EMP}$
'I am a village mayor.' (nominal predicate)

[^13]c. $w a r a b \dot{i}=n u t \ddot{i}=b a \quad m i-c j a$
child = GEN hand = ACC look-PST
'(I) looked at a child's hand.' (phrasal modifier NP)
The head is obligatory, while the modifier is optional. A case clitic attaches to the right edge of an NP; in other words, the core of an NP is not the case clitic, but the head (and modifier). There are reasons for this analysis, like the fact that some case clitics undergo ellipsis when the NP is a core argument (see §7.3).

### 3.1.3 Predicate phrase

Yuwan has the following two types of predicate phrases.
(16) Verbal predicate
lexical verb 1 (+ auxiliary verb/lexical verb 2 )
(17) Nominal predicate
$\mathrm{NP}(+$ copula verb)

### 3.1.3.1 Verbal predicate

Only the first lexical verb is obligatory in the verbal phrase (VP). The minimal VP is exemplified below, where a single lexical verb wu-i (exist-NPST) fills the first lexical verb slot.

$$
\begin{align*}
& \text { in }=n u \quad \text { wu- } i  \tag{18}\\
& \text { dog }=\text { NOM exist-NPST } \\
& \text { 'There is a dog.' }
\end{align*}
$$

As for the second verb slot, it can be filled by two types of verbs, an auxiliary verb or another lexical verb.
a. tigan $=b a$ jud-i moor-an
letter $=$ ACC read-MED HON-NEG.NPST
'(He) will not read the letter.' (honorific auxiliary)
b. tigan = ba jud-i kurir-an
letter $=$ ACC read-MED BEN-NEG.NPST
'(He) will not read the letter for me.' (benefactive auxiliary)
c. tigan $=b a$ jud-i $\quad k$-on
letter $=$ ACC read-MED come-NEG.NPST
'(He) will not go to read the letter and come back.' (lexical verb 2)
The dependency of the second verb decreases from (19a) to (19c). The second verb in (19a) moor- (HON) cannot be used in the first (lexical) verb slot.

On the other hand, kurir- (BEN) in (19b) can be used in the first (lexical) verb slot with the meaning 'have the kindness to give'. We can see some semantic bleaching (Hopper and Traugott 2003: 94) has happened in the case of the auxiliaries. ${ }^{9}$ The second verb in (19c) can also be used in the first (lexical) verb slot, e.g. tari-nkuin $k$-on (who-INDFZ come-NEG.NPST) 'No one comes', and there seems to be no semantic bleaching in (19c).

Table 8: Auxiliary verbs

| Form | Gloss | Related form (if any) |
| :--- | :--- | :--- |
| $n n j-$ | 'try to' |  |
| $u k-$ | PRF |  |
| kurir- | BEN |  |
| moor- | HON | imoor- (go/come/exist.HON) |
| taboor- | BEN.HON |  |

### 3.1.3.2 Nominal predicate

A nominal predicate consists of an obligatory nominal phrase (NP) and an optional copula verb. The non-obligatory status of the copula is one of the reasons to consider the head of the nominal predicate is not the copula verb but the nominal phrase itself. A copula verb is obligatory in the following cases: (a) in past tense, (b) when negated, (c) when taking non-finite inflections.
a. araə in ja-ta
that.TOP dog COP-PST
'That was a dog.' (past tense)
b. arəə in=na ar-an
that.TOP dog = TOP COP-NEG.NPST
'That is not a dog.' (negation)
c. in jap-poo, $\quad b a a=d o o$
dog COP-CVB.CND uncomfortable $=$ EMP
'If (it) is a dog, I feel uncomfortable (with it).' (non-finite)
In other cases the copula verb is not necessary.
(21)
araz in
that.TOP dog
'That is a dog.' (non-past affirmative in a main clause)

[^14]
### 3.2 Word, clitic and affix

### 3.2.1 Word

A word is a free form made of at least one root. Yuwan does not have any prefixes or proclitics, and every word thus begins with a root. A word is made of a root (or several compounded roots) plus a suffix (or suffixes), and enclitics can attach to it. The following section lists three criteria to determine whether a bound morpheme is a suffix or an enclitic.

### 3.2.2 Affix versus clitic

There are three criteria that determine the status of a bound morpheme: (A) whether it attaches to a bound stem, (B) whether it attaches to more than two word classes, ( C ) whether it can be preceded by another clitic (which satisfies criterion (B)). If a bound morpheme satisfies criterion (A), it is an affix; if a bound morpheme satisfies the criteria (B) or (C), it is a clitic.

### 3.2.3 Compound versus phrase

A compound is made of roots; on the other hand, a phrase is made of a word (or words).
a. $[k j u r a+d i i]=b a \quad m i-c j a$
beautiful + hand = NOM look-PST
'(I) looked at a beautiful hand.' (compound)
b. [naa tii] = ba mi-cja
your.HON hand = ACC look-PST
'(I) looked at your hand.' (phrase)
One important difference between a compound and phrase is whether another word can intervene within it. A compound cannot be interrupted by another word, as in (23a), but a phrase can, as in (23b).
a. *[kjura siju-sa-n $\quad t i i]=b a \quad m i-c j a$

Beautiful white-vLZ-NPST.ADN hand = ACC look-PST
'(I) looked at a beautiful white hand.' (compound intervened)
b. [naa siju-sa-n tiï] $=b a \quad m i-c j a$
your.HON white-vLZ-NPST.ADN hand = ACC look-PST
'(I) looked at your white hand.' (phrase intervened)

### 3.3 Word classes

Yuwan has three major word classes, nominals, adnominals, and verbs. Nominals and verbs are more numerous than adnominals. The criteria for word class assignment are listed in (24). ${ }^{10}$
(24) Criteria for word class assignment
(A) Heads an NP
(B) Directly fills the dependent slot of an NP
(C) Inflects

Table 9: Word classes: distinctive criteria

|  | (A) | (B) | (C) |
| :--- | :---: | :---: | :---: |
| Nominal | + | - | - |
| Adnominal | - | + | - |
| Verb | - | - | + |
| Minor word class | - | - | - |

### 3.3.1 Nominals

A nominal is a word that can only head a nominal phrase (§3.1.2). There are four subclasses of nominals: nouns, reflexives, numerals, and indefinites (see § 4.2.1). Human pronouns, demonstratives, and interrogatives are partly included in nominals (see §3.4).

### 3.3.2 Adnominals

An adnominal is a word that only serves as the modifier of an NP and thus cannot function as an argument or as the head of a nominal predicate. Since it does not head an NP, it never carries case when functioning as a modifier of an NP. ${ }^{11}$
(25) kun hon $=b a \quad$ tu-ta
this book = ACC take-PST
'(I) took this book.'

[^15]
### 3.3.3 Verbs

A verb is a word that inflects. Thus the verb stem tur- 'take' inflects as tu-ta (take-PST), tur-oo (take-INT), etc. Inflectional categories differ according to the clause type (main clause, relative clause, adverbial clause). See $\S 5.2$ for more details about Yuwan verb morphology.

### 3.3.4 Minor word class

The minor word class is a set of words which do not satisfy any of the criteria (A) to (C) in (24) above. The minor word class can be divided into two subcategories depending on its syntactic function; if it can directly modify a verbal predicate, it is an adverb (e.g. mazin ikj-oo! (together go-INT) '(Let's) go together!'); if not, it is an interjection (e.g. agi! 'Oh!').

### 3.4 Functional categories of words

The three categories human pronouns, demonstratives and interrogatives have their own specific roots, i.e. human pronominal roots, demonstrative roots, and interrogative roots. These can turn into several different word classes (with some derivational affixes). For example, demonstrative roots can be used as nominals, adnominals, or adverbs (§3.4.2). This means this category is not a word class, but a functional category that can cover several word classes.

### 3.4.1 Human pronouns

Human pronouns formally extend over nominals and adnominals. Semantically, they indicate the speaker (first person) or the hearer (second person). ${ }^{12}$ Third person in anaphoric or deictic function is expressed by demonstratives (see §3.4.2).

Pronouns exhibit number distinctions, but adnominal forms have no dual forms. ${ }^{13}$ Yuwan has three human pronominal roots: waa (1sG), naa (2sG.HON), and ura (2sG.NHON).

The pronouns waa (1sG) and naa (2SG.HON) are adnominals, and they need to attach a nominalizer suffix to become nominals: -n (NLZ.SG), -ttaว (NLZ.DU), or $-k j a$ (NLZ.PL). On the other hand, ura ( $2 \mathrm{SG} . \mathrm{NHON}$ ) is a nominal, and it thus needs the adnominalizer suffix $-a$ to become an adnominal. The nominalized plural forms waa-kja, naa-kja and ura-kja, also need the same adnominalizer suffix to become adnominals.

[^16]a. $w a n=g a \quad i k-j u-i$
$1 \mathrm{SG}=\mathrm{NOM}$ go-IPFV-NPST
'I will go.' (nominal)
b. waa zjuu ${ }^{14}=g a \quad i k-j u-i$
my father $=$ NOM go-IPFV-NPST
'My father will go.' (adnominal)

Table 10: Human pronouns

|  |  |  | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nominals | $1^{\text {st }}$ person |  | wa-n | wa-ttəə | waa-kja |
|  | $2^{\text {nd }}$ person | HON | na-n | na-ttaว | naa-kja |
|  |  |  | non-HON | ura | ura-ttวa |
| ura-kja |  |  |  |  |  |
| Adnominals | $1^{\text {st }}$ person |  | waa | - | waa-kja-a |
|  | $2^{\text {nd }}$ person | HON | naa | - | naa-kja-a |
|  |  |  | non-HON | ura-a | - |
|  |  |  | ura-kja-a |  |  |

### 3.4.2 Demonstratives

Demonstratives extend over nominals, adnominals, and adverbs. They are constituted of a demonstrative root, which is a bound form, and a derivational suffix. Three degrees of distance are distinguished, i.e. proximal, mesial, and distal.

Table 11: Demonstrative roots and derived forms

| Class Meaning | Root | Suffix | Proximal | Mesial | Distal |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N | Pronominal | $k u / u / a$ | $-r \dot{i}$ (SG) | $k u-r \dot{i}$ | $u-r \dot{i}$ | $a-r \dot{i}$ |
|  |  |  | $-t t a a$ | (APPR) | $k u-t t a a$ | $u-t t a a$ |
|  | Locative |  | $-m a$ | $k u-m a$ | $u-m a$ | $a-m a$ |
| Adn | Plain |  | $-n$ | $k u-n$ | $u-n$ | $a-n$ |
| N | Approximation | $k a / g a / a g a-s s a$ | $k a-s s a$ | ga-ssa | $a g a-s s a$ |  |
| Adn | Derogatory |  | $-r a a$ | $k a-r a a$ | $g a-r a a$ | $a g a-r a a$ |
| Adv | Direction |  | $-n$ | $k a-n$ | $g a-n$ | $a g a-n$ |

[^17]
### 3.4.3 Interrogatives

Interrogatives formally extend over nominals, adnominals, and adverbs, and semantically express wh-questions.
a. $n u u=n u \quad u t i-t t$ ?
what $=$ NOM fall-MED
'What fell?' (nominal)
b. uraə taa ?kin?
that.TOP whose kimono
'Whose kimono is that?' (adnominal)
c. nuusjattu ikj-an?
why go-NEG.NPST
'Why don't (you) go?' (adverb)

Table 12: Basic forms of interrogatives

|  | Form | Gloss |
| :--- | :--- | :--- |
| Nominals | nuu | what |
|  | tarí / taru (SG), tat-taa (PL) | who |
|  | daa | where |
|  | diru | which |
|  | ici | when |
|  | ikjassa | how much |
| Adnominals | taa | whose |
|  | din | which |
| Adverbs | nuusjattu | why |

### 3.5 Property concept stems (PC stems)

Yuwan has a special stem category, which is called here property concept stem (PC stem), following the term used in Shimoji (2008a). ${ }^{15}$ Semantically, PC stems can express the following semantic types, which are expressed by adjectives in many languages: ${ }^{16}$ DIMENSION (e.g. taa 'tall', tuu 'distant', inja/sjugi 'small'), AGE (e.g. mii ‘new'), VALUE (e.g. ic 'good', waru 'bad'), COLOUR (e.g. aa 'red', siju 'white', kuru 'black'), PHYSICAL PROPERTY (e.g. ubu 'heavy'), HUMAN PROPENSITY (e.g. hoora 'happy'), and SPEED (e.g. hวa 'fast').

Morphologically, a PC stem is made of a single root (PC root) or a derived stem (see § 6.3). A PC stem is a bound form, thus it needs to undergo some

[^18]derivational and/or inflectional operation in order to be a free form. There are three means to turn a PC stem into a free form: nominalization, verbalization, and adverbialization.

A PC stem can become a nominal word if it is followed by a nominalizer -sa/-sja. ${ }^{17}$
a. taa-sa=nu tar-an
tall-NLZ $=$ NOM be.sufficient-NEG.NPST
'(It) is not tall enough.' (argument PC nominal)
b. an $k \ddot{i}=n u$ taa-sa
that tree $=$ NOM tall-NLZ
'That tree is tall.' (PC nominal predicate)
A PC stem can become a verb if it is followed by a verbalizer -sar/-sjar.
(29) an $k i i=j a$ taa-sar-oo
that tree $=$ TOP tall-vLZ-SUPP
'That tree is supposed to be tall.' (PC verb)
In the following example, a PC stem becomes an adverb by taking the adverbializer -ku.
(30) həə-ku ikj-oo!
fast-AVLZ go-INT
'Let's go fast!'

## 4 Nominals and nominal phrases

A brief explanation about nominals and nominal phrases (NPs) has already been given in §3.3.1 and §3.1.2 respectively. The following sections give a more detailed presentation of the Modifier Head( = Case) construction of NPs.

### 4.1 Modifier

### 4.1.1 Modifier filled by an NP

If a nominal is to modify another nominal in an NP, first it fills the head slot of an NP taking a genitive case clitic, and then it fills the modifier slot of a larger NP recursively. In the following example, the larger NP is analyzed as following: warabi=nu (Modifier), hon (Head), and $=b a$ (Case).

[^19]$w a r a b \dot{i}=n u$ hon $=b a \quad m i-c j a$
child = GEN book = ACC look-PST
'(I) looked at the child's book.'

### 4.1.2 Modifier filled by adnominal word or relative clause

The modifier slot of an NP can be filled by an adnominal word, which does not take any case clitics (see §3.3.2). In the following example, the NP is analyzed as following: an (Modifier), hon (Head), and =ba (Case).

> an hon=ba mi-cja
> that book=ACC look-PST
'(I) looked at that book.'
Furthermore, the modifier slot of an NP can be filled by a relative clause, whose final constituent is a verb taking an inflectional suffix that marks relativization (see §5.2.2.1). In the following example, the NP is analyzed as following: akira = ga ju-da-n (Modifier), hon (Head), and =ba (Case).
(33) an 2cjoo akira=ga ju-dan hon=ba mi-cja
that person.TOP Akira $=$ NOM read-PST.ADN book $=$ ACC look-PST
'That person looked at the book that Akira read.'

### 4.2 Head

The head slot is obligatory in an NP, and it is filled by a minimal NP, i.e. a nominal word.

### 4.2.1 Subclass of nominals

There are four subclasses of nominals: nouns, reflexives, numerals, and indefinites. As stated in §3.4, human pronouns, demonstratives and interrogatives are categorized not only as nominals, but also as other word classes. Therefore they are treated as functional categories of words, not as a subclass of nominals.

### 4.2.1.1 Nouns

A noun can function as an NP of any kind (argument, predicate or modifier of a larger NP). Some nouns that have a temporal meaning, e.g. ?kinjuu 'yesterday', acja 'tomorrow', or kjuu 'today', can undergo conversion into adverbs.
acja $\quad k$-juu- $d=d o o$
tomorrow come-IPFV-NPST = EMP
'I'll come tomorrow!'

### 4.2.1.2 Reflexives

Yuwan has two reflexives, nusi and duu, and I have so far found no difference between them. They can function as an NP of any kind. A reflexive can be coreferential with not only a previous subject argument, as in (35), but also with an (indirect) object, as in (36).
(35) akira $=g a \quad$ jumiko $=n \quad n u s i / d u u=n u$ ?kin $=b a$

Akira $=$ NOM Yumiko $=$ DAT RFL $=$ GEN $\quad$ kimono $=$ ACC
?сітm- $a$-cj $=$ doo
wrap-CAUS-MED = EMP
'Akira ${ }_{i}$ made Yumiko wrap his ${ }_{i}$ kimono.'
(36) akira=ja jumiko=n nusi/duu=nu ?kin=boo $\quad n u s i / d u u=s j i$

Akira $=$ TOP Yumiko $=$ DAT RFL $=$ GEN $\quad$ kimono $=$ ACC $. T O P R F L=I N S T$
?cimm-a-cji =doo
wrap-CAUS-MED = EMP
'Akira made Yumiko $_{i}$ wrap her $_{i}$ kimono by herself ${ }_{i}$.'

### 4.2.1.3 Numerals

A numeral is constituted of a numeral root plus a classifier suffix, e.g. -ci (ClF. GENERAL), -tai (CLF.HUMAN), and -kai (CLF.TIMES). A numeral can function as an NP of any kind; however, a numeral often fills the head slot of an NP.

$$
\begin{align*}
& n a s i=n u \quad \text { mii-ci mura-tí (*mii-cí=nu nasi) }  \tag{37}\\
& \text { pear }=\text { GEN three-CLF receive-MED three-CLF }=\text { GEN pear }
\end{align*}
$$

'(I) received three pears.'
'Three pears' is expressed as nasi=nu mii-cí (pear = GEN three-CLF), where the referent noun fills the modifier slot and the numeral fills the head slot, not vice versa. The classifier for inanimate nouns is generally $-c \dot{z}$, and the numbers above ten are all non-native words. The classifier -tai is used to count humans, but loanwords are used for numbers above four.

### 4.2.1.4 Indefinites

There are two types of indefinites: non-specific and specific. Both types are formed by an interrogative root plus an indefinitizer (INDFZ) suffix.

Indefinites of the first type have a non-specific meaning and are formed by an interrogative root plus the indefinite suffix -nkuin.
(38) tari-nkuin $k$-juu- $d=$ doo
who-INDFZ come-IPFV-NPST $=$ EMP
'Someone will come.'

Table 13: Numerals for counting inanimates

| Number | Word form | Morphological structure |
| :---: | :--- | :--- |
| 1 | Ptïi | NUM.CLF |
| 2 | Ptaa-ci | NUM-CLF |
| 3 | mii-cí |  |
| 4 | $j u u-c \dot{c}$ |  |
| 5 | $\dot{i c i-c \dot{i}}$ |  |
| 6 | muu-ci |  |
| 7 | nana-ci |  |
| 8 | jaa-cí |  |
| 9 | Pkuunu-cí |  |
| 10 | $t u u$ | NUM |
| 11 (or more) | $z j u u i c i$ | loanword from Japanese |
| how many | $i k u-c \dot{i}$ | NUM.ITR-CLF |

Table 14: Numerals for counting humans

| Number | Word form | Morphological structure |
| :---: | :--- | :--- |
| 1 | ?cjui | NUM.CLF |
| 2 | ?tai |  |
| 3 | mi-cjai | NUM-CLF |
| 4 | ju-tai |  |
| 5 (or more) | go-nin | loanword from Japanese |
| how many | iku-tai | NUM.ITR-CLF |

Indefinites of the second type have a specific meaning and are formed by an interrogative root followed by one of the two indefinite suffixes -gajaaroo and -ka. Here the term specific is used in the meaning of Payne (1997: 264): "an entity is objectively referential if it exists as a bounded, individuated entity in the message world. Sometimes referentiality in this sense is referred to as specificity".
(39) tari-gajaaroo = ga $3 c j a$
who-INDFZ $=$ NOM come.PST
'Someone came.'

Table 15: Indefinites (non-specific) made of -nkuin

| Form | Meaning |
| :--- | :--- |
| nu-nkuin | 'anything' |
| tari-nkuin | 'anyone' |
| da-nkuin | 'anytime' |
| diru-nkuin | 'any one' |
| ici-nkuin | 'anywhere' |

Table 16: Indefinites (specific) made of -gajaaroo/-ka

| Form | Meaning |
| :--- | :--- |
| nuu-gajaaroo/nuu-ka | 'something' |
| tarí-gajaaroo/tarï-ka | 'someone' |
| daa-gajaaroo/daa-ka | 'somewhere' |
| diru-gajaaroo/diruu-ka | 'something in these things' |
| íci-gajaaroo/iciè-ka | 'sometime' |

### 4.2.2 Derivational morphology of nominals

### 4.2.2.1 Nominal derivation

The structure of the nominal word is schematically shown in (40).
(40) Structure of the nominal word:

Root (-DIM)( = APPR)
or Root (-PL)(-APPR)( = APPR)
There are three nominal derivational suffixes: -kkwa (DIM), -kja (PL), and -taa (APPR). For convenience, we will also present together the approximative clitic $=n k j a$, although it is not a nominal derivational suffix.

The diminutive suffix -kkwa adds some overtones of endearment to the root it attaches to.
(41) $w a r a b i-k k w a=n u ~ w u-i$
child-DIM = NOM exist-NPST
'There is a little child.'
The plural suffix -kja can attach to human pronouns only (I ignore the nominalizing function of $-k j a$ here, see §3.4.1).
(42) $w a a-k j a=g a ~ i k-j u-i$

1 -PL $=$ NOM go-IPFV-NPST
'We will go.'

On the other hand, the approximative suffix -taa ('and so on' or 'a kind of') can attach to demonstratives, human names, elder kinship terms, and profession names.
zjuu-taa $=g a \quad i k-j u-i$
father-APPR $=$ NOM go-IPFV-NPST
'(My) father and some people will go.'
When expressing plurality of other nominals, the approximative clitic $=n k j a^{18}$ is used.

$$
\begin{align*}
& \operatorname{maga}=n k j a=n u \quad i k-j u-i  \tag{44}\\
& \text { grandchild = APPR }=\text { NOM go-IPFV-NPST }
\end{align*}
$$

'(My) grandchild and some people will go.'
As can be seen above, kinship terms which refer to younger people do not take the approximative suffix -taa, but take the approximative clitic $=n k j a$.

The selection of the plural and approximative markers is summarized in figure 2.

| 1st \& 2nd pronouns | demonstratives human names |
| :---: | :---: |
| -kja > | -taa |

Figure 2: Selection of the plural and approximative markers

This nominal division seems to correspond to the nominal hierarchy or the animacy hierarchy of linguistic typology (Silverstein 1976, Dixon 1994, Whaley 1997).

### 4.2.2.2 Nominal compounding

A nominal compound is a nominal word made of two roots (Root1 + Root2). The first root may be any nominal root, verbal root, or PC root (see §3.5), and the second one is always a nominal root.
a. nominal root + nominal root
mumin 'cotton' + ?kin 'kimono' $\rightarrow$ mumin + gin ${ }^{19}$ 'kimono made of cotton'

[^20]b. verbal root + nominal root
jusir- 'teach' + kaci 'worth' $\rightarrow$ jusí + gaci 'worth teaching'
c. PC root + nominal root
kjura 'beautiful' + ?kin 'kimono' $\rightarrow$ kjura + gin 'beautiful kimono'

### 4.3 Case

### 4.3.1 Case markers

Yuwan has thirteen case markers, which are clitics following a nominal phrase. Most of them mark arguments (nominative, accusative, dative, allative, locative, instrumental, associative, comparative, ablative, limitative), while the genitive case marks the modifier of an NP (§ 3.1.2). Yuwan has a nominativeaccusative case marking system; the single argument of an intransitive verb (S) and the agent-like argument of a transitive verb (A) both take nominative case, while the patient-like argument of a transitive verb (O) takes accusative case.

Table 17: Case forms and their functions

| Name | Form | Function (case) | Function (limiter) |
| :---: | :---: | :---: | :---: |
| Nominative | $=g a /=n u$ | S/A |  |
| Genitive | $=g a /=\emptyset /=n u$ | NP modifier |  |
| Accusative | $=b a$ | O |  |
| Dative | = $n$ | beneficiary |  |
| Allative 1 | $=k a c i$ | goal of locomotion |  |
| Allative 2 | $=z j i$ | goal of action |  |
| Locative 1 | = non/nan | place of static action |  |
| Locative 2 | $=(n z) n t i /(n a) n t i$ | place of dynamic action |  |
| Instrumental | $=s j i$ | instrument |  |
| Associative | = tu | associated motion |  |
| Comparative | = jumma/ = jukkuma | standard of comparison |  |
| Ablative | = kara | source |  |
| Limitative | $=$ gadì | limit ('as far as') | emphasis |

### 4.3.2 Animacy hierarchy with case markers

Two case markers, the nominative and the genitive, depend on the nominal hierarchy. ${ }^{20}$ First, the nominative case marker has two forms, $=g a$ and $=n u$.

[^21]There is a tendency that a nominal located higher in the animacy hierarchy takes $=g a$, while a nominal located lower takes $=n u$.
(46) $w a n=g a \quad a i k-j u-i$
$1 \mathrm{SG}=\mathrm{NOM}$ walk-IPFV-NPST
'I will walk.' ( $1^{\text {st }}$ person singular human pronoun)
(47) $\quad$ in $=n u \quad a i k-j u-i$
dog $=$ NOM walk-IPFV-NPST
'The dog will walk.' (animal noun)
As can be seen above, the form of the nominative case varies according to position on the animacy hierarchy of the nominal heading the NP. The assignment of the nominative is summarized in figure 3.
human demonstratives elder kinship others nouns pronouns terms

$$
=g a \quad \gg \quad=n u
$$

Figure 3: Nominative hierarchy

Second, the genitive case marker has three allomorphs $=g a,=\varnothing$ (zero) and $=n u$. The genitive case marker can express possessive relation between the modifier and the head in an NP, but there is another means to express possessive relation, ${ }^{21}$ i.e. with an adnominal. Possessive relation is marked as follows according to the animacy hierarchy, from higher to lower: adnominal, genitive case $=g a$, $=\emptyset$ (zero), and $=n u$.
(48) a. waa hon $=b a$ jum-i!
my book = ACC read-IMP
'Read my book!' ( $1^{\text {st }}$ person singular human pronoun)
b. agga hon=ba jum-i!
that.person.GEN book = ACC read-IMP
'Read that person's book!' (demonstrative)
c. $a k i r a=\emptyset$ hon=ba jum-i!

Akira $=$ GEN book $=$ ACC read-IMP
'Read Akira's book!' (noun (human name)) ${ }^{22}$
d. $w a r a b i=n u$ hon $=b a$ jum-i !
child $=$ GEN book $=$ ACC read-IMP
'Read the child's book!' (noun)
The assignment of the forms is summarized in figure 4.

[^22]

Figure 4: Adnominal and genitive hierarchy

### 4.4 Formal nouns

A formal noun can fill the head slot of an NP only if it is preceded by a modifier word or clause. It can thus be called a "bound word". In the following examples, $s i$ 'thing' is a formal noun, but mun 'thing' is not.

| $w a a s \dot{t}=n u$ | $a-i$ | (cf. * $s \dot{t}=n u \quad a-i$ ) |
| :---: | :---: | :---: |
| my thing $=$ NOM | ist-NPST | thing $=$ NOM exist-NPST |
| 'There is a thing | of mine.' | 'There is a thing.' |

waa mun =nu $a-i \quad$ (cf. mun = nu $a-i)$
my thing = NOM exist-NPST $\quad$ thing = NOM exist-NPST
'There is a thing of mine.' $\quad$ 'There is a thing.'

As can be seen above, the formal noun si 'thing' can fill the head slot with an adnominal (waa 'my') filling the modifier slot of the NP; however, if there is no modifier, the formal noun cannot head an NP. Interestingly, a formal noun behaves like a nominalizer suffix, when it co-occurs with a verbal stem.
$k o o-j u-s i=n u \quad a-i$
buy-IPFV-NLZ $=$ NOM exist-NPST
'There is a thing (that I) will buy.'
This kind of phenomenon about formal nouns is also found in Irabu Ryukyuan (Shimoji 2009d: 16).

## 5 Verb morphology

The verb class is the only word class that shows inflection. The copula is a verb, but its syntactic function is to serve as an extension to nominal predicates rather than the head of a verbal predicate.

### 5.1 The structure of the verbal complex

The verbal complex is made of a stem plus one or several inflectional suffixes. A stem can be made of a single root (a minimal stem), several roots (a compound), or root(s) plus derivational suffix(es).
(52) Structure of the verbal complex (D: derivation, I: inflection)
$[[\operatorname{Root}(+ \text { Root }) \text {-D suffix (-D suffix...n })]_{\text {stem }}-I$ suffix(-I suffix) $]_{\text {word }}$

### 5.1.1 Stem

Yuwan has two different types of verb-making stems: plain verbal stems and property concept stems (PC stems); plain verbal stems can be sub-divided into two subtypes, the ordinary type and the special type.

Formally, both plain verbal stems and PC stems are bound forms, but they can be clearly divided by the following criteria: the former cannot be followed by a verbalizer -sar/-sjar or a nominalizer -sa/-sja, but the latter can. Semantically, plain verbal stems can express relatively higher transitivity (Hopper and Thompson 1980) than PC stems, e.g. kuss- 'kill', ut- 'hit', mur- 'pick (some fruits)', and so on. On the other hand, PC stems basically express relatively lower transitivity, and they often correspond to adjectives in other languages, e.g. taa- 'tall', aa- 'red', hoora- 'happy', etc.

### 5.1.1.1 Plain verbal stems (ordinary type)

Plain verbal stems can be divided into two subtypes, ordinary types, and special types, which are distinguished by the following criteria. If a plain verbal stem can be followed by an imperfective suffix -jur, it is an ordinary type stem; if not, it is a special type stem.
(53) $\quad$ warabi $=n u$ un=nantit app-ju-i
child $=$ NOM sea $=$ LOC2 play-IPFV-NPST
'A child plays in the sea.' (plain verbal stem (ordinary type))

Table 18: Examples of plain verbal stems (ordinary type)

| Form | Gloss | Form | Gloss |
| :--- | :--- | :--- | :--- |
| app- | 'play' | izjas- | 'take out' |
| tub- | 'fly' | ut- | 'hit' |
| asib- | 'play' | tat- | 'stand' |
| kak- | 'write' | mur- | 'pick (fruits' |
| uk- | 'put' | izibar- | 'come out' |
| kam- | 'eat' | ?kij- | 'cut' |
| tanm- | 'ask' | hankj- | 'come in' |
| waas- | 'boil' | koow- | 'buy' |

### 5.1.1.2 Plain verbal stems (special type)

Yuwan has four plain verbal stems that are of a different, special type. These stems cannot take the imperfective suffix -jur.

Table 19: Plain verbal stems (special type)

| Form | Gloss | Note |
| :--- | :--- | :--- |
| wur- | 'exist' | used with animate subjects |
| ar- | 'exist' | used with inanimate subjects |
| nə- | 'not exist' | used with inanimate subjects; <br> necessarily takes negative suffix <br> the former used for affirmative, <br> the latter for negative |
| jar-/ar- | COP |  |

The existential verbs wur- and ar- correlate with the animacy ${ }^{23}$ of a subject. If the subject has an animate referent, wur- is used, as in (54), and if the subject has an inanimate referent, ar- is used, as in (55). In both cases, the aspect marker -jur cannot be used.
(54) $\quad a m a=n a n \quad$ warab $\dot{i}=n u w u-i \quad(* w u-j u-i)$
that.place $=$ LOC1 child $=$ NOM exist-NPST
'There is a child.' (existential verb (animate subject))
(55) $\quad a m a=n a n \quad k i \ddot{i}=n u \quad a-i \quad$ (*a-ju-i)
that. place $=$ LOC1 tree $=$ NOM exist-NPST
'There is a tree.' (existential verb (inanimate subject))
It is worth noting that the animate existential verb wur- can take a negative suffix $-a n$, e.g. warabi $=n u$ wur-an (child = NOM exist-NEG.NPST) 'There is no child'; however, the inanimate existential verb ar- cannot, e.g. *kiï=nu ar-an (tree $=$ NOM exist-NEG.NPST) 'There is no tree'. Instead, the negative existential verb nд- 'not exist' is used.

$$
\begin{align*}
& a m a=n a n=n j a \quad k \ddot{i}=n u \quad n \partial-n  \tag{56}\\
& \text { that.place }=\text { LOC1 }=\text { TOP tree }=\text { NOM not.exist-NEG.NPST } \\
& \text { 'There is no tree.' (negative existential verb) }
\end{align*}
$$

A negative existential verb does not have affirmative inflection. As can be seen in (56) above, the negative existential verb nə- takes a negative suffix, but the verb nə-n (not.exist-NEG.NPST) means 'not exist', and not '(not not) exist'. This kind of phenomena is also found in other languages (see, for example, Jespersen 1924: 334).

The copula verb has two variants: jar- for affirmative inflection and $a r$ - for negative inflection.

[^23](57) an ?cjoo sjensjee ja-ta
that person.TOP teacher COP-PST
'That person was a teacher.' (copula verb (affirmative inflection))
(58) an ?cjoo sjensjee=ja ar-an-ta
that person.TOP teacher $=$ TOP COP-NEG-PST
'That person was not a teacher.' (copula verb (negative inflection) ${ }^{24}$

### 5.1.1.3 Property concept stem

As mentioned in $\S 3.5$, a property concept stem (PC stem) is not a verbal stem, since it needs a verbalizer suffix -sar/-sjar to be a verbal stem and carry inflection (on the other hand, a plain verbal stem is a verbal stem by itself since it can stand as a verb just by carrying verbal inflection). A verbal stem derived from a PC stem has some restrictions concerning its inflection and derivation (see §6.2 for details).

### 5.2 Inflectional morphology

Verbal inflectional categories in Yuwan can be divided into two categories: finite inflection and non-finite inflection. Finite inflection occurs on verb forms that head a main clause, while non-finite inflection mostly ${ }^{25}$ occurs on verb forms that head dependent clauses. Non-finite inflection can be further divided into three subtypes, each of which corresponds to the forms in relative clauses, adverbial clauses, and clause chains.

### 5.2.1 Finite inflection

Generally, finite inflected verbs function as verbal predicates. However, the verbs inflected by -mai (OBL) has to fill the head slot of a nominal predicate, as in (59).
(59) arəa mu-i-mai ja-ta
that.TOP pick.up-SE-OBL COP-PST
'(I) should have picked that up.'
Table 20 presents the finite inflectional paradigm, which is further exemplified in table 21.

[^24]Table 20: Finite inflection

|  |  | affirmative | negative |
| :--- | :--- | :--- | :--- |
| past | declarative | -tar ${ }^{26}$ | -an-tar |
|  | suppositional | -taroo | -an-taroo |
|  | yes-no question | -tamí | -an-tamí |
|  | focused yes-no question | -tarui | -an-tarui |
|  | focused wh-question | -taru | -an-taru |
| non-past | declarative | $-i$ | $-a n$ |
|  | suppositional/intentional ${ }^{27}$ | - oo | N/A |
|  | intentional question | $-o i$ | N/A |
|  | yes-no question | $-m \dot{i}$ | $-a m \dot{z}$ |
|  | focused yes-no question | $-u i$ | $\mathrm{~N} / \mathrm{A}$ |
|  | focused wh-question | $-u$ | $\mathrm{~N} / \mathrm{A}$ |
|  | obligative | $-m a i$ | $\mathrm{~N} / \mathrm{A}$ |
|  | imperative | $-\dot{i}$ | - na |

Table 21: Finite inflection of mur- 'pick up (some fruits)'

|  |  | affirmative | negative |
| :---: | :---: | :---: | :---: |
| past | declarative <br> suppositional <br> yes-no question <br> focused yes-no question focused wh-question | mu-tar <br> mu-taroo <br> mu-tami <br> mu-tarui <br> mu-taru | mur-an-tar <br> mur-an-taroo <br> mur-an-tami <br> mur-an-tarui <br> mur-an-taru |
| non-past ${ }^{28}$ | declarative <br> suppositional/intentional <br> intentional question <br> yes-no question <br> focused yes-no question <br> focused wh-question <br> obligative <br> imperative | mu-ju-i <br> mur-oo <br> mur-oi <br> $m u-j u-m i$ <br> mu-jur-ui <br> mu-jur-u <br> $m u-i-m a i^{29}$ <br> mur-i | mur-an <br> N/A <br> N/A <br> mur-ami <br> N/A <br> N/A <br> N/A <br> mun-na |

[^25]
### 5.2.2 Non-finite inflection

Non-finite inflections express relativization, adverbial subordination (with converbs), or clause-chaining (with medial verbs). Some of converbs do not have negative forms, and only adnominal forms exhibit a tense opposition.

### 5.2.2.1 Relativization

Yuwan has a special inflected form for predicates of relative clauses. This verbal form basically does not appear in other types of clauses, ${ }^{30}$ and it is called the adnominal form here.
(60) $\quad$ wan = ga ?kinjuu mu-tan] $]_{\text {Rel-clause }}$ nikan $=b a$ tur-i!
$1 \mathrm{SG}=$ NOM yesterday pick.up-PST.ADN orange $=$ ACC take-IMP
'Take the orange I picked up yesterday!'

Table 22: Relative inflection

|  | affirmative | negative |
| :--- | :--- | :--- |
| non-past | $-n$ | -an $)$ |
| past | -tan | -an-tan |

Table 23: Relative inflection of mur- 'pick up (some fruits)' with nikan 'orange'

|  | affirmative | negative |
| :--- | :--- | :--- |
| non-past $^{31}$ | mu-ju-n nikan | (mur-an nikan) |
|  | 'an orange (I) will pick up' | 'an orange (I) won't pick up' |
| past | mu-tan nikan | mur-an-tan nikan |
|  | 'an orange (I) picked up' | 'an orange (I) didn't pick up' |

The parentheses in tables 22 and 23 indicate there is no morphologically overt inflectional suffix expressing relativization in negative non-past tense. In other words, Yuwan uses a gap strategy (Payne 1997: 330) for the negative non-past, and the verbal form is identical with the finite form used for negative non-past declarative.

[^26]
### 5.2.2.2 Converb

Yuwan has a converb, constituted of a verbal stem and an inflectional suffix. The converb is used to head an adverbial clause.
(61) $k j u u=j a \quad n i k a n=b a \quad$ mur-an-ba, app-igja today $=$ TOP orange $=$ ACC pick.up-NEG-because play-CVB.PUR koo $=$ joo come.IMP = CNF1
'(We) will not pick up oranges today, so come and play.'

Table 24: Converb inflection

|  |  | affirmative | negative |
| :--- | :--- | :--- | :--- |
| non-past | conditional ('if') | -boo | -an-boo |
|  | causal 1 ('because') | - ba | -an-ba |
|  | causal 2 ('because') | - sa | N/A |
|  | simultaneous ('while') | -jagacinaa | N/A |
|  | purposive ('in order that') | -igja | N/A |
| past | causal 3 ('because (x) did...') | -tattu | -an-tattu |

Table 25: Converb inflection of mur- 'pick up (some fruits)'

|  |  | affirmative | negative |
| :--- | :--- | :--- | :--- |
| non-past | conditional ('if') | mup-poos | mur-an-boo |
|  | causal 1 ('because') | mup-pa | mur-an-ba |
|  | causal 2 ('because') | mu-jus-sa33 | N/A |
|  | simultaneous ('while') | mu-jagacinaa | N/A |
|  | purposive ('in order that') | mu-igja | N/A |
| past | causal 3 ('because (x) did...') | mu-tattu | mur-an-tattu |

### 5.2.2.3 Medial verb

Yuwan has a medial verb, which encodes clause-chaining (see §9.3).

[^27]Table 26: Medial inflection

|  | affirmative | negative |
| :--- | :---: | :---: |
| medial 'do (something), and...' | $-t \dot{t}$ | -an-nən (/ -an-tit) |

(62) $j u-d \dot{d}, \quad k a-c j \ddot{i}, \quad$ wara-ta
read-MED write-MED laugh-PST
'(I) read (something), and wrote (something), and laughed.' (affirmative)
(63) hon-u=nkja=gadì jum-an-nən, asì-dì koo!
book-SE $=$ APPR $=$ LMT read-NEG-MED play-MED come.INT
'Without reading books, let's (go) play and come back!' (negative)
The negative medial form -an-tit is used only when the predicate of the main clause includes a PC stem ic- 'good' (or in insubordinated clauses); on the other hand, the other negative medial form -an-nan can be used for any case.
(64) hon=ba jum-an-nən(/jum-an-ti), ic-cja a-mi ?
book $=$ ACC read-NEG-MED good-NLZ exist-YNQ
'(You) do not read the book, and that is okay?'

Interestingly, a medial verb can be used independently, without a main clause.
(65) uroo $\quad k u n h o n=b a \quad j u-d i=n a$ ?

2SG.NHON.TOP this book = ACC read-MED $=$ YNQ
'Did you read this book?'

The medial verb ju-di in (65) expresses past tense, like the finite inflectional form ju-da (read-PST). ${ }^{34}$ Typologically, this kind of phenomenon is known as insubordination, which is defined as "the conventionalized main-clause use of formally subordinate clauses" (Evans 2007).

### 5.3 Derivational morphology

In this section, the internal structure of the verbal stem is described. As shown in (52) in §5.1, a verbal stem can consist of a single root or of compounded roots plus derivational affixes.

[^28]
### 5.3.1 Derivational affix

Yuwan has seven derivational suffixes: the voice suffixes -as (CAUS) and -ar(ir) ${ }^{35}$ (PASS), the aspect suffixes -tuk (PRF), -jur (IPFV), -tur (PROG), -təar (RES), and the politeness suffix -joor (POL). All derivational suffixes can attach to a verbal root (or compounded roots), and they are basically optional. The derivational suffixes can appear in the following order:

| -CAUS | -PASS | -PRF | -IPFV | -PROG | -RES | -POL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| -as | -ar(ir) | -tuk | -jur | -tur | $-t \partial \partial r^{36}$ | -joor |

However, there are some restrictions concerning their combinations; the impossible combinations are summarized below.

```
*-ar(ir) (PASS) + -jur (IPFV)
*-tuk (PRF) + -tur (PROG), -tว\partialr (RES)
*-jur (IPFV) + -tur (PROG), -ta\partialr (RES), -joor (POL)
```

Yuwan has an interesting phenomenon where some optionally-expressed affixes become obligatorily-expressed when they precede certain inflections. ${ }^{37}$

Table 27: Obligatory suffixes

| Set of obligatory suffixes |  |  | Context |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -ar(ir) | (PASS) |  | finite inflections | -i | (NPST) |
| -jur | (IPFV) |  |  | -mi | (YNQ) |
| -tur | (PROG) | + |  | -ui | (FOC.YNQ) |
| -tar | (RES) |  |  | -u | (FOC.WHQ) |
| -joor | (POL) |  | non-finite inflections |  | (ADN) |
|  |  |  |  | -sa | 'because' |

For example, the finite inflectional suffix -i (NPST) and the non-finite inflectional suffix -n (NPST) cannot directly follow a verbal root, and one of the suffixes in table 27 has to appear on the verb.

$$
\begin{align*}
& \text { a. wan =ga mu-ju-i } \quad(* m u-i)  \tag{68}\\
& \text { 1sG = NOM pick.up-IPFV-NPST } \\
& \text { 'I will pick up (the fruits).' }
\end{align*}
$$

[^29]b. wan=ga mu-ju-n (*mu-n) mun=na diru? $1 \mathrm{SG}=$ NOM pick.up-IPFV-NPST.ADN thing $=$ TOP which 'Which is the thing that I pick up?'

However, these affixes, i.e. -ar(ir) (PASS), -jur (IPFV), -tur (PROG), -təər (RES), and -joor (POL), are not obligatory when they precede the other inflections; for example, the past tense inflection may not take -jur (IPFV) as in (69a), or may take it as in (69b).
a. $w a n=g a \quad$ mu-ta

1SG = NOM pick.up-PST
'I picked up (the fruits).'
b. wan=ga mu-ju-tan mun=doo
$1 \mathrm{SG}=$ NOM pick.up.ADN-IPFV-PST thing $=$ EMP
'I used to pick up (the fruits). ${ }^{38}$
Furthermore, basically every derivation can directly attach to the inflections listed in §5.2, but some derivations cannot, like *jum-as-i (read-cAUS-NPST) 'to make (someone) read'. ${ }^{39}$ The possible combinations between derivations and inflections are too complex to be detailed here.

### 5.3.2 Compounding

A verbal compound combines two plain verbal roots into a stem.
(70) a. jum- 'read' + agir- 'raise' $\rightarrow j u m-j^{40}+$ agir- 'read (something) all'
b. jum- 'read' + hatir- 'end' $\rightarrow$ jum + hatir- 'finish reading'
(71) uroo
an $h o n=b a \quad j u m-j+a g i r-i=j o o$
2SG.NHON.TOP that book = ACC read-SE + raise-IMP = CNF1
'You read that whole book, right?'

## 6 Class-changing derivations

Yuwan has several kinds of class-changing derivations: nominalization (§6.1), verbalization (§6.2), and PC stem-making derivation (§6.3).

[^30]
### 6.1 Nominalization

Yuwan has four nominalizers, -sa/-sja, -jaa, -i, and -madəə. First, as mentioned in §3.5, -sa/-sja can derive a nominal from a PC stem.
(72) taa-sa=nu tar-an
tall-NLZ $=$ NOM be.sufficient-NEG.NPST
'(It) is not tall enough.'
Second, the nominalizer -jaa can attach to a plain verbal stem to form a nominal refering to "a person who (deliberately) does the activity expressed by the stem".
a. tur- + -jaa $\rightarrow$ tu-jaa
take NLZ
'a person who takes'
b. tur- + -as + -jaa $\rightarrow$ tur-as-jaa
take CAUS NLZ
'a person who makes someone take'
c. $u t-+-a r+$-jaa $\rightarrow u t-a r-a a$
hit pass NLZ
'a person who lets himself be hit (by someone) deliberately'
Interestingly, not only a verbal root, but also a derivational suffix can be followed by the nominalizer -jaa (although derivational suffixes other than -as (CAUS), -ar (PASS) cannot precede -jaa).

Third, a nominalizer -i can attach to a verbal stem expressing continuous aspect when it is used as a nominal predicate as in (74a). It can also be used as an argument of the verb sir- 'do' as in (74b). ${ }^{41}$

> a. $\quad$ wan $=n a z i i \quad k a k-i \quad j a p-p a, \quad i k j-a n=d o o$
> $1 \mathrm{sG}=$ TOP characters write-NLZ COP-because go-NEG.NPST $=$ EMP
'Because I am writing characters, (I) won't go.' (nominal predicate)
b. wan =na zii $k a k-i=d u \quad s j a$
$1 S G=$ TOP characters write-NLZ $=$ FOC do.PST
'I wrote characters.' (argument of a verb)
The last nominalizer is -madəa ('fail to'), which can precede a copula verb as a nominal predicate, and also can be an argument of the verb -sir 'do' (although it cannot take any case clitics).

[^31]a. an hon=ba jum-madəə ja-ta that book = ACC read-fail.to COP-PST
'(I) failed to read that book.' (nominal predicate)
b. an hon=ba jum-madəə sja that book =ACC read-fail.to do.PST '(I) failed to read that book.' (argument of a verb)

### 6.2 Verbalization

As mentioned in $\S 3.5$ and $\S 5.1 .1 .3$, the verbalizer -sar/-sjar can attach to a PC stem, but it has some restrictions about its inflection and derivation; only three inflectional suffixes $-i$ (NPST), -oo (SUPP), and -n (NPST.ADN) can follow a verbalizer directly, and only a derivational suffix -joor (POL) can follow it.
a. an $k i \ddot{i}=n u \quad t a a-s a-i$
that tree $=$ NOM tall-vLZ-NPST
'That tree is tall.'
b. an $k i \ddot{i}=j a$ taa-sar-oo
that tree $=$ TOP tall-vLZ-SUPP
'That tree is supposed to be tall.'
c. taa-sa-n $k \ddot{\ddot{u}}=n u \quad a-i$
tall-vLZ-NPST.ADN tree = NOM exist-NPST
'There is a tree that is tall.'
d. an $k \ddot{i}=j a \quad$ taa-sa-joo- $i$
that tree $=$ TOP tall-vLZ-POL-NPST
'That tree is tall.'

### 6.3 PC stem-making derivation

Yuwan has a special type of affix, the PC affix, which can derive a PC stem from a plain verbal stem. Yuwan has two PC affixes, -cja 'want' and -cjagi 'seem'. ${ }^{42}$ A derived PC stem can take the same affixes as a non-derived PC stem, i.e. PC root (e.g. taa- 'tall').
a. wan=na an hon=ba jum-cja-sa-i
$1 \mathrm{SG}=$ TOP that book $=$ ACC read-want-VLZ-NPST
'I want to read that book.'
b. an $k \ddot{i}=j a$ toori-cjagi-sa-i
that tree $=$ TOP fall-seem-VLZ-NPST
'That tree seems to fall.'

[^32]
## 7 Clitics

Syntactically, a clitic attaches to a phrase or a clause, its grammatical host, but phonologically, it attaches to a word, its phonological host.

### 7.1 Conjunction clitics

Yuwan has two conjunction clitics =sjuti 'and' and =ban 'although'. First, $=$ sjuti expresses coordination and can attach to a negative finite inflection, a negative medial inflection, or a PC nominal.
(78) $\quad$ hon $=b a \quad$ jum-an(-nən) $=s j u t i, a s i-d i=b \partial i$
book $=$ ACC read-NEG-MED $=$ and play-MED $=$ only
'(He) does not read any books, and is always playing.'
Next, = ban expresses concessive meaning and can attach only to adnominal forms.
(79) Pmoo həə-sa-n=ban, kaтәə judəə-sa=nu horse.TOP fast-vLZ-NPST.ADN $=$ although turtle.TOP slow-NLZ $=$ NOM 'While a horse is fast, a turtle is slow.'

### 7.2 Modal clitics

In this section, nine modal clitics are examined: =joo (CNF1), $=j \not \partial \partial(C N F 2)$, $=j a a$ (SLD), $=d o o(\mathrm{EMP}),=d a r o o(S U P P),=g a(i)(\mathrm{CNF} . \mathrm{Q}),=n a$ (YNQ), $=c i$ (QT), and $=b a /=b o o(\mathrm{PSU}) .{ }^{43}$

First, the clitic $=$ joo (CNF1) is used only with imperative inflection to confirm that the hearer will obey the directive given by the speaker.

$$
\begin{align*}
& \text { uroo } \quad \text { kuri }=b a \text { kam-na }=\text { joo }  \tag{80}\\
& \text { 2sG.NHON.TOP this }=\text { ACC eat-PROH }=\text { CNF1 } \\
& \text { 'You do not eat this, right?' }
\end{align*}
$$

The clitic $=j \partial \partial$ (CNF2) is used only with intentional inflection to confirm the hearer acknowledges the intention of the speaker, as in (81). The clitic =jaa (SLD) can follow verbs of intentional inflection and a nominalizer -sa/-sja, and it expresses the speaker's feeling of solidarity with the hearer, as in (82).

[^33](81) amaaci wan Tcjui ikj-oo =jəว (*ikj-oo=jaa)
that.place.ALL1 1SG one.CLF go-INT = CNF2 go-INT = SLD
'I will go there alone, right?'
(82) amaaci mazin ikj-oo=jaa. (*ikj-oo=jəə)
that.place.ALL1 together go-INT = SLD go-INT = CNF2
'(Let's) go there together.'
As can be seen above, -oo (INT) can express not only the intention to do something, as in (81), but also an invitation, as in (82). Furthermore, there is a restriction on co-occurrence of =jaa (SLD) and -oo: the two cannot co-occur if the sentence expresses an intention. On the other hand, $=j \not \partial \partial$ (CNF2) cannot be used with -oo if the sentence expresses an invitation.

This phenomenon is akin to an inclusive/exclusive distinction. According to Payne (1997: 45), "first person inclusive includes speaker and hearer" and "first person exclusive includes the speaker and a non-speech act participant, but excludes the hearer". Concerning the intentional suffix in Yuwan, $-00=j \partial \partial$ ( INT = CNF2) can be used only as "exclusive", but $-00=j a a($ INT = SOL) can be used only as "inclusive" (table 28).

Table 28: Uses of $=$ jaว and $=j a a$ with the intentional suffix -oo

| Meaning of -oo (INT) | $=$ jəə | $=j a a$ |
| :--- | :---: | :---: |
| "exclusive" meaning | + | - |
| inclusive" meaning | - | + |

The clitic $=$ doo (EMP) can follow nominals and verbs and marks emphasis.
(83) an $\uparrow c j u=g a \quad$ waa zjuu=doo
that person = NOM my father = EMP
'That person is my father.'
The clitic = daroo (SUPP) can follow nominals and verbs expressing a suppositional meaning, as in (84a). The clitic $=g a(i)(\mathrm{Q})$ is only used with the clitic $=$ daroo (SUPP) and marks a question about the sentence, as in (84b).
a. an Pcjoo akira=daroo
that person.TOP Akira = SUPP
'(I) suppose that person is Akira.'
b. an ?cjoo sjensjee=ja ar-an=daroo=ga(i)? that person.TOP teacher = TOP COP-NEG.NPST $=$ SUPP $=\mathrm{Q}$
'(I) suppose that that person is not a teacher, is that right?'

The clitic $=n a(Y N Q)$ can follow nominals and verbs and expresses a question about the proposition of the sentence.
(85) urakjoo sima + jumita $=n u \quad$ waka-ju- $n^{44}=n j a$ ?

2 PL.NHON.TOP village + language $=$ NOM understand-IPFV-NPST $=\mathrm{YNQ}$
'Do you understand the language of (our) village?'
The clitic $=c i(\mathrm{QT})$ can follow any kind of word and functions as a quotation marker. It also sometimes function as a complementizer that makes a complement out of a linguistic expression. Noonan (1985: 42) defines complementation as "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate". As can be seen in the following example, the clitic $=c i$ attaches to adnominal forms of verbs.
akira $=g a \quad u n=k a c i \quad i k-j u-n=c i=d o o$
Akira $=$ NOM sea $=$ ALL1 go-IPFV-NPST.ADN $=$ QT $=$ EMP
'Akira (said) that (he) goes to the sea. ${ }^{45}$
Last, the clitic $=b a /=b o o$ (PSU) can follow the clitic $=c i(\mathrm{QT})$ to express the speaker's intention to persuade the hearer.

$$
\begin{align*}
& \text { wan =ga } \quad i k-j u-n=c i=b a(/=b o o)!  \tag{87}\\
& \text { 1SG = NOM go-IPFV-NPST.ADN = QT = PSU } \\
& \text { '(I said) that I would go (so please don't mind)!' }
\end{align*}
$$

### 7.3 Limiter clitics

Yuwan has three limiter clitics, ${ }^{46}=n$ 'also', $=$ gadi (EMP) and $=$ bai 'only'. They can attach to both nominals and verbs and can follow any case maker clitic, except the nominative and accusative. The nominative and accusative case markers are omitted when they would co-occur with a limiter clitic, e.g. in 'dog' + $=n u(\mathrm{NOM})+=b a i$ 'only' $\rightarrow$ in $=b \partial i(* i n=n u=b a i)$.
a. in=bai wu-i
dog $=$ only exist-NPST
'There is only a dog.' (with nominal)
b. hon=ba $k a-c j i=b \partial i \quad w u-i$ book $=$ ACC write-MED $=$ only PROG-NPST
'(He) is only writing a book.' (with medial verb)

[^34]
### 7.4 Focus/topic clitics

Yuwan has two focus markers, $=d u$ and $=g a$, and a topic marker, $=j a$. They can attach to nominals and verbs as well as limiter clitics. These clitics can follow any case marker, except the nominative one. In the case they would follow a nominative case marker, the latter is omitted, e.g. wan (1SG) $+=g a$ (NOM) $+=d u$ (FOC) $\rightarrow w a n=d u(* w a n=g a=d u$ ).

The focus marker $=d u$ is used in declarative clauses, as in (89), or in yes-no interrogative clauses, as in (90). On the other hand, =ga is used in wh-question interrogative clauses, as in (91).
(89) $k u r i=b a=d u(*=g a) ~ j u m-j u-i$
this $=$ ACC $=$ FOC read-IPFV-NPST
'(I) read this.'
(90) uroo kun hon $=b a=d u(*=g a)$ jum-jur-ui?

2sG.NHON this book $=$ ACC $=$ FOC read-IPFV-FOC.YNQ
'Will you read this book?' (yes-no question)
(91) uroo $\quad n u u=b a=g a(*=d u)$ jum-jur-u?

2sG.NHON.TOP what $=\mathrm{ACC}=$ FOC read-IPFV-FOC.WHQ
'What will you read?' (wh-question)
As can be seen above, $=d u$ and $=g a$ are used in interrogative clauses, and the verbal predicate takes a different inflection, -ui or $-u$, in each case (see also §5.2.1). The clitic $=d u$ cannot appear with $-u$, while $=g a$ cannot appear with -ui. This kind of phenomenon, where the presence of a focus clitic correlates with the type of verbal inflection, is known as kakari-musubi in Japanese linguistics (Shibatani 1990). According to Shibatani (1990), regarding classical Japanese, and Shimoji (in press), about Irabu Ryukyuan, the verbal inflection correlated with a focus marker is (or can be) identical with the form appearing in relative (adnominal) clauses. In Yuwan, however, the form appearing in such focus constructions differs from that of relative clauses; the relative inflection $-n /-\tan$ (see $\S 5.2 .2 .1$ ) is completely different from the forms above, a situation uncommon among the Japonic languages.

The clitic =ja marks the topic of a sentence.
(92) $s \not \partial \partial=j a \quad s i k-a n$
alcohol = TOP like-NEG.NPST
'[lit.] About alcohol, (I) do not like (it).'

## 8 The simple sentence

### 8.1 Speech acts

There are three types of clauses that correspond to the three major speech acts (Lyons 1977) (statement, question, and command): declarative clause, interrogative clause, and imperative clause.

### 8.1.1 Declarative clause

A declarative clause takes the following inflections: -i (NPST) or -tar (PST).
(93) $w a n=g a$ an hon=ba tu-ju-i/tu-ta

1 SG $=$ NOM that book $=$ ACC take-IPFV-NPST/take-PST
'I take/took that book.'

### 8.1.2 Interrogative clause

Yuwan has three inflections, $-m i,-u i,-u$, and one clitic, $=n a$, that appear in interrogative clauses. The markers $-m i,-u i$, and $=n a$ are used for yes/no questions, while - $u$ is used for wh-questions.

### 8.1.2.1 Yes/no question

A yes/no question is marked by an inflectional suffix or by a clitic. The suffix -ui requires the presence of a focused argument, as in (94b), contrary to -mi in (94a). The clitic = na may take a focused argument, as in (94a) (see also §7.4 for focus clitics and $\S 7.2$ for question clitics).
a. $k u r \dot{i}=b a(*=d u) t u-j u-m \dot{i}$ ?
this $=$ ACC $(=$ FOC $)$ take-IPFV-YNQ
'Will (you) take this?'
b. $k u r i=b a=d u \quad t u$-jur-ui ?
this $=\mathrm{ACC}=$ FOC take-IPFV-FOC.YNQ
'Will (you) take this?'
c. $k u r i=b a(=d u) \quad t u-j u-n=n j a$ ?
this $=\mathrm{ACC}(=$ FOC $)$ take-IPFV-NPST-YNQ
'Will (you) take this?'

### 8.1.2.2 Wh-question

Basically, a wh-question includes the focus marker $=g a$ attached to an interrogative word and a verbal predicate carrying the suffix $-u$ (see $\S 7.4$ for details).
(95) $n u u=b a=g a \quad t u-j u r-u$ ?
what $=$ ACC $=$ FOC take-IPFV-FOC.WHQ
'What will (you) take?'

### 8.1.3 Imperative clause

An imperative clause takes either $-\dot{t}$ (IMP) or -na (PROH).
a. kuri=ba tur-i!
this = ACC take-IMP
'Take this!' (imperative)
b. kuri=ba tun-na!
this $=$ ACC take- PROH
'Don't take this!' (prohibitive)

### 8.2 Equation, proper inclusion, location and possession

### 8.2.1 Equation and proper inclusion

An equative clause expresses that the subject of the clause is equal to the entity indicated by the nominal predicate, e.g., He is my father. Proper inclusion indicates the subject of the clause is a member of the referent of a nominal predicate, e.g. he is a teacher (see also Payne 1997). Yuwan has no grammatical distinction between the two notions. In both cases, the subjects have the same case marker, i.e. nominative case.
a. agga waa Rcjan
that.person.NOM my father
'That person is my father.' (equation)
b. agga sjensjee
that.person.NOM teacher
'That person is a teacher.' (proper inclusion)

### 8.2.2 Location and possession

Location (98a) and possession (98b) are expressed by the same construction in Yuwan, with a locative case marker and an existential verb.

> a. jamməə = nan = nja wututu $=n u \quad w u-i$ garden = LOC1 = TOP younger.sibling = NOM exist-NPST 'There is a younger sibling in the garden.'

$$
\begin{aligned}
& \text { b. wan = nan = nja wututu = nu } \quad \text { wu- } i \\
& 1 \mathrm{SG}=\mathrm{LOC} 1=\text { TOP younger.sibling = NOM exist-NPST } \\
& \text { 'I have a younger sibling.' (lit. 'There is a younger sibling at me.') }
\end{aligned}
$$

### 8.3 Negation

Negation is expressed morphologically and/or analytically. The negation of a verb is expressed by a negative inflection as in (99a); on the other hand, the negation of the existence of an inanimate referent is expressed by a negative existential verb with a negative inflection as in (99b).
(99)

> a. $w a n=n a \quad i k j-a n=d o o$
> $1 \mathrm{SG}=\mathrm{TOP}$ go-NEG.NPST = EMP
> 'I won't go.'
b. səə=ja nə-n
alcohol $=$ TOP not.exist-NEG.NPST
'There is not any alcohol.'

### 8.4 Valency-changing operations

Yuwan has three valency-changing operations: causative, passive and malefactive.

### 8.4.1 Causative

Causative voice is expressed by the suffix -as, which introduces a causer with a nominative case marker, and a causee with a dative case marker. As can be seen below, the original subject marked by $=g a$ (NOM) in the sentence of a non-derivational verbal predicate becomes an indirect object marked by $=n$ (DAT), and a new subject marked by $=g a$ (NOM) is introduced.
a. akira=ga hon=ba ju-da

Akira $=$ NOM book $=$ ACC read-PST
'Akira read a book.'
b. $\quad$ wan $=g a \quad$ akira $=n \quad$ hon $=b a \quad j u m-a-c j a$
$1 \mathrm{SG}=$ NOM Akira $=$ DAT book $=$ ACC read-CAUS-PST
'I made Akira read a book.'

### 8.4.2 Passive

Passive voice is expressed by the suffix -ar(ir), which introduces an actor with a dative case marker, and an undergoer with a nominative case marker. As can be seen below, the original subject marked by $=g a$ (NOM) in the sentence of
a non-derivational verbal predicate becomes an indirect object marked by $=n$ (DAT), and the original direct object marked by $=b a$ (ACC) becomes a subject marked by $=g a$ (NOM).
a. zjuu=ga akira=ba uc-cja
father $=$ NOM Akira $=$ ACC hit-PST
'The father hit Akira.'
b. akira=ga zju=n ut-at-ta

Akira $=$ NOM father $=$ DAT hit-PASS-PST
'Akira was hit by the father.'

### 8.4.3 Malefactive

The malefactive (Shimoji 2008a) is marked by the suffix -ar(ir) (which is formally identical with the passive). It introduces a malefactee with a nominative case marker (although it is replaced by a topic marker in the following example), and a malefactor with a dative case marker. As explained by Shimoji (2008a: 256), the verb's valency increases in the malefactive (with introduction of a malefactee), which is the major difference with the passive.
(102)
a. $a m i=n u \quad h u-t a$
rain $=$ NOM fall-PST
'It rained.' (lit. 'rain fell')
b. wan=na $a m \dot{i}=n$ hur-at-ta
$1 \mathrm{SG}=$ TOP rain $=$ DAT fall-MAL-PST
'I was bothered by the rain (that) fell.'

### 8.5 Tense, aspect and mood

### 8.5.1 Tense

Yuwan has a non-past/past opposition in tense, which is marked by verbal inflections.
a. $\quad w a n=g a \quad k a k-j u-i$
$1 \mathrm{SG}=$ NOM write-IPFV-NPST
'I will write (it).'
b. $w a n=g a \quad k a-c j a$
$1 \mathrm{SG}=\mathrm{NOM}$ write-PST
'I wrote (it).'

### 8.5.2 Aspect

Aspect in Yuwan is expressed morphologically or analytically.
a. $\quad a k i r a=g a \quad z i i=b a \quad k a k-j u-i$
Akira $=$ NOM character $=$ ACC write-IPFV-NPST
'Akira writes/is writing characters.'
b. akira=ga zii=ba ka-cju-i

Akira $=$ NOM character $=$ ACC write-PROG-NPST
'Akira is writing characters.'
c. $a m a=n a n \quad z i i=n u \quad k a-c j \partial-i$
that. place $=$ LOC1 character $=$ NOM write-RES-NPST
'Characters are written there.'
It is worth noting that in the resultative aspect (104c), the actor role is not expressed. Only the undergoer is expressed and takes a nominative case marker.

An analytic means to express aspect is to use auxiliary verbs as in (105a), or compounding as in (105b), or by an adverb derived from a reduplication of a verbal root as in (105c).

> a. $a m a=n a n \quad z i i=b a \quad k a-c j \ddot{z} \quad n n j-i!$
> that.place = LOC1 character=ACC write-MED try.to-IMP
> '(Why don't you) try to write characters there!'
b. uroo zii = ba $\quad k a k-j+a g i r-\dot{-}=j o o$
2SG.NHON.TOP characters = ACC write-SE + raise-IMP = CNF1
'You write all the characters, right?'
c. nasi=ba ukkaci irí+iri $\quad$ sju- $i$
pear $=$ ACC that.ALL1 RED + put.in do.PROG -NPST
'(He) is putting the pears into that again and again.'

### 8.5.3 Mood and modality

In Yuwan, modality is expressed by an inflectional suffix, a modal clitic, or an adverb. The first example includes the modal affix -mai, which expresses obligation, the second example the modal clitic = daroo, which expresses supposition, and the third example the modal adverb abinəa, which can express an irrealis mood. This adverb has to co-occur with a verb taking the affix -jur (IPFV).
a. wan=na kun hon=ba jum-mai=doo
$1 \mathrm{SG}=\mathrm{TOP}$ this book $=\mathrm{ACC}$ read $-\mathrm{OBL}=\mathrm{EMP}$
'I have to read this book.' (obligation)
b. akiroo an hon=na jum-an=daroo

Akira.TOP that book $=$ TOP read-NEG $=$ SUPP
'(I) suppose that Akira will not read that book.' (supposition)
c. abinəə an hon=ba jum-ju-tan mun=doo

IRLS that book = ACC read-IPFV-PST.ADN thing = EMP
'(I) was about to read that book (but I did not read it).' (irrealis)

### 8.6 Information structure

In this section,two types of constructions relevant to information structure are described: topicalization and focus construction.

### 8.6.1 Topicalization

The term topic is here used in the following meaning: "the topic of a sentence is the thing which the proposition expressed by the sentence is About" (Lambrecht 1994: 118). Yuwan has a clitic that marks an information as topical. The following example is taken from a conversation between two persons.
a. A: uroo taruu ?

2sG.NHON.TOP who
'Who (are) you?' (lit. 'About you, who (is it)?')
b. B: wan=na akira=doo
$1 \mathrm{sG}=\mathrm{TOP}$ Akira $=\mathrm{EMP}$
'I am Akira.' (lit. 'About me, (it is) Akira')

### 8.6.2 Focus construction

The term focus here refers to the point of emphasis. Focus is marked by the clitic $=d u$ in declarative clauses.
(108) mura-təə $a r$-an $=d o o . \quad k o-i=d u \quad s j i=d o o$
receive-MED.TOP COP-NEG.NPST $=$ EMP buy-NLZ $=$ FOC do.MED $=$ EMP
'(I) have not received (it). (But I) did buy (it).' (declarative)
Moreover, $=d u$ can mark a focused argument in a yes-no interrogative clause, as in (109); on the other hand, =ga marks a focused interrogative word in a wh-question interrogative clause, as in (110) (see §7.4 for details).
(109) uroo kun hon $=b a=d u \quad$ jum-jur-ui?

2sG.NHON.TOP this book = ACC = FOC read-IPFV-FOC.YNQ
'Will you read this book?' (yes-no question)

```
(110) uroo diru=ba=ga jum-jur-u?
2SG.NHON.TOP which = ACC = FOC read-IPFV-NPST.WHQ
'Which one will you read?' (wh-question)
```

The other inflections do not take any focus clitics, although -mai (OBL) can appear with $=d u$, e.g. kun hon $=b a=d u$ jum-mai $=d o o$ (this book $=\mathrm{ACC}=$ FOC read-OBL $=\mathrm{EMP}$ ) '(I) have to read this book'.

## 9 The complex sentence

This chapter describes complex clause structures, noting three major clause linkage types: (1) coordination, (2) clause chaining, and (3) subordination.

### 9.1 Overview of complex clause structure

In Yuwan, coordination is marked by a conjunction clitic or by a simple juxtaposition. Clause-chaining consists of a series of non-finite, medial clauses followed by a finite clause. Subordination falls into adverbial subordination (where the subordinate clause functions as a predicate adjunct), adnominal subordination (where the subordinate clause functions as an adnominal), and complementation (where the subordinate clause functions as an argument).

### 9.2 Coordination

Coordination links two main clauses. Yuwan has a conjunction clitic which is used in verbal predicate in negative clauses, as in (111). A simple juxtaposition is used to link two clauses that include PC nominals as predicates, as in (112).
(111) hon $=b a \quad$ jum-an $=s j u t \dot{\text { t }}$, $\quad a s i-d u-t a$
book = ACC read-NEG-MED $=$ and play-PROG-PST
'(He) did not read any books, and was playing.'
(112) tin $=n a$ taa-sa, un=na huka-sa
sky $=$ TOP high-NLZ sea $=$ TOP deep-NLZ
'The sky is high, and the sea is deep.'

### 9.3 Clause-chaining

Clause chaining consists of a series of non-finite, medial clauses followed by a finite clause. The verb in medial clauses, called a medial verb, does not exhibit the non-past/past tense opposition.
(113)
daiban $+g \ddot{i}=n u \quad a-t \dot{t}, \quad j i n g a=n u \quad$ hasigo $k i ̈ z-t i z, \quad n a s i=b a$ big + tree $=$ NOM exist-MED man $=$ NOM ladder prop-MED pear $=$ ACC
?tiï Ptiï mu-tu-n wake
one.CLF one.CLF pick.up-PROG-NPST.ADN DSC
'There is a big tree, and a man props a ladder on (the tree), and (he) is picking up pears one by one.'

### 9.4 Subordination

### 9.4.1 Adverbial subordination

Yuwan expresses adverbial subordination (where the subordinate clause functions as a predicate adjunct) by an inflection (i.e. converb inflection), as in (114), or by a clitic, as in (115).
(114) $k j u u=j a \quad n i k a n=b a \quad$ mur-an-ba, app-igja
today $=$ TOP orange $=$ ACC pick.up-NEG.NPST-because play-CVB.PUR
koo $=$ joo
come.IMP = CNF1
'(We) will not pick up oranges today, so come and play.'

$$
\begin{align*}
& \text { wan = na ik-ju-n=ban, uroo } \quad i k-j u-n=n j a ?  \tag{115}\\
& \text { 1SG = TOP go-IPFV-NPST.ADN = although } 2 \text { 2SG.TOP go-IPFV-NPST = YNQ } \\
& \text { 'I will go but will you?' }
\end{align*}
$$

### 9.4.2 Adnominal subordination

Yuwan expresses adnominal subordination (where the subordinate clause functions as an adnominal) by inflection (see §5.2.2.1).
(116) kurəə akira=ga ju-dan hon
this.TOP Akira = NOM read-PST.ADN book
'This is a book that Akira read.'

### 9.4.3 Complementation

Yuwan expresses complementation (where the subordinate clause functions as an argument) through clitics (see §7.2).

$$
\begin{array}{lc}
u c-j u-n=c i & j u-t a=j a a  \tag{117}\\
\text { hit-IPFV-NPST.ADN }=\text { QT } & \text { say-PST }=\text { SLD }
\end{array}
$$

'(He) said that (he was going to) hit (something).'

## Sample text: the Pear story

(т.1) daiban+gït=nu $a-t \dot{t}, \quad j i n g a=n u$ hasigo $k \ddot{i}-t \dot{t}, \quad n a s i=b a$ big + tree $=$ NOM exist-MED man $=$ NOM ladder prop-MED pear $=$ ACC ?tï̈ ?tï̈ mu-tu-n wake one.CLF one.CLF pick.up-PROG-NPST.ADN DSC
'There is a big tree, and a man props a ladder on (the tree), and (he) is picking up pears one by one.'
(т.2) $k \ddot{i}=n u \quad$ sja=nan=nja $k a g o=n u \quad$ Ptaa-ci $u$-cju-tit, tree $=$ GEN under. part $=$ LOC1 $=$ TOP basket $=$ GEN two-CLF put-PROG-MED '(He) is putting two baskets under the tree, and'
(т.3) mu-tí (cjəəoo) un kago=kaci ziisan=na
pick.up-MED ? that basket $=$ ALL1 old. man $=$ тоР
iri-tu-n wake
put.in-PROG-NPST.ADN DSC
'The old man picked (the pears) up, and put (them) into that basket.'
(т.4) hasigo = kara sji (un kun kun mak-i, naa,) ma-cju-n ladder = ABL do.MED that this this roll-NLZ FIL roll-PROG-NPST.ADN
sankake $=n k j a=s j i \quad h u k$-jagacinaa, $(u k k a c i=d u=b o)$
triangle $=$ APPR $=$ INST wipe-CVB.SIM that.ALL1 $=$ FOC $=$ ?
'(He) did (it) from the ladder, and (he) is wiping (the pears) with the triangular (scarf) that (he) is wearing.'
(т.5) gan, $($ maga $=n \quad \operatorname{maga}=m i t a i=n a)$
there grandchild = GEN grandchild = look.like = GEN
$($ maga $=$ micjai $=n a) \quad$ maga $=$ minsjan $\quad ? k w a=n u \quad$ mi-cjai, grandchild $=$ look.like $=$ GEN grandchild $=$ look.like child $=$ NOM three-cLF e, ?cjui ?cjï,
FIL one. CLF come.MED
'There are three children looking like grandchildren, ah (no!) a child came, and'
(т.6) $k a g o=n u \quad$ Ptiï $\quad$ ci-di $\quad i k-j u-n \quad$ wake, zitensja $=n a n$ basket $=$ GEN one.CLF lift-MED go-IPFV-NPST.ADN DSC bicycle $=$ LOC1 '(the child) lifted a basket onto the bicycle, and goes.'
(т.7) de cjuuto $i k-i=n j a n z i t e n s j a ~ h a n k ə \partial r-a-c i, \quad k u g \partial r-a-c i$, and on.the.way go-NLZ = ? bicycle fall-CAUS-MED fall-CARS-MED baramuk-a-sjan wake scatter-CAUS-PST.ADN DSC
'And on the way (the child) made the bicycle fall, and made (the pears in the basket) scatter.'
(т.8) un toor-igakari $=$ no san-nin $=$ ga, that pass-NLZ = GEN three-CLF = NOM
'There are three passing people' (spoken in Standard Japanese)
(т.9) toor-igakari $=c i=n k j o o \quad i-c j a \quad i k-a n=j a a$
pass-NLZ $=$ QT $=$ APPR. TOP say-PST correct-NEG $=$ SOL
'(It) is not correct to say something like 'toorigakari' (in Standard Japanese).'
(т.10) tuisina $=c i=d u . \quad$ tuu-ju-n
$2 c j u=n u \quad w u-t i$,
passing $=$ QT = FOC pass-IPFV-NPST.ADN person = NOM exist-MED
'(I have to say) 'tuisina'. There was a person who is passing, and'
(т.11) un (mi-cjai tu) mi-cjai tuu-ti, (mi-cjai tuu-ti, ...) that three-ClF? three-ClF pass-MED three-CLF pass-MED 'those three people passed.'
 fall-RES-NPST.ADN child = GEN bicycle = ACC raise-MED three-CLF $=$ INST (kaz) kasjaz sjï, kago=kaci iri-ju-n wake ? help do.PST basket = ALL1 put.in-IPFV-NPST.ADN DSC
'(They) picked up the bicycle of the child who had fallen, and the three helped (the child), and (they) put (the pears) into the basket.'
(т.13) iri-tu-n
mi-cjai $=j a \quad$ wakari-ti, (seton)
put.in-PROG-NPST.ADN three-CLF = TOP part-MED ?
'The three people who were putting (pears) in (the basket) parted, and'
(т.14) atoora hurikaep-poo, after.ABL look.buck-CVB.CND
'when (they) look back later,'
(т.15) un $2 k w a=g a$ mada boosi utu-cjəz-tattu
that child = NOM still hat drop-RES-PST.because
'because that child still had left (his) hat,'
(т.16) saki izjan mi-cjai=ja kondo mata isjoobiki hu-cjï, un ahead go.PST.ADN three-CLF $=$ TOP this.time again whistle blow-MED that $? k w a=b a a b \dot{-}-t \dot{t}$
child = ACC call-MED
'This time again, the three people who went ahead whistled, and called that child.'
(т.17) zitensja=n nur-u-n $\quad 3 k w a=b a$ abi-təəra, boosi bicycle $=$ DAT ride-SE-NPST.ADN child $=$ ACC call-MED.after hat
wata-cji
hand.in-MED
'After (they) called the child who rides on the bicycle, (they) handed him the hat.'
(T.18) $($ un cuide $=n i \quad$ ija)
that opportunity $=$ DAT no
'(At) that opportunity, no' (spoken in Standard Japanese)
(т.19) gansjan tuki mata, joonasi = nu mii-cí (hora) mura-tì
that time again pear = GEN three-CLF FIL receive-MED
ccjaroo
come.PST.SUPP
'At that time, again, (I) suppose (that they) received three pears.'
(т.20) un mi-cjai mata (ka-ti) ka-ti ik-ju-n wake=jo
that three-CLF again eat-MED eat-MED go-IPFV-NPST.ADN DSC = EMP
'Again, those three people go, eating (the pears).'
(т.21) sinni mata un mi-cjai=ja mudu-tu-i=nkja ?cja
then again that three-CLF $=$ TOP return-PROG-NLZ $=$ APPR come.PST
'Then those three people are returning again.'
(т.22) (tta) ari tada uma (aik-ju-n) sanpo = sji
? that.person still that.place walk-IPFV-NPST.ADN walking $=$ INST
aik-ju-n $\quad$ Pcju $=n k j a \quad n a-t i=d a r o o$
walk-IPFV-NPST.ADN person = APPR COP-MED $=$ SUPP
'(I) suppose (that) that person is a kind of person who still walks there.'
(т.23) ziisan $=n u$ jukkadì mu-tì, sjaaci
old.man $=$ NOM throughout pick.up-MED below.ALL1
$u r u s-i+u r u s-i=d u \quad$ sup-pa
unload-NLZ + unload-NLZ $=$ FOC do-because
'Because the old man picked up (the pears) throughout, and unloaded (them) to the ground again and again,'
(т.24) gan sini uma=kaci mata, hinzjaa suc-cju-n
there then that.place $=$ ALL1 again goat pull-PROG-NPST.ADN
$j i n g a=n u$
man $=$ NOM
'Then a man who is pulling a goat, is there again,'
(т.25) hinzjaa=nu Ptï suc-cju-n $\quad$ ?cju=nu gan
goat $=$ GEN $\quad$ one.CLF pull-PROG-NPST.ADN person $=$ NOM there
2cjan $=c i=j o o$
come.PST.ADN = QT = EMP
'A person who is pulling a goat came there.'
(т.26) $h i n z j a=i \quad \operatorname{sim} a+h i n z j a=i \quad a r-a n=b a n$
goat $=\mathrm{TOP}(?)$ village + goat $=$ TOP(?) COP-NEG $=$ although
'Although the goat is not a goat of (our) village.'
(т.27) hinzjaa (cuuci naa) tuisuzi $=d u$ izjattu, mata ato $=$ no goat ? FIL passing = FOC go.PST.because again after = GEN san-nin =ga mata mudu-tí $\quad$ ccjan=tu three-CLF $=$ NOM again return-MED come.PST.ADN $=$ ?
'Because the goat went and passed, the tree people behind returned and came (back) again.'
(т.28) un $\uparrow c j u=n k j o o u$ uma ai-cju-n that person = APPR.TOP that.place walk-PROG-NPST.ADN
?cju $=n k j a=$ daroo
person $=$ APPR $=$ SUPP
'Those people (are supposed to be) the people who are walking there.'
(т.29) ni-du mata zitensja=nu ?kwoo, ni-du mata $2 c j i=k a i$ ? two-time again bicycle = GEN child. TOP two-time again come. MED $=\mathrm{Q}$ ni-du $\quad$ ?cji $=k a i$ ?
two-time come. $\mathrm{MED}=\mathrm{Q}$
'Did the child of the bicycle come again, two times?'

## Abbreviations

| 1 | first person | GEN | genitive | POL | politeness |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | second person | HON | honorific | POT | potential |
| ABL | ablative | IMP | imperative | PRF | perfect |
| ACC | accusative | INDFZ | indefinitizer | PROG | progressive |
| ADN | adnominal form | INST | instrumental | PROH | prohibitive |
| ALL | allative | INT | intentional | PST | past |
| APPR | approximative | IPFV | imperfective | PSU | persuasive |
| ASC | associative | IRLS | irrealis | PUR | purposive |
| AVLZ | adverbializer | ITR | interrogative | Q | question |
| BEN | benefactive | LMT | limitative | QT | quotative |
| CAUS | causative | LOC | locative | RED | reduplication |
| CLF | classifier | MAL | malefactive | RES | resultative |
| CMP | comparative | MED | medial verb | RFL | reflexive |
| CND | conditional | N/A | not applicable | SE | stem extender |
| CNF | confirmative | NEG | negative | SG | singular |
| COP | copula | NHON | non-honorific | SIM | simultaneous |
| CVB | converb | NLZ | nominalizer | SLD | solidarity |
| DAT | dative | NOM | nominative | SUPP | suppositional |
| DIM | diminutive | NPST | non-past | TOP | topic |
| DSC | discourse marker | NUM | numeral | VLZ | verbalizer |
| DU | dual | OBL | obligative | WHQ | wh-question |
| EMP | emphatic | PASS | passive | YNQ | yes-no question |
| FIL | filler | PC | property concept |  |  |
| FOC | focus | PL | plural |  |  |

## Tsuken (Okinawan)

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Figure 1: Okinawa Islands

## Introduction

Tsuken has a remarkable case system. In particular, instruments are encoded not only by instrumental case, but also by locative case and ablative case. The choice of these case markers is based on the semantic characteristics of the noun to which the case marker is attached, or on the verb that follows the instrument NP.

## 1 The language and its speakers

Tsuken is spoken on the Tsuken Island, which is located approximately 5 kms south-east of the Yokatsu peninsula, in central Okinawa. The number of the local population is $557 .{ }^{1}$ They subsist via fishing and farming, and especially on the cultivation of carrots.

Tsuken is a dialect of Okinawan, a northern Ryukyuan language. Though the Tsuken island is geographically located in central Okinawa, its dialect shares several features with northern Okinawan varieties.

The local population is decreasing, and native speakers are now restricted to those over their seventies. Speakers in their fifties and sixties are also able to speak the local dialect to some degree, even though their speech is influenced by central Okinawan and standard Japanese. The younger generations are most often passive bilinguals, and the situation is worse in generations that are even younger.

Dialectal differences are almost absent, but some speakers do report that in past times there used to be a certain dialectal difference between the inner region and the coastal region.

## 2 Phonology

### 2.1 Vowels

The inventory of vowel phonemes is listed in table 1.

Table 1: Vowels

|  | Front | Central | Back |  |
| :---: | :---: | :---: | :---: | :---: |
| High | i |  |  | u |
| Mid |  | e |  | o |
|  |  |  |  |  |
| Low |  |  | a |  |

Long vowels are phonemically treated as vowel sequences. The mid vowels generally occur only in loanwords.

### 2.2 Consonants

The inventory of consonant phonemes is listed in table 2.

[^35]Table 2: Consonants

|  |  | Labial | Alveolar | Velar | Glottal |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Stops | voiceless | p | t | k | P |
|  | voiced | b | d |  |  |
| Fricatives | voiceless |  | s |  | h |
| Affricates | voiceless |  | c |  |  |
|  | voiced |  | z |  |  |
| Sonorants | nasal | m | n |  |  |
|  | flap |  | r |  |  |

Voice is distinctive for both stops and fricatives. The fricative /s/ is sometimes realized as an affricate [t 6 ] when palatalized, in which case the opposition with the palatalized variant of the affricate $/ \mathrm{c} /$ is neutralized. The affricate $/ \mathrm{z} /$ is realized as [z] or [dz]. The glides (and the vowels /a/ and /i/) contrast in glottalization, and this contrast is phonemically interpreted as the presence or the absence of a preceding glottal stop phoneme $/ 2 /$.
(1) /2jaa/ [?ja:] '2sg' vs. /Rwaa/ [?wa:] 'pig'
/jaa/ [ja:] 'house' vs. /waa/ [wa:] '1sg'

### 2.3 Syllable and mora

The syllable templates are as follows, with pattern (1) being the most basic.
(1) (C)V /kusi/ 'mouse', /pana/ 'flower'
(2) (C) G V /Rjaa/ 'you', /?waa/ 'pig'
(3) nC /nmaga/ 'grandchild', /nni/ 'chest'
(4) GV /jaa/ 'house, /waa/ 'I'
(5) CCGV /kkwa/ 'child'

In (2) the C slot is filled by a glottal stop phoneme, and the nucleus slot is mostly a long vowel as in (4). Only /kkw/ can appear in the onset slot of (5).

### 2.4 Tone/accent

Tsuken is considered to be an accent-less language, but there is much to be uncovered until any solid conclusions are drawn. With regard to intonation, clause-final lowering indicates various speech acts ranging from affirmative/ negative, questions, and rhetorical questions. Clause-final raising is rare in Tsuken.

## 3 Basic clause structure and phrase structure

### 3.1 Basic clause Structure

The basic word order of Tsuken is SOV for transitive clauses. However, in actual speech, neither core argument is frequently unexpressed.
(2) $\quad w a=n u \quad m o o i=\emptyset \quad$ mii-ga ik-un
$1 \mathrm{SG}=$ NOM dance $=$ CORE watch-CVB go-NPST
'I will go watch a dance.'
Declarative clauses are exemplified in the following examples.
(3)
a. $2 j a a=g a \quad k a k-u-n$

2SG = NOM write-NPST-SF
'You will write.'
b. taroo = ja kak-an

Tarō = TOP write-NEG
'Tarō won't write.'
c. taroo=ga kak-u=hazi

Tarō = NOM write-NPST = maybe
'Tarō should write.'
Interrogative clauses carry a sentence-final question marker.
(4) $2 j a a=g a \quad k a k-u=m i$
$2 \mathrm{SG}=\mathrm{NOM}$ write-NPST $=\mathrm{Q}$
'Will you write?'
Imperative clauses have a special verb form inflected for imperative mood, which may be further followed by a special particle.
a. miici=nka wakir-i
three $=$ Loc1 divide-IMP
'Divide it into three.'
b. 2jaa=ga kak-i=be!
$2 \mathrm{SG}=\mathrm{NOM}$ write-IMP $=\mathrm{DSC}$
‘Write!'
The intentional inflection is used for the predicate of persuasive clauses.
(6) manna kak-a
together write-INT
'Let's write together.'
Exclamatory clauses often have a stative verb as their predicate.
(7) uri saa anci usu-ha-ru!
this tea so.much thin-vLz-NPST
'This tea is really thin!'
Complex clause structures are exemplified as follows:

- Adverbial clause
(8) a. ruu =n $k w a-n s a a=n k a m-a n=k u t u \quad$ wattaa $=n i$
herself $=$ FOC child - PL $=$ FOC eat-NEG $=$ because us $=$ DAT
muta-u-ru= baajo
give-CAUS-NPST = DSC
'Because neither she nor the children ate it, she gave it to us.'
b. Rjaa=ga jaa=nka u-uri-ba $\quad w a=n u$
$2 \mathrm{SG}=\mathrm{NOM}$ house $=$ LOC1 COP-PROG-CVB.CND $1 \mathrm{SG}=\mathrm{NOM}$
suuw- $a=j a$
go-INT = DSC
'If you are home, I will go.'
- Adnominal clause
(9) anci takaaru=mun kooi-ru $c u=n u \quad u u=m i$ ?
so.much expensive $=$ things buy-NPST man $=$ NOM $\operatorname{COP}=\mathrm{Q}$
'Are there people who would buy such an expensive thing?'
- Nominal clause
a. 2jaa =ga iih- $\emptyset$-jee ${ }^{2} \quad$ jukucimuni ja $=h a$
$2 \mathrm{SG}=\mathrm{NOM}$ say-NLZ $=$ TOP lie $\quad$ COP $=\mathrm{DSC}$
'What you say is a lie.'
b. taroo=ga hwuuru=kutu icin wa-sa-ru kutu=bikaa

Tarō = NOM do = thing always bad-vLZ-NPST thing = only
'What Tarō does is always bad.'

## 4 Word classes

Four major word classes can be identified on the basis of their morphosyntactic properties.

[^36]
### 4.1 Nominal

The nominal is an uninflected word form which may carry a case marker or other role markers such as topic and focus markers. Nominals are sub-classified into common nouns, proper nouns, pronouns, interrogatives, and numerals.
a. niisan $=g a$
ka-sa-n
elder.brother = NOM write-PST-SF
'My elder brother wrote it.'
b. $i s i k u=n u \quad t u z i$
cousin = GEN wife
'The cousin's wife'
c. $t a a=g a \quad s a=g a$ ?
who $=$ NOM do $=\mathrm{Q}$
'Who does?'
d. hwusika=ni ikkwai=ja kusa kat-aku=munaa
two.days $=$ DAT once $=$ TOP green.vegetables eat-HBT $=$ DSC
'I eat green vegetables once every two days.'

### 4.2 Verb

The verb is an inflected word, and it can be inflected for medial verb form and imperative mood. The verb may also carry tense markers and aspect markers.
a. nmunijanaabi $=n k a$ nis-i $\quad n m u \quad k a-t u-t a-n=r o o$
pan = LOC1 boil-MED potato eat-PROG-PST-SF = DSC
'I boiled potatoes with a pan and ate them.'
b. miici=nka waki-ri
three $=$ LOC1 divide-IMP
'Divide it into three.'
c. sake kumikoozi=kara suku-ta-n=ro
liquor yeast $=\mathrm{ABL} \quad$ make- $\mathrm{PST}-\mathrm{SF}=\mathrm{DSC}$
'Liquor was made from yeast.'
d. wattaa $c u u=n u \quad$ nama sika-tu-n=ro
our man = NOM now use-PROG-SF = DSC
'Someone in our family is using it now.'
The so-called "adjective" is a subtype of verb: the property concept root is transformed into a verb stem by the suffixation of $-h a .^{3}$

[^37](13) a. uri saa suu-ha-n= roohja this tea thin-vLZ-SF=DSC 'This tea is thin.'
b. tuunaa =tu uri=tu ii-ti maa-hat-ta-n tuna $=$ ASC this = ASC put-CVB delicious-VLZ-PST-SF
'Tuna and this were mixed, and it was good.'

### 4.3 Interjection

Interjections are uninflected words which cannot carry a case marker, and are thus distinguished from nominals. Interjections do not modify other words, but rather they are independent utterances themselves.
a. Pakkee aminaka = kara acc-i kis-i!
oh in.the.rain = ABL walk-MED come-MED
'Oh dear, you have walked in the rain!'
b. Pi ?i jaa=nka un=roo
yes yes house $=$ LOC1 COP $=$ DSC
'Yes, I'm home.'

### 4.4 Adverb

Words other than those discussed above are collectively called adverbs. This catch-all category includes predicate modifiers such as zikoo 'very', manna 'together' or picji ~ piccjii 'frequently', and onomatopoeic words such as pisjupisju 'swish-swash'.

## 5 Basic morphology

### 5.1 Morphological typology

### 5.1.1 Derivational morphology

Word-class changing derivation by affixation includes verb-to-noun derivation.
a. hontoo ka-jaa
main.island visit-NLZ
'island visiting'
b. kwaa mu-jaa
child nurse-NLZ
'baby-sitting'

### 5.1.2 Compounding

There are compound nouns and compound verbs. Compound nouns are formed by connecting two noun roots or by connecting a property concept root and a noun root.

- Noun root + Noun root
a. inagu + sooree
woman + brother
'sister'
b. tida + mii
sun+inside
'in the sunlight'
- Property concept root + Noun root
(17) naga $+a m i$
long + rain
'long rain'
A compound verb is formed by connecting a property concept root and a verb root or by connecting a noun root and a verb root.
- Property concept root + Verb root
a. isunaa + sun
busy + do
'be busy'
b. mikegee + sun
hateful+do
'to hate'
The above type of compound is used when the speaker talks about a third person or about himself from an objective point of view.
- Noun root + Verb root
a. tempura + sun
tempura + do
'make tempura'
b. joosaiten + sun
tailor + do
'to tailor'
In this type of compound, the verb root denotes the action related to the concept denoted by the noun root.


### 5.1.3 Reduplicated form

The reduplicated form is a full reduplication of a property concept root followed by a suffix -tu. A reduplicated form functions adverbially.
(20) sabi+sabi-tu sun
lonely + lonely-AVLz do
'It seems to be lonely.'

### 5.2 Basic nominal morphology

Nominals are not inflected and have only derivational morphology. Nominal derivational affixes include the diminutive and plural suffixes.

### 5.2.1 Diminutive

The diminutive affix is attached to various kinds of noun stems without respect to animacy. Moreover, it may attach to a stem that designates direction and location, with the meaning of 'somewhere around'.
(21)
a. nkazi-gwaa
centipede-DIM
'centipede'
b. kusui-gwaa
medicine-dIM
'medicine'
c. waabi-gwa
above-DIM
'around above'

### 5.2.2 Plural

The plural suffixes are-taa and -nsa. In addition to the expected plural meaning, these suffixes also express the location at which the referent is situated.
a. paapa-taa grandmother-PL
'grandmothers'
b. kwa-nsaa
child-PL
'children'
c. sensee-taa $=$ si $\quad i k-u-n$
teacher-PL = ALL go-NPST-SF
'(She) will go to the teacher's house.'

### 5.3 Basic verbal morphology

Tsuken verbs fall into three major classes in terms of inflectional morphology.

- Regular verbs 1: akkun 'walk', kamun 'eat', numun 'drink', etc.
- Regular verbs 2: urin 'go down', utin 'fall', kiin 'kick', etc.
- Irregular verbs: sun 'come', sun 'do', etc.

Table 3: Finite inflection

|  | Affirmative Negative |  |  |  |
| :--- | :--- | :--- | :--- | :--- | Example jum 'read'

Regular verbs 1 and 2 are easily distinguished by the formation of negatives: -an for Regular verb 1, and -ran for Regular verb 2. Thus we have Regular verb 1 forms like jum-an, 'don't read', num-an, 'don't drink', and kam-an, 'don't listen', whereas we have Regular verb 2 forms like uri-ran, 'don't go down', uti-ran, 'don't fall', and siti-ran, 'don't throw (it) away’.

## 6 Argument marking

### 6.1 Case Marking

As listed in table 4, there are thirteen case forms, including one zero case form. There are two homophonous case forms, allative $=s i$ and instrumental $=s i$, but they have different historical origins. The nominative and the genitive are formally syncretized.

## Nominative (NOM)

(23)
a. waa=ga uui-ne $a m a=r u \quad$ oo-ta=mun
$1 \mathrm{SG}=\mathrm{NOM}$ COP-CVB there $=\mathrm{FOC} C O P-\mathrm{PST}=\mathrm{DSC}$
'When I was on the island, she was there.' (s)
b. wattaa $c u u=n u \quad$ nama sika-tu- $n=r o$
our man = NOM now use-PROG-SF=DSC
'Someone in my family is using (the ladder) now.' (A)

Table 4: Case forms and their functions

| Name | Form | Function (case) |
| :--- | :--- | :--- |
| Nominative | $=g a /=n u$ | S/A |
| Genitive | $=g a /=n u$ | NP modifier <br> beneficiary, comparative, time, frequency <br> Dative |
| standard |  |  |
| Allative | $=s i$ | direction, result of change (forced change), <br> listing (ending marker) <br> static action, reaching, point of movement, <br> result of change, instrument |
| Locative 1 | $=n k a$ | active action |
| Locative 2 | $=n z i$ | active action |
| Locative 3 | $=u t i$ | instrument <br> Instrumental <br> associated motion, result of change (equivalent <br> Associative <br> value), listing (equivalent value), comparative <br> comparative ('than') <br> Comparative |
| Ablative | $=j u k a$ | sara |
| source, instrument (movement), static action |  |  |
| (movement), listing (beginning marker) |  |  |
| Limitative | $=m a r i$ | limit ('as far as') |
| Core argument | $=\emptyset$ | S/A/O |

Genitive (GEN)
(24) hanako=ga kkwa

Hanako = GEN child
'Hanako's child' (NP modifier)
Dative (DAT)
(25) a. hanako $=n i$ aziki-tu-ru=baate

Hanako = DAT leave-PROG-NPST = DSC
'I will leave (a gift) to Hanako.' (beneficiary)
b. jaami inagun uja=ni nisu=gajaa

2SG woman parent = DAT look.like = DSC
'You look like your mother.' (comparative )
c. zuuhaci=ni $k k w a a \operatorname{nasu}-n=r o$
eighteen = DAT child have.a.baby-SF = DSC
'I gave birth to my child when I was 18 years old.' (time)
d. hwusika=ni ikkwai=ja kusa kat-aku=munaa
two.days $=$ DAT once $=$ EMP green.vegetable eat $-\mathrm{HBT}=$ DSC
'I eat green vegetables once every two days.' (frequency standard)

Allative (ALL)
a. Paba umi=si $\quad i k u-n=$ ci $i i-t a=m u n a g a$
oh sea = ALL go-SF = HS say-PST = DSC
'Oh? Didn't he say he went to the sea?' (direction)
b. en $=s i \quad$ kirikae-ta-kutu ihwi ra-ta-n=ro
yen $=$ ALL change-PST-because a.few COP-PST-SF $=$ DSC
'I changed it to yen from dollars, which means that I got less in return.'
c. sanee $=$ kara junion $=k a r a$ seikjoo $=s i \quad i k u-i=g a \quad u n u$

San'ei $=$ AbL Union $=$ AbL $\quad$ Seikyō $=$ ALL go-CVB $=$ but this
mise $=$ nakante muru urikire jan= baajo
shops $=$ AMBG all sellout COP $=$ DSC
'I went to San'ei, Union, and Seikyō, but in these shops, all the bean-jam buns were sold out.' (equalis (ending marker))

Locative 1 (LOC1)
(27)
a. Pi ?i jaa=nka un=roo
yes yes house = LOC1 COP = DSC
'Yes, yes, I'll be home.' (static action)
b. puni $=n u \quad$ suba $=n k a \quad u t s u i-b i n=r o o$
ship $=$ GEN corner $=$ LOC1 put.on $-\mathrm{POL}=\mathrm{DSC}$
'Luggage is put on the corner of the ship.' (reaching point of movement)
c. miici=nka waki-ri
three $=$ LOC1 divide-IMP
'Divide it into three.' (result of change)
d. jakwan $=(n) k a \operatorname{sizir}-a n=g a$
kettle $=$ LOC1 infuse-NEG $=\mathrm{Q}$
'Infuse it with the kettle.' (instrument)

## Locative 2 (LOC2)

(28) uma sanee $=n z i \quad$ isa-ta- $n=b a$ ?
here san'ei $=$ LOC2 meet-PST-SF $=\mathrm{Q}$
'Did you meet him in a San'ei here?' (active action)

Locative 3 (LOC3)
(29) anci $k a z i p u k i=n i ~ p u k a=u t i \quad a s i b u-r u \quad c u u=n u \quad u u=m i$ ?
so.much typhoon $=$ DAT outside $=$ LOC3 play-NPST $\operatorname{man}=$ NOM COP $=\mathrm{Q}$
'Is there a person who plays outside during the typhoon?'
( = Nobody plays outside at the typhoon.) (active action)

Instrumental (INST)
(30) zookin $=s i \quad$ isur- $i=b e$
dust-cloth $=$ InST wipe-IMP = DSC
'Wipe it with a dust-cloth.' (instrument)

## Associative (ASC)

a. rusinsaa =tu manna $i k u-n=t s u n$
friends $=$ ASC together go- $\mathrm{SF}=\mathrm{HS}$
'(Hanako) will go with a friend.' (associated motion)
b. uri-satsuu gohjakuen taaci=tu keeti-turahan =ga ?
this $=$ bill five.hundred.yen two $=$ ASC exchange- $\mathrm{POL}=\mathrm{Q}$
'Would you exchange this one thousand yen bill for two five hundred yen coins?' (result of change: equivalent value)
c. coonan=tu zinan=tu rokunan=tu ukinaa eldest.son = ASC second.son = ASC sixth.son = ASC Okinawa
'The eldest son, the second son, and the sixth son are in Okinawa.' (listing: equivalent value)
d. paapa-taa =tu kawa-tu-i=gate
grandmother-PL = ASC different-PROG-CVB = DSC
'My dialect is different from that of my old grandmothers.' (comparative)

## Comparative (CMP)

(32) wan=juka tiicee siizaa $=r a-r u$
$1 \mathrm{SG}=\mathrm{CMP}$ one older $=$ COP-NPST
'She is one year older than me.' (comparative: 'than')

## Ablative (ABL)

a. arakaa $=k a r a ~ m i z i ~ k u r u-k u u=b e ~$

Araka $=$ ABL $\quad$ water draw-come:IMP $=$ DSC
'Get water from Araka' (name of a well) (source)
b. kuruma $=$ kara si-sa- $n=n a$ ?
car $=\mathrm{ABL} \quad$ come-PST-SF $=\mathrm{Q}$
'Did you come by car?' (instrument: movement)
c. tidamii $=$ kara acc-aku $=m i$ ?
sunlight $=$ ABL walk-PROG $=\mathrm{Q}$
'Are you walking in the sunlight?' (static action: movement)
d. sanee $=$ kara junion $=k a r a$ seikjoo $=s i \quad i k u-i=g a$

San'ei $=$ Abl Union = Abl $\quad$ Seikyō = ALL go-CVB = but
$u n u=$ mise $=$ nakante muru urikire $=j a-n=$ baajo
DEM $=$ shops-AMBG all sellout $=\mathrm{COP}-\mathrm{SF}=\mathrm{DSC}$
'I went to San'ei, Union, and Seikyō but in these shops, all the beanjam buns were sold out.' (equalis: beginning marker)

## Limitative (LIM)

$j o z i=$ mari asiri-kisu- $n=r o o$
four $=$ LMT play-come-NPST $=$ DSC
'She has played until four o'clock.' (limit: 'as far as')

Core (CORE)
a. $k o o h i i=\emptyset \quad$ mucuku-ba simu-ta=muja anca
coffee $=$ CORE bring-CVB.CND be.good-PST $=$ DSC DSC
'I should have brought some coffee, shouldn't I?'
b. sooree $=\emptyset \quad u u=$ gutujo inagu-sooree
relative $=$ CORE COP $=$ DSC female-relative
'There is a female relative.'

### 6.2 Information structure marking

Focus is marked by the focus clitic $=r u$. This may co-occur with a range of case-marked NPs (e.g. maa = si'to where'), but whether this is also true for the associative $=t u$ and the comparative $=j u k a$ can't be confirmed.
a. wattaa niinii-taa $=g a=r u$ kam-un
our $\quad$ son $-\mathrm{PL}=\mathrm{NOM}=$ FOC eat -NPST
'My son eats.'
b. maa =si=ga muta-ti-nzj-uru wakar-an=baajo
where $=$ ALL $=$ FOC take-CVB-go-NPST know-NEG $=$ DSC
'He doesn't understand where it is taken to.'
Topic is marked by the topic clitic $=j a$.
(37)
a. hanako-ja taroo=ni pumi-raru-ta-n

Hanako-TOP Tarō = DAT praise-PASS-PST-SF
'Hanako was praised by Tarō.'

## 7 Predicate categories

### 7.1 Negation

Negation is made by suffixation of -an or -ran (see §5.3) to the verb stem. When the stative verb is negated, the negative verb neen or its reduced form nen is used.
i. Negation of ordinary verbs
(38) isaasi suku-i-ta=gaja wakar-an=ja
how make-CVB-PST = DSC know-NEG = DSC
'He doesn't know how it was made, does he?'
ii. Negation of stative verbs
(39) a. nbu-ku ne-e=mun
heavy-AVLZ NEG-NEG = DSC
'It is not heavy.'
b. ure maa-ku n-an
this delicious-AVLZ NEG-NEG
'This is not good.'

### 7.2 Tense, aspect, and mood

### 7.2.1 Tense

Tense is indicated by verb inflection, with past and non-past formally distinguished. The form of the non-past affix differs depending on the conjugation class: -un for Regular verbs 1, and -in for Regular verbs 2.
(40) a. wattaa niinii-taa $=g a=r u \quad k a m-u n$
our $\quad$ son $-\mathrm{PL}=\mathrm{NOM}=$ FOC eat -NPST
'Our son will eat.'
b. nama ka-ta-n
now eat-PST-SF
'I just ate.'

### 7.2.2 Mood and modality

Mood is expressed by finite inflection, whereas non-grammaticalized modalities are expressed by various post-predicate clitics such as $=h a z i$, 'maybe, will', and $=b a$ (assertive, which has two variants $=b a a$ and $=b a a t e$ ), etc. The clitic $=b a$ has functions related to emphasis and confirmation. An additional rising intonation contour indicates question and confirmation.
a. sanzuu ama-tu-taru=hazi 30.years exceed-PROG-PST = maybe 'She's probably over thirty years old.'
b. nigatsu hwutsuka=ni ja-ta-n=baa February two = DAT $\quad$ COP-PST-SF $=$ DSC
'I did it on February $2^{\text {nd. }}$.'

### 7.2.3 Aspect

Three major aspectual expressions are identified, as shown in table 5.

Table 5: Aspect

|  | non-past | past |
| :--- | :--- | :--- |
| Completive | kakun 'write' | kasan 'wrote' |
| Progressive | kakinzjan 'is writing' | kakutan 'was writing' |
| Resultative | kakatun 'have been written' | kakatutan 'had been written' |

Progressive aspect (non-past) is marked by the affixes -nzjan and -tun. The suffix -nzjan attaches to atelic verb stems, as in acci-nzjan, 'is walking', jumi$n z j a n$, 'is reading', and kaki-nzjan, 'is writing'. On the other hand, the suffix -tun attaches to telic verb stems, as in kuma-tun, 'be in trouble.', aziki-tun, 'is depositing', and kasi-tun, 'is lending'.

### 7.3 Voice

There are three major voices that contrast to active voice: passive, causative, and potential. These are expressed by the verbal affixes -raru, -hwun $\sim-u n$, and -run respectively.

Active
(42) taroo $=g a$ hanako pumii-ta-n Tarō = NOM Hanako praise-PST-SF 'Tarō praised Hanako.'

## Passive (-raru)

(43) hanako-ja taroo =ni pumi-raru-ta-n

Hanako-TOP Tarō= DAT praise-PASS-PST-SF
'Hanako was praised by Tarō.'

Causative (-hwun)
(44) a. hanakoo=ni kama-hwu-n

Hanako = DAT eat-CAUS-SF
'I will make Hanako eat.'
b. asa hanakoo=ni muta- $u=w a$ tomorrow Hanako = DAT bring-CAUS = DSC
'I will make Hanako bring (it) tomorrow.'

## Potential (-run)

(45) nboku-na-an-gutu muta-run
heavy-NEG-NEG-because have-Poss
'Because it isn't heavy, I can hold it.'

## Sample text: the Pear story

(т.1) $\quad$ ikiga $=n u$ uhwucu = ru ja-ra-hazi $=$ ro ure
man $=$ GEN adult $=$ EMP COP-CVB-maybe = DSC DEM
'This person might be an adult man.'
(т.2) naa tusui=ga ja-ra mata wak-a-aru $4^{4} \quad c u=g a \quad j a-r a$

DSC old = NOM COP-CVB DSC young-VLZ-NPST man = NOM COP-CVB wakar-an- $i=g a \quad$ ma anu ikiga jai-ga $\quad k i i=n u \quad i i=s i$ know-NEG-CVB = but FIL FIL man COP-CVB tree = GEN above = ALL nubuj-aaku-n= baajo
climb-PROG-SF = DSC
'I don't know whether he's old or young, but he is climbing the tree.'
(т.3) unru hasigo = kara uma=nka ure kii=nu mii tui-ga

FIL ladder $=$ ABL here $=$ LOC1 DEM tree $=$ GEN fruit take-CVB ja-ra-hazi = ro
COP-CVB-maybe $=$ DSC
'(He climbs) the ladder, he might take the fruits.'
(т.4) uma=nka rippa-nu unu pasi uri kii=nu mii=ja mata here = LOC1 properly-AVLZ DSC FIL DEM tree = GEN fruit=TOP DSC $k a g u=n k a \quad$ ii-ne sugu muta-r-an $=g u t u$ basket $=$ LOC1 put.in-CVB easy lift-POSs-NEG $=$ because
'When he puts the fruits in the basket, he cannot lift it easily, so...'
(т.5) caanto $u m a=n k a$ anu tui-sinre ii-ti
properly here = LOC1 DSC take-CVB put.in-CVB
'He puts them in the basket as soon as he takes them.'
(т.6) anci uri-ti kis-i mata miici=nu kago usukat-tu=je and get.down-CVB come-MED DSC three $=$ GEN basket put-PROG $=$ DSC 'And (he) goes down, and three baskets are put below, aren't they?'
(T.7) uri=nka buru
this = LOC1 all
'(He) puts everything in these (baskets).'
(т.8) taaci=ja ippai-si mata nanci naan tiici=nu mun mata two $=$ TOP full-do DSC FIL more one $=$ GEN thing DSC
'Two are full, another is...'
(т.9) nugara uma=nka mae jodarekake hankaci-gwa su-i=ga

DSC here= lOC1 FIL bib handkerchief-DIM do-NLZ = NOM
uri-n mata tu-ti-ti su-i-ga hi-nzjan=baajo this-FOC DSC take-CVB-go:IMP do-CVB-CVB do-PROG $=$ DSC

[^38]'There is something like a handkerchief in that place, and he's taking that.'
(т.10) anci uma=si mata naahwin mata nan cici aru-sa
and here $=$ ALL DSC more DSC more one COP=DSC
'Another is here, isn't it?'
(т.11) uri tui-ga $=c i \quad$ mata nubu-ti-nzja $=$ gutu

DIM take-CVB $=$ HS DSC climb-CVB-go:IMP $=$ DSC
'(He) climbed again to take that.'
(т.12) uma=nka na mata nugara piizaa-neesuru cu tuuj-aaku-n=baajo here = ALL DSC DSC DSC goat-AMBG man pass-PROG-SF=DSC
'Something looking like a goat and a person are passing.'
(т.13) uri cu-nsa=ja nu-n tu-ra=na tuurisugi-ti
this man-AMBG $=$ TOP what-FOC take-CVB $=$ NEG pass-CVB
ikj-aaku-n = baate
go-PROG-SF = DSC
'This person passes without taking anything'
(т.14) ancuiga mata boosi kan-ti
but DSC hat wear-CVB
'But (he) wears a hat...'
(т.15) naa ure naa ikuci ne-iru warabi=ga=ru wakar-an-i=ga DSC he DSC how.old become-PROG child $=\mathrm{Q}=$ EMP know-NEG-CVB = but '(I) don't know how old this child is.'
(т.16) sugu naa ari zitensja nu-ti-kis-i boosi kan-ti DSC DSC DSC bicycle ride-CVB-PROG-MED hat wear-CVB '(He) is riding a bicycle and is wearing the hat.'
(т.17) sakutu uri mun-ci naa uri-cu mii-mi-si i-nka and DIM watch-HS DSC this-man watch-watch-do above=ALL
nubu-tu-ru cu mii-mi-su-u-ti
climb-PROG-NPST man watch-watch-do-PROG-CVB
'He watches the person climbing the tree.'
(т.18) naa uri ga cuu=nu na nr-an-uci=ti na uri tiici kago DSC DSC GEN man = NOM DSC watch-NEG-CVB = HS DSC DIM one basket zitensja ruu $=n u \quad$ zitensja $=n u$ mee $=n k a$ nusi-ti ik-aaku- $n=$ baajo bicycle himself $=$ GEN bicycle $=$ GEN front $=$ ALL put-CVB go-PROG-SF $=$ DSC '(He) thinks the man is not watching, and (he) is putting one basket on the front of his bicycle and is leaving.'
(т.19) ncagutu mee $=$ kara nuu $=$ ga cu anu nusu-i-tu sikkakat-ti
and $\quad$ front $=$ ABL what $=$ Q FIL DSC ride-CVB-ASC scratch-CVB
ikkeera-su-n= baate
spill-do-SF = DSC
'What was put (on the bicycle) collided and fell.'
(т.20) ikkeera-sa-gutu na ruu-n ari su-i=hjeja spill-do-because DSC himself-FOC DSC do-CVB = DSC 'The basket overturned and he himself...'
(т.21) uma suu-gisanaa po pooraka-su-gutu uma $=n k a$ naa misee $=n u$ here pass-CVB FIL spill-do-because here = ALL DSC three= GEN waraba-taa $=$ ga kis-i
child-PL=NOM come-MED
'Because a basket was turned over when (he) came here...three children came there.'
(т.22) uri na tu-ti anu kasi hi-nzja-n=baaje manna iri-ti this DSC take-CVB DSC support do-PROG-SF = DSC together put-CVB 'They take them, and help him, they put them in the basket together.'
(т.23) sagutu anci ii-ta-gutu mata iki-nzja-n=baajo
and DSC put-PST-CVB DSC go-PROG-SF = DSC
'They have gone, after putting them into the basket.'
(т.24) cu uru waraba-taa unnen nu-n tu-te na-an=ro FIL this child-PL DSC something-FOC take-CVB NEG-NEG = DSC
ki-rar-an $=$ ro
give-PASS-NEG = DSC
'Nothing is given to these children.'
(т.25) uma=uti za saru uma=kara mata boosi sa-kutu boosi muci-nzi this = LOC3 FIL go.away DEM = ABL DSC hat do-CVB hat take-go sagu
FIL
'When (he) was going to go, (they) took a hat.'
(т.26) kusi aizu sun=baje hwuuhwuu-s-i

FIL signal do=DSC ONM-do-MED
'(They) signal by whistling.'
(т.27) wanni kusibue = kara nugara wakar-an-i=ga

1sG whistle $=$ ABL what know-NEG-cVB $=$ but
'I don't know whether it is a whistle or something else.'
(т.28) ancagutu uma tuma-tu- $n=$ baajo
and here stop-PROG-SF=DSC
'And (he) stops there.'
(т.29) anci boosi $=r o o=$ ci tura-ca-gutu ${ }^{5}$ unniutte mata naa anu aa DSC hat = DSC = HS take-PST-because DSC DSC DSC DSC FIL
boos $=$ na arigatoo $=c i=$ garana tura-i-nzja- $n=$ baate
hat $=\mathrm{DSC}$ thank. $\mathrm{you}=\mathrm{HS}=\mathrm{AMBG}$ take- $\mathrm{CVB}-\mathrm{PROG}-\mathrm{SF}=\mathrm{DSC}$
'When (they) came with the hat, (he) seemed thankful.'
(т.30) miici-gara mucci-nz-i three-AMBG take-PROG-MED
'(He) carries out about three.'
(т.31) ancuru waraba-taa mata anci ari missai ari miccai ja-ta-i=je DEM child-PL DSC DSC DSC three DSC three COP-PST-CVB=DSC 'There were three children, weren't there?'
(т.32) $\quad$ ciici $=n a=c i \quad$ turac-i $\quad k i-t i-n j z a-n=b a a j o$ one $=$ DSC $=$ HS take-MED give-CVB-PROG-SF $=$ DSC
'(He) was giving (them) each one.'
(т.33) ancisagutu naa uri naa zitensja nunguraa $=j a \quad$ mata uri-ti and DSC DEM DSC bicycle something = FOC DSC get.off-CVB '(He) gets off his bicycle.'
(т.34) a kii=nka nubu-tu-i=hjeja uri naa ippai ii-ti FIL tree = ALL climb-PROG-CVB = DSC DEM DSC full put-CVB
uri-ti-kisa-gutu na-an na-tu=je
get.down-CVB-come:IMP-CVB NEG-NEG become-PROG = DSC
'When the person climbing the tree puts a lot of fruits in a basket and goes down, a basket disappears.'
(т.35) tooto taa=ga tu-ta=gaja=ci=jo nasu-i DSC $w h o=$ NOM take- $\mathrm{PST}=\mathrm{DSC}=\mathrm{HS}=\mathrm{DSC}$ do -CVB
'He wondered who had taken it.'
(т.36) tiic-e kagu nna-kagu ja=hjeja one-TOP basket empty-basket COP = DSC
'One is an empty basket, isn't it?'
(т.37) uri misin = ciru mata nubu-ti-nzju-ru=ha jaiga ancisinci sagutu this fill $=$ HS DSC climb-CVB-go:IMP-NPST $=$ DSC but DSC DSC naa taa = ga mucc-i-nzja=gajaa=ci=jo=nu hwuuzii sun=baate DSC who $=$ NOM take-CVB-go:IMP $=$ DSC $=$ HS $=$ NOM atmosphere do $=$ DSC
'The person climbed the top again to fill this basket, but he seems not to know who took it.'

[^39](т.38) ancisagutu naa ure-e isaasi uma=nka uri $n u=c i=g a$ DSC DSC DEM-TOP how here $=$ LOC1 DSC what $=\mathrm{HS}=\mathrm{Q}$
toorisugi-ti-nzj-uru $\quad c u=n u=r u \quad$ mucc-i-nzj-uru=ci=nu pass-CVB-go:IMP-NPST man $=$ NOM $=$ FOC take-CVB-go:IMP-NPST $=$ HS $=$ GEN $h w u u z i i \quad s a-i=g a$
atmosphere do-CVB = but
'It seems that he thinks those who have passed took it.'
(т.39) ato naa uri=ga nunko wakar-an na-tu-n=baaje DSC DSC this = NOM FIL understand-NEG become-PROG-SF = DSC 'He doesn't know anymore what that is.'
(т.40) maa=si=ga muta-ti-nzj-uru wakar-an=baajo where $=$ ALL $=$ FOC take-CVB-go:IMP-NPST know-NEG $=$ DSC 'He doesn't know where it was taken.'
(т.41) unnee $=r u s-i=n u \quad$ are ar-an DEM $=$ EMP do-MED $=$ GEN DSC COP-NEG
'Wasn't this such a story?'

## Abbreviations

| 1SG | first person singular | IMP | imperative |
| :--- | :--- | :--- | :--- |
| 2SG | second person singular | INST | instrumental |
| ABL | ablative | INT | intentional |
| ALL | allative | LMT | limitative |
| AMBG | ambiguity | LOC1 | locative1 |
| ASC | associative | LOC2 | locative2 |
| AVLZ | adverbializer | LOC3 | locative3 |
| CAUS | causal | MED | medial verb |
| CMP | comparative | NEG | negation,negative |
| COP | copula | NLZ | nominalizer |
| CORE | core argument | NOM | nominative |
| CVB | converb | NPST | non-past |
| CVB.CND | converb condition | ONM | onomatopoeia |
| DAT | dative | PASS | passive |
| DEM | demonstrative | PL | plural |
| DIM | diminutive | POL | politeness |
| DSC | discourse marker | POSS | possessive |
| EMP | emphatic | PROG | progressive |
| FIL | filler | PST | past |
| FOC | focus | Q | question particle/marker |
| GEN | genitive | SF | sentence final particle |
| HBT | habitual | TOP | topic |
| HS | hearsay | VLZ | verbalizer |

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Figure 1: Miyako Islands

## Introduction

Ōgami Ryukyuan is a verb-final language with an SXOV and a modifier-head order. The alignment is nominative-accusative, with both the nominative and the accusative marked. The phonology has uncommon features, like a very reduced phonemic inventory ( 5 vowels, 9 consonants) and a great variety of syllabic
consonants, which do not conform to the "universal" hierarchy of syllable nuclei. Voiceless fricatives can be syllabic, and whole words and utterances can be constituted of voiceless consonants only (§ 2.4.3). Property concept stems (eg. taka 'high') are morphologically bound and serve as a base to derive adjectives, stative verbs and nouns. Syntactic, semantic and pragmatic roles of the different constituents are morphologically encoded by post-posed markers. Two accusative case markers coexist, one of them being restricted to adverbial and chain-medial clauses. Two different topic markers coexist: one for general topics, the other for topicalized objects. Coordinate and sequential events are encoded by clause-chains, which can involve a dozen of clauses headed by converbs (§11.3). Such chain-medial clauses are also subject to desubordination, and for example the narrative converb can be used as an independent past tense form (§11.5.2).

## 1 The language and its speakers

### 1.1 Geography

The main community of O Ogami Ryukyuan speakers is located on the small island of Ōgami (jp. O gami-jima, vernac. ukam), located 4 km North-East of the main Miyako island. It is also spoken to some extent in the Takano village on the main island, where several families from O Ogami have moved in 1992.

### 1.2 Affiliation

The Ōgami dialect belongs to the Central Miyako branch of Miyako Ryukyuan, which is defined by several common innovations such as the irregular voicing of the dental consonant in the word for 'tongue'. ${ }^{1}$ Miyako Ryukyuan belongs in turn to the Southern branch of Ryukyuan, together with the Yaeyama and Yonaguni languages. ${ }^{2}$

No common innovation is found to refine Ōgami's position within the Central Miyako branch. The fact that it preserves some archaic features, like the first person pronoun anu or some instances of proto-Miyako *r after *1, while other Miyako dialects have lost it, ${ }^{3}$ indicates it might constitute a distinct subbranch.

[^40]
### 1.3 Sociolinguistic overview

### 1.3.1 The number of speakers

The actual number of fluent speakers is difficult to ascertain. The inhabitants of the Ōgami Island currently number as approximately 30 . We also have to take into account their relatives living in other places, but the total number of speakers is probably not greater than 100-150 as a rough estimate.

### 1.3.2 Sub-dialects

The variety spoken in the Takano village is under heavy influence of surrounding dialects and has been gradually assimilating to these.

### 1.3.3 Viability, education and documentation

Most speakers are now in their seventies or older, and intergenerational transmission of the language ceased several decades ago. The youngest speakers are in their late forties and they constitute the last generation of native speakers: no children are acquiring O Ögami Ryukyuan as their native language anymore. All speakers are bilingual in Japanese, and the youngest generations are Japanese monolinguals.

No writing system nor educational materials exist, and so far no attempt to revitalize the language has been made. Some documentation exists in the form of some short texts transcribed and translated in Japanese (Hirayama et al. 1967, Shibata 1972). Pellard (2009b) contains four texts transcribed phonemically and accompanied by interlinear glosses and a translation in French.

### 1.4 Previous works

Apart from a few articles on some phonological issues, very little research has been undertaken on Ōgami Ryukyuan. Hōsei daigaku Okinawa bunka kenkyūjo (1977) deserves to be mentioned as it contains a lexicon and tables of verb paradigms, as well as short elicited examples. The many shortcomings and inadequacies of previous works have been criticized in detail in Pellard (2009b), which contains a description of the phonology, morphology, syntax and historical developments of Ōgami Ryukyuan.

## 2 Phonology

### 2.1 Segmentation: grammatical word and phonological word

In Ōgami Ryukyuan the grammatical word doest not always correspond one to one with the phonological word. A grammatical word is defined here as:

- the smallest unit that can be manipulated by syntax;
- a unit made up of one or several morphemes which always occur together in a fixed order.

Such a grammatical word can be phonologically bound to a host, the two constituting a single phonological word. This is the case with auxiliary verbs, which can cliticize and fuse with a preceding verb:
(1) a. iki $u \omega \rightarrow i k i=w$ ' $g o=$ IPF $^{\prime}$
b. iki $a u \rightarrow i k \varepsilon=w ' g o=$ REs'

The phonological word in Ōgami Ryukyuan is characterized by a strict minimal length constraint: a word must be at least bimoraic. In consequence, the many monomoraic markers are phonologically bound to their host and cannot appear independently. Some of the clitics are even monosegmental and are included within their host's final syllable.
(2) $p s t u=n[p s . t u n]$ 'person $=$ DAT'

### 2.2 Phoneme inventory

### 2.2.1 Consonants

The native consonant system of Ōgami Ryukyuan comprises nine consonants (table 1).

Table 1: Ōgami consonants

|  | Bilabial | Labio-dental | Dental/alveolar | Velar |
| :--- | :---: | :---: | :---: | :---: |
| Stop | p |  | t | k |
| Nasal | m |  | n |  |
| Flap |  |  | r |  |
| Fricative |  | f | s |  |
| Affricate |  |  |  |  |
| Approximant |  | v |  |  |

There is no voicing distinction for stops, which are usually voiceless but can be optionally voiced between vowels.

Other allophonic realizations are as follows:

- $/ \mathrm{k} /$ is usually a velar stop, but often lenits to a fricative $[\mathrm{x} \sim \mathrm{y}]$ before the vowel /a/;
- /n/ is usually a dental nasal but has a velar or uvular allophone in final position ( $[\mathrm{y} \sim \mathrm{N}]$ ); this nasal also assimilates to the place of articulation of a following obstruent, and a devoiced allophone is also often observed after a voiceless fricative;
- /s/ has a palato-alveolar realization [c] before the front vowels /i/ and $/ \varepsilon /$; for some speakers an intrusive dental stop ([ts $\sim \mathrm{t} \epsilon$ ]) appears after the nasal /n/
- /v/ is usually an approximant but can be a fricative [v] when geminated/long.

There is a length distinction for $/ \mathrm{m}, \mathrm{n}, \mathrm{f}, \mathrm{s}, \mathrm{v} /$, and we also find a geminate $/ \mathrm{tt} /$, but in one morpheme only, the hearsay marker tta.

The palatal approximant [j] is not considered to be a distinct phoneme but a contextual allophone of the vowel /i/; there is no minimal pair opposing the two and the realization as [j] or [i] is fully predictable from the linear sequence of segments:
(3) $/ \mathrm{i} / \rightarrow[\mathrm{j}] /-\left\{\begin{array}{l}\mathrm{a} \\ \mathrm{u}\end{array}\right\}$

Furthermore, consistency requires us to treat these two sounds as variants of the same phoneme, like $/ \mathrm{m}, \mathrm{n}, \mathrm{f}, \mathrm{s}, \mathrm{v} /$, which can similarly appear both as a syllable margin and as a nucleus.

Some words do have distinctively voiced stops, but almost all of them can be demonstrated to be loans from Japanese or other Miyako dialects. There is also some speaker variation regarding voicing, and the distinction is often very unstable. Apart from voiced consonants, borrowings also show some otherwise non existent consonants like the affricates [ts] and [tc].

### 2.2.2 Vowels

The vowel system of O Ogami has the following five vowels, any of which can be short or long (table 2).

Table 2: Ōgami vowels

|  | Front | Back |
| :--- | :---: | :--- |
| High <br> Mid <br> Open | i | u u |

The vowel / $\mathrm{m} /$ has been previously described as a central vowel (Hirayama et al. 1967, Kajiku 1977, 1989, Sakumoto 2004) or as an "apical" vowel (Sakiyama 1963, Karimata 1993), but its articulatory and acoustic characteristics are those of a close back unrounded vowel pronounced with spread lips (Pellard 2009b). Some speakers have a somewhat more centralized realization, but on the other hand younger speakers tend to merge $/ \mathrm{m} /$ with $/ \mathrm{u} /$.

Contrary to other Miyako dialects (or Standard Japanese), vowel devoicing does not occur in Ōgami. Previous studies have usually posited a very active vowel devoicing process, but though this is historically true, those devoiced vowels they posit are better viewed as synchronically nonexistent. Historically, earlier * 1 and *u have been completely absorbed by an adjacent fricative when between two voiceless consonants. They correspond to the syllabic fricatives of the present analysis. Acoustic data (Pellard 2009b) clearly shows there is no synchronic vowel devoicing in Ōgami Ryukyuan, even between voiceless consonants.

### 2.3 Suprasegmentals

### 2.3.1 Length

Length is distinctive for both vowels and consonants, and nasals as well as fricatives even exhibit a three-way length distinction, though in such a case they belong to different syllables.
(4) /faa/ [fa:] 'child'
/f.fa/ [f:a] 'grass'
/ff.fa/ [f::a] 'comb = TOP'
However, there seems to be some cases of non-distinctive lengthening in final position of some intonational phrases. This is attested for narrative, sequential and anterior converb forms as well as the quotative particle $t$. This occurs even if a focus marker is added to the form.

### 2.3.2 Tone and accent

Although Shibata (1972) has reported the existence of a typical Ryukyuan twoword tone system in Ōgami, no other scholar has been able to confirm this fact. Even the eldest speakers still alive have no such system, and no recordings nor acoustic analyses exist to confirm this claim.

Ōgami Ryukyuan has no fixed lexical pitch pattern nowadays, and words spoken in isolation can be pronounced with various melodies. The details of Ōgami Ryukyuan's prosody above the word are still yet to be investigated.

### 2.3.3 Mora

The basic prosodic unit of O Ogami Ryukyuan is the mora, and its importance is most visible in the bimoraic minimal word constraint and the compensatory lengthening processes. For instance, there are no words of the mono-moraic shape CV, while CCV and CVV words are common. Speakers are also most of the time able to break a word into morae by separating them with pauses.

Syllabic segments, geminate consonants and codas each bear a mora, and long vowels as well as long syllabic consonants bear two morae. The segments that can bear a mora are thus $/ \mathrm{i} u \mathrm{u} \varepsilon \mathrm{amnfs} v /$, i.e. all continuants but $/ \mathrm{f} /$.

### 2.3.4 Syllable

The syllable is also a meaningful unit in the description of some morphonological processes. For instance, the topic marker has a different shape depending on whether it attaches to words with a final diphthong or long vowel, or to a word ending with a short vowel.
a. 'staff' $/ \mathrm{pau}+=\mathrm{a} / \rightarrow / \mathrm{pau}=\mathrm{ia} /$
b. 'vegetable' /suu $+=\mathrm{a} / \rightarrow /$ suu $=\mathrm{ia} /$
c. 'person' $/ \mathrm{pstu}+=\mathrm{a} / \rightarrow / \mathrm{psta}=\mathrm{a} /$

The syllable is also needed to explain why words like /kss/ 'breast' escape the $u$-epenthesis phenomenon while words like /ksks/ 'month' do not, although both are bimoraic (§2.5).

In Ōgami Ryukyuan, any continuant except /f/ can be syllabic: vowels as well as $/ \mathrm{m}, \mathrm{n}, \mathrm{f}, \mathrm{s}, \mathrm{v} /$ can assume the function of syllable nucleus.
(6) a. $/ \mathrm{mm} /[\mathrm{m}:]$ 'yam'
b. /vo/ [v:] 'sell'
c. /nta/ [nta] 'where?'
d. /pstu/ [pstu] 'person'
e. /ftai/ [ftai] 'forehead'

This seems to be in contradiction with the "universal" hierarchy of syllable nuclei (Zec 2007): the existence of syllabic fricatives is usually assumed to entail the existence of syllabic liquids.

Syllable nuclei can be short and simple, long or complex. Complex nuclei are those that contain a sequence of two different vowels.
a. /a.mi/ 'rain' (simple nucleus)
b. /paa/ 'leaf' (long nucleus)
c. /mm.na/ 'all' (long nucleus)
d. /pai/ 'south' (complex nucleus)

All consonants as well as as the vowel /i/ can be syllable onsets, and the sonorants $/ \mathrm{m} \mathrm{n} \mathrm{V}$ / can also appear in the coda. There are no long or complex onsets nor codas, and there are no medial glides. The syllabic consonants are also subject to restrictions on their possible onsets:

- the sonorant consonants /m n v/ cannot have an onset;
- /s/ can only have /p/ or /k/ as its onset;
- /f/ can only have /k/ as its onset.
 obligatory nucleus ( Nu ), long or complex, which can be occupied by a vowel or a consonant. There can be a simple onset ( O ) and a simple coda (Co), but they remain optional. The syllable template is thus as follows:
(8) $(\mathrm{O}) \mathrm{Nu}(\mathrm{Nu})(\mathrm{Co})$


### 2.4 Phonotactics

### 2.4.1 The structure and phonotactics of the root word

Root words are most often dissyllabic, although mono- and trisyllabic roots are not uncommon. This is due to the strict minimality constraint applying to both lexical roots and phonological words: a word is minimally bimoraic, and $\mathrm{C}, \mathrm{V}$ or CV are not valid word forms.

In lexical roots, onsetless syllables are usually restricted to the word-initial position. Other phonotactic constraints restrict the possible segment sequences. Many of them are the consequence of sonority sequencing principles and of the syllable template described above, but others, such as the absence of sequences like *sm, *sf, *ts, *tu, *ac, etc, are mostly by-products of historical developments.

### 2.4.2 The structure and phonotactics of the morphologically complex word

In a morphologically complex word, some otherwise non-existent segment sequences and syllable structures can appear when suffixes attach to a root or stem, or when clitics are incorporated into a phonological host.
a. $/ \mathrm{us}=\mathrm{n} /{ }^{\prime} \mathrm{cow}=\mathrm{DAT}$ '
b. $/ \mathrm{ff}=\mathrm{si} /$ 'comb $=\mathrm{INSTR}$ '

### 2.4.3 Voiceless, vowelless words and utterances

 to be constituted by voiceless consonants only, a typologically very uncommon feature, reported hitherto for only a handful of languages in the world.

Table 3: Voiceless, vowelless words in Ōgami Ryukyuan

```
/ss/ 'dust', 'rub'
/ff/ 'comb', 'bite', 'fall (rain)'
/kss/ 'breast', 'fish-hook', 'to fish', 'come'
/kff/ 'make'
/ksks/ 'month', 'listen'
/fks/ 'mouth', 'build'
/psks/ 'pull'
```

Some short sentences or phrases aligning several voiceless words can be found:
a. $u r \varepsilon=\varepsilon \quad a=k a \quad i k s=m a i \quad k f f \quad k s s$
this $=$ TOP $\mathrm{I}=$ NOM when $?=$ INCL make fish-hook
'These are the fish-hooks that I use to make.'
b. $u r \varepsilon=\varepsilon \quad t u m=n u$ maitus $k f f$ ss
this $=$ TOP bird $=$ NOM each. year make nest
'This is the nest that the bird makes every year.'
Previous studies have often assumed the presence of an underlying devoiced $/ \mathrm{w} /$ or $/ \mathrm{u} /$, but this view is clearly untenable, as shown by both acoustic analyses and (morpho-)phonological evidence (Pellard 2009b). Strong evidence is found in the existence of minimal pairs like /sta/ 'below' vs. /suta/ 'tongue', /fkw/ 'mouth' vs. /fuku/ 'lottery, lapel', /kss/ 'breast' vs. /kuw/ 'written character' or /ff/ 'comb' vs. /ffu/ 'excrement'. More supporting evidence is found in the patterning of syllabic fricatives with consonants and not vowels in morphophonological processes and in the absence of the putative vowel where devoicing should be blocked (i.e. before clitics with a voiced initial segment or when lenghtened).
a. /us/ $+/=\mathrm{a} / \rightarrow /$ ussa/ *usua 'cow = TOP'
b. /us $=n u / \rightarrow[u s n u]$ *[usunnu] 'cow $=$ NOM'

### 2.5 Phonological alternation rules

A final /s/ is regularly followed by an epenthetic vocoid [w] when preceding a pause. This phenomenon is mandatory for polysyllabic voiceless words, but not
for monosyllabic ones. Similarly, a final /f/ is often followed by an epenthetic vocoid, though it is difficult to say whether it is [u] or [v]. This inserted vocoid is not a true segment but a boundary marker.
a. /ksks\#/ $\rightarrow$ [ksksw] 'moon'
b. /saiaf\#/ $\rightarrow$ [sajafu ~ sajafv] 'carpenter'

Other alternation rules involve several vowel coalescence processes:

- $\mathrm{Ci}+\mathrm{a} \rightarrow \mathrm{C} \varepsilon \varepsilon$
- $\mathrm{Cu}+\mathrm{a} \rightarrow \mathrm{Caq}$
- $\mathrm{Ci}+\mathrm{u} \rightarrow \mathrm{Ci}$
- $\mathrm{Ci}+\mathrm{a} \rightarrow \varepsilon \varepsilon$
- $\mathrm{C}_{0} \mathrm{u}+\mathrm{u} \rightarrow \mathrm{C}_{0} \mathrm{uu}$ (optional)

Some consonant assimilations also occur:

- $\mathrm{s}+\mathrm{f}, \mathrm{f}+\mathrm{s} \rightarrow \mathrm{ff}$
- $v+\mathrm{f} \rightarrow \mathrm{v}$
$\cdot \mathrm{n} / \mathrm{m}+\mathrm{n}]_{\sigma} \rightarrow \mathrm{n} / \mathrm{m}$
- $\mathrm{u}+\mathrm{s} \rightarrow \mathrm{ss}$

In the verbal morphology, suffixes lose their initial consonant when they attach to verbs of the general class:
(13) fa + -rai $\rightarrow$ fa-ai 'eat-POT'
ur + -samar- $\rightarrow$ ur-amau 'be-HON'
num + -ripa $\rightarrow$ num-ipa 'drink-CIRC'
Before the topic and accusative markers $a$ and $u$, a word-final consonant is reduplicated, while an epenthetic /i/ is inserted if the word ends with a heavy vocalic nucleus.
(14) 'stone' is $\rightarrow$ issa
'sea' im $\rightarrow$ imma
'child' faa $\rightarrow$ faaia
Stems and suffixes underlyingly ending in / $/$ / undergo a $/ \mathrm{f} / \rightarrow / \mathrm{w} /$ change before a word boundary and also loose their final consonant before the indicative suffix -m:
a. mma-kas $\rightarrow$ mma-kau 'tasty-vBZ'
b. mma-kar $+-\mathrm{m} \rightarrow \mathrm{mma}-\mathrm{ka}-\mathrm{m}$ 'tasty-vBZ-IND'

### 2.6 Variation

One of the most vexing issues in the description of O Ogami Ryukyuan phonology is the behavior of the vowel $/ \mathrm{m} /$. First of all, as seen above, some instances of word-final [w] are not truly phonemic segments but epenthetic boundary markers. Second, /w/ and the syllabic /s/ seem to be in the process of merging to /u/ after /k-/ in word-final position. While one can find several minimal pairs opposing the two, the opposition is often neutralized and both phones are then in free variation.
(16) /muku/ 'wheat' $\neq /$ muks/ 'rice cake'
/mkw/ 'right (side)' $\neq / \mathrm{mks} / \quad$ 'road'
[fks] ~ [fkw] 'mouth'
[fta:ks] ~ [fta:kw] 'two'
[iks] ~ [ikw] 'go'

## 3 Descriptive preliminaries

### 3.1 Basic clause and phrase structure

### 3.1.1 Basic clause structure

A basic clause is minimally constituted of a predicate, verbal, nominal or adjectival. Core arguments are often unexpressed, especially if they are speech-act participants, though if they are expressed the basic word order is SxOV.

This basic order is rather rigid, but can be modified according to the information structure of the sentence. In such a case, a special marking is required on the topicalized or focalized elements. The head of the clause is always final, though it can be followed by some clitic markers.

### 3.1.2 Nominal phrase

A nominal phrase is headed by a nominal. An np followed by role markers, which indicate its syntactic, semantic and/or pragmatic role(s), can be recognized as an extended $N P$ rather than as a different constituent type. An NP can be modified by a determiner, an adjective, a relative clause or a genitival NP, and all modifiers are placed before the head noun.

### 3.1.3 Predicate

A predicate can be verbal, nominal or adjectival.

### 3.1.3.1 Verbal predicate

A verbal predicate minimally contains a lexical verb. Analytic verb forms exist and combine a lexical main verb with an auxiliary verb, most usually an aspectual marker. Complex verbal predicates that combine more than one lexical verb into a single predicate are also found in Ōgami Ryukyuan.

### 3.1.3.2 Nominal predicate

A nominal predicate consists of an NP, which can be reduced to a single bare nominal. No copula is required unless converb, TAM or polarity markers are added to the predicate.
a. $\begin{aligned} & a=k a=t u \quad \text { suta } \\ & \mathrm{I}=\text { NOM }=\text { FOC elder.brother }\end{aligned}$
'I am older (than him).'
b. ik\&Em=n=na $\quad$ kama=nu im=ma suma=tu $\quad$ ia-tau=tim old.days $=$ DAT $=$ TOP there $=$ NOM sea $=$ TOP island $=$ FOC COP-PST $=$ HS
'It is said this part of the sea was land during the old days.'

### 3.1.3.3 Adjectival predicate

An adjectival predicate involves an adjective in predicative position. In the case of reduplicated adjectives, an auxiliary verb is always required, while similative adjectives can stand on their own as a predicate, like nominals.
a. upu-uри= tu uш ira
big-big = FOC IPF DSC
'It's big, isn't it?'
b. im=nu kssitiki ira
sea $=$ nOM beautiful DSC
'The sea is beautiful, isn't it?'

### 3.2 Word, clitic and affix

### 3.2.1 Word

A word minimally contains a root, more than one if it is a compound. In the case of nouns, a bare root is always an independent word, while many verb roots must first undergo a stem-formation process to acquire wordhood. Adjectives on the other hand are always morphologically complex and involve a property concept stem accompanied by a suffix or are reduplicated.

### 3.2.2 Suffix

Ōgami Ryukyuan's morphology is suffixal, and there seem to be no prefixes nor infixes. However, it is not always easy to distinguish a suffix from a clitic (see below). The main criteria usually invoked are:
i. suffixes can attach to a bound root or stem, but not clitics;
ii. suffixes exhibit serious restrictions on the kind of host they can attach to, while clitics have more freedom;
iii. suffixes are bound to a word, while the syntactic host of a clitic can be a phrase.

Verb suffixes are the most easily identified since they appear only on verbs and often attach to a bound root or stem. Some other morphemes attach to nominals only and do not seem to have any freedom, and they can be recognized as nominal suffixes, like the plural.

### 3.2.3 Clitic

The distinction between suffixes and clitics is not always straightforward. Some role markers like the nominative $k a$ or the topic $a$ attach to an irregular bound stem of the first person pronoun ( $a n u+k a \rightarrow a k a$, $a n u+a \rightarrow a r a a$ ). On the other hand, the scope of role markers is an entire phrase, and some of them can attach not only to NPs but also to predicates of subordinate clauses as well. In such cases, it would make sense to consider them to be a kind of phrasal affix.
a. $\left.\left[\begin{array}{ll}{[u s=t u} & p i n t a\end{array}\right]=n u\right]=t u u u$ cow $=$ COM goat $=$ NOM $=$ FOC be
'There is a cow and a goat.'
b. [kisa mii-r-ipa]=tu nau-kara=nu mui u-taw before see-CIRC = FOC what?-INDEF = NOM burn.CVB IPF-PST
'When I looked before, something was burning.'
Moreover, several auxiliary verbs tend to lose their phonological autonomy and to cliticize to the main verb. They tend to get phonologically reduced and to fuse with the main verb, to the point where it is sometimes difficult to segment the two units. They are clearly gradually acquiring more and more suffixal properties, but retain some syntactic freedom that prevent treating them as pure suffixes. For example auxiliary constructions retain the possibility of introducing a pragmatic role marker between their two terms.
a. $i k-i=w ' g o-C V B=I P F '$
b. $i k-i=t u=w ' g o-C V B=F O C=I P F '$

Finally, there are several short words that do not seem to belong to a particular word class, cannot head a constituent, and are usually not uttered alone. There is often little basis to decide if these are truly phonologically dependent or not and if they should be described as clitics. I have chosen to label them as particles and to remain somewhat agnostic about their exact status.

### 3.2.3.1 Syntactic host and phonological host

For clitics, we must distinguish their phonological host, the word they attach to and form a single phonological unit with, and their syntactic host, the word or constituent they have scope over. As seen above (19), role markers usually attach to a noun, but have scope over a whole NP, and some of them can attach to a verb but have scope over a whole clause.

### 3.3 Word classes

There are two major word classes in Ōgami Ryukyuan: nominals and verbs. To these we can add a class of adjectives, a heterogeneous class of grammatical particles, and several other minor word classes.

### 3.3.1 Nominals

Nominals are defined as the class of words that can head an NP and can constitute an argument of a predicate. Nominals thus regroup nouns, pronouns and numerals.

### 3.3.2 Verbs

Verbs differ from other word classes by their ability to take TAM markers and to head an independent sentence on their own, while not being able to assume directly the role of argument of a predicate.

### 3.3.3 Adjectives

Adjectives are a secondary word class in Ōgami Ryukyuan. They are derived by reduplication or addition of the similative suffix -ki to a property concept stem. Adjectives are generally used to modify a noun, and they cannot constitute the argument of a predicate (unlike nominals) and do not inflect (unlike verbs).

### 3.3.4 Particles

Ōgami Ryukyuan has a set of grammatical morphemes that are not suffixes but do not belong to a precise word class and cannot head a phrase. Many of them are clitics that attach to a phrasal constituent. The label particle is used here to
regroup such markers as the role markers, the restrictive and inclusive markers, as well as the modal markers. The role markers will be detailed in §8, and an overview of other particles is given below.

### 3.3.4.1 Final particles

Final particles are markers that appear after a main predicate and express various kinds of modal values. They can appear after any kind of predicate, and in the case of a nominal predicate they do not trigger insertion of the copula.

The most common final particles include $t t a \sim t i m$ for hearsay, $i \sim i u$ for exclamation, ira for requesting agreement, saika for requesting confirmation, pecm for doubt, tara for assertion, $k a$ for question or na for prohibition.

### 3.3.4.2 Restrictive and inclusive particles

The restrictive particle tecn attaches to an extended NP before a focus marker, or to a dependent verb form.
(21) $k a r \varepsilon=\varepsilon \quad$ saki $=i=t \varepsilon \varepsilon n \quad n u m-i=t u \quad s k a m a=u=p a$
$\mathrm{DIST}=\mathrm{TOP}$ alcohol $=\mathrm{ACC}=$ RESTR drink $-\mathrm{CVB}=\mathrm{FOC}$ work $=\mathrm{ACC}=$ TOP.OBJ
asi-n
do-NEG
'He only drinks alcohol and does not work.'
The inclusive particle mai attaches to extended NPs or to subordinate clauses.
(22) $\quad$ akaures $=n u \quad<k j o o d a i>f t a a u=n u<f u u f u>=n$

Akaurse $=$ NOM sibling two $=$ NOM $\quad$ couple $=$ DAT
nar- $i=i k-i \quad$ mamuia $=u=$ mai nas-tau
become-CVB = PARF-CVB Mamuya $=$ ACC $=$ INCL to.father-PST
'The brother and the sister of the Akaurse house became husband and wife and gave birth to Mamuya too.'

### 3.3.5 Other word classes

### 3.3.5.1 Determiners

Determiners form a small closed word class (unu 'proximal' and kanu 'distal') and are used for adnominal modification only. They correspond to demonstrative adjectives in other languages and are based on the same roots as the demonstrative pronouns.

> unu nkena $=u \quad$ upu-upu-na kitam-i fii-ru
> PROX nigana $=$ ACC big-big-DISTR cut-CVB give-IMP
> 'Cut me these nigana roughly.'

### 3.3.5.2 Adverbs

Adverbs are used to modify a verbal predicate and cannot be used as a predicate (unlike verbs, nominals and adjectives), as a predicate's argument (unlike nominals). Adverbs do not inflect (unlike verbs).
a. piima-kaa-na mut-i=ra
few-DIM-DISTR hold-IMP = DISC
'Take them little by little!'
b. ikecm=n=na ansi $=n u$ muna $=a \quad$ nec-tata- $m$
old.days $=$ DAT $=$ TOP so $=$ NOM thing $=$ TOP NEG-PST.NEG-IND
'In the old days, there were no such things.'

### 3.3.5.3 Conjunctions

There are few conjunctions in Ōgami Ryukyuan, and only one is used for (disjunctive) coordination: suka 'but'. Most of the conjunctions seem to be clitics attaching to the right edge of a clause.
$a k s-k a u=k \varepsilon \quad n u m-i=r a$
hot $-\mathrm{vBZ}=$ when drink - IMP $=$ DISC
'Drink while it's still hot!'

### 3.3.5.4 Ideophones

Ideophones are used adverbially and are of two types: reduplicated ideophones (samisami ‘rugose’) and simple ideophones ( $\varepsilon t t i$ 'circular movement').

### 3.3.5.5 Interjections

Interjections are uninflected words that can be used in isolation to mark an exclamation, like ikei and akira for surprise, mmaiu for refusal or tii to raise attention.

## 4 Nominals and nominal phrases

Nominals are words that can head a nominal phrase, take (in general) any role marker and function as a predicate with or without the copula. Nouns are the most common type of nominals, and their bare root is always a free form. Other noticeable nominal subclasses are detailed below, as well as the properties of the nominal phrase.

### 4.1 Subclasses of nominals

### 4.1.1 Pronouns

The basic pronouns of Ōgami Ryukyuan are given in table 4 (some stem variants are omitted). Pronouns referring to humans can be marked for (associative) plural, but there is no inclusive/exclusive distinction for the first person pronoun. There is no real third person pronoun, and demonstrative pronouns are used instead. Both demonstrative and locative pronouns are organized around a proximal/distal opposition. The original proximal pronouns have been replaced by the original mesial ones, though the former do appear in some rare occasions.

Table 4: Pronouns in Ōgami Ryukyuan


Some other pronouns derived from the interrogative ones exist too:

- specific indefinite pronouns are derived by the suffix -kara (ex: 'what?' nau $\rightarrow$ nau-kara 'something')
- non-specific indefinite pronouns are derived by addition of the inclusive marker mai, after any case marker (ex: 'what?' nau $\rightarrow$ nau = mai 'anything')


### 4.1.2 Time nouns

Time nouns are a subclass of nouns, like 'today', 'now' or 'old days', that can be used like adverbs: their bare form can appear alone in the sentence, without any role marker.
(26) $k i i \quad$ sinsii $=k a \quad k u u-t i=t t a$
today teacher = NOM come-PROSP $=$ HS
'It is said the teacher will come today.'

### 4.1.3 Numerals

The original numerals are gradually being replaced by Sino-Japanese ones borrowed from Japanese. This is especially true of numerals over ten.

For generic enumerations, the following series of truncated numerals is used: tii ' 1 ', taa ' 2 ', mii ' 3 ', iuи '4', iks ' 5 ', muiu ' 6 ', nana ' 7 ', iaa ' 8 ', kukunu '9', tuu '10'.

On the other hand, a numeral root is always followed by a classifier suffix when counting or quantifying beings or objects. There are some stem alternations and idiosyncrasies in the combination of numeral roots and classifiers, but the usual numerals are as follows: pstu ' 1 ', fta ' 2 ', miu ' 3 ', iu ' 4 ', iks ' 5 ', muiu ~ mm '6', nana ' 7 ', ia ' 8 ', kukunu ' 9 ', tuu ' 10 '. Classifier suffixes include for example $-k s$, a generic classifier, -nupstu for humans, -ka for days, -kara for animals, -uuna for ships, -wa for flat objects, -kssi for cut bits, -kiv for houses, etc.

Numerals behave like other nominals and can head an NP, but they can also be floating:
(27) nnama situ $=n u=t u \quad a n-t a=k a \quad i a a=n k a i$ ftaau
now student $=$ NOM $=$ FOC I-PLUR $=$ NOM house $=$ DIR two
$k s s-i=u$
come-CVB = IPF
'Now there are two students in my house.'

### 4.1.4 Formal nouns

Formal nouns are nouns that have undergone some grammaticalization. Some of them have entirely lost their lexical meaning and are now pure grammatical markers, while others can still be used as lexical nouns. Both retain some morpho-syntactic characteristics of nouns, which requires classifying them as a subcategory of nouns. For example, formal nouns can be used in predicative position on their own and take the copula for some inflectional categories.

Usually formal nouns follow a verb in relative clause-like structure and serve as conjunctions or TAM markers.
(28) $k a r i=k a \quad k s-t i k a \quad$ panas kumata ia-tauu munuи DIST $=$ NOM come-ANT speak PREV COP-PST though 'If he had come we would have spoken.'
The most common formal nouns are kumata 'previsional', munu 'complementizer', paa 'temporal subordinator', pakw 'presumptive', sammin 'intentional'.

### 4.2 Nominal morphology

Nominals can attach some suffixes like the plural, diminutive, and approximative.

### 4.2.1 Plural

Plural marking is possible for animate nouns, though it is always optional except for personal pronouns. There are three different plural suffixes, which all convey the same associative plural meaning:

- -ta attaches to pronouns referring to humans as well as address nouns (see §4.3);
- $-k \varepsilon$ attaches only to the distal demonstrative pronoun kari, which can also be pluralized by -ta;
- -nummi attaches to other animate nouns.
a. kama=n=tu taroo-ta=ka uw
there $=$ DAT $=$ FOC Tarō-PLUR $=$ NOM be
'Tarō and the others are over there.'
b. kari-k $=\varepsilon \quad$ ikima $=n k a i$ iks kumata DIST-PLUR $=$ TOP Ikema $=$ DIR go PREV
'They are going to Ikema.'
c. $u\ulcorner\varepsilon=\varepsilon \quad a n-t a=k a \quad$ faa-nummi PROX $=$ TOP I-PLUR $=$ NOM child-PLUR 'These are our children.'


### 4.2.2 Diminutive

The suffix -kaa generally has a diminutive value, but it can also convey the meaning of an approximate direction. Polysemous markers combining such seemingly disconnected meanings as diminutive, approximative, endearment and plural are in fact not uncommon in the world's languages, especially in Japanese and other East Asian languages (Antonov 2007). The diminutive suffix can appear not only on nominals but also on reduplicated adjectives and some adverbs.
(30)
a. mitum-faa-kaa $=n s i=n u \quad$ pstu ira
woman-child-DIM = SIMIL = NOM person DISC
'He looks like a little girl.'
b. uma-kaa=n=tu au
here - DIM $=$ DAT $=$ FOC RES
'It's around here.'

### 4.2.3 Approximative

The suffix -naki indicates an approximation or an ambiguity.
(31) uma-naki=i=kara saukw=pa assu
here-APPROX $=$ ACC $=$ ABL cleaning $=$ TOP.OBJ do.IMP
'Clean the room beginning from around here.'

### 4.3 Nominal hierarchy

Nominals in Ōgami Ryukyuan are organized according to a hierarchy that governs several morphosyntactic features. It is not fundamentally different from what is usually called the animacy, empathy, topicality, referentiality or indexability hierarchy (Silverstein 1976, Bickel and Nichols 2007).

The nominal hierarchy of Ōgami Ryukyuan specifically distinguishes inanimates from animates, humans and non-humans, address nouns from common nouns. Address nouns are kinship terms for elders ('father', 'elder sister', etc.) or status or function names ('teacher', 'chief', etc.) that are used to address someone.

Features correlated with the nominal hierarchy are:

- the choice of the interrogative pronoun taru or nau;
- the choice of the nominative-genitive marker $k a$ or $n u$;
- the possibility and choice of the plural suffix-ta or -nummi;
- the choice of the existential verb ur or ar.

The nominal hierarchy and the correlating features can be schematized as in figure 2.


Figure 2: The nominal hierarchy in Ōgami Ryukyuan

### 4.4 Nominal phrases

A nominal phrase contains a nominal head that can be preceded by a modifier and followed by a role marker.

### 4.4.1 Modifier

Nominal phrases contain an optional modifier slot before the head noun. It can be occupied by a determiner, another NP, a relative clause or an adjective.

### 4.4.1.1 Modifier filled by a determiner

The NP modifier position may be occupied by a determiner.
(32) araa kanu mitum $=m u=t u \quad n u k u m-i=u u$
I.TOP DIST woman $=\mathrm{ACC}=\mathrm{FOC}$ love-CVB $=\mathrm{IPF}$
'I love that woman.'

### 4.4.1.2 Modifier filled by an NP

A modifier NP is marked by one of the two nominative-genitive case markers and can be labeled a genitive phrase. However, the semantic relationship involved is not restricted to possession but also includes attribution or quantification.
a. $u r \varepsilon=\varepsilon \quad a=k a \quad$ kankai=kami $\quad i a=s s u k a=t u$ PROX = TOP I = NOM thought = TERM COP = but = FOC 'This is just my opinion.'
b. <epuron> $=n u<$ poketto > = kara mut-i kss-i apron $=$ NOM $\quad$ pocket $=$ ABL $\quad$ hold-CVB comeCVB
'He brought them from his apron's pocket'
c. mii-tau=nu pstu=nu kss-i
three-CLF $=$ NOM person $=$ NOM come-CVB
'Three persons came...'
The modifier NP may already carry a case marker, and then the marker nu attaches after it, no matter the place of the noun in the nominal hierarchy.
$a n=k a r a=n u<$ tegame $>=\varepsilon a$-ta-m?
$\mathrm{I}=\mathrm{ABL}=\mathrm{NOM}$ letter $=$ TOP be-PST-IND
'Was there a letter from me?'

### 4.4.1.3 Modifier filled by a relative clause

A noun can also be modified by a relative clause.
$u m a=a \quad[[a=k a$ mai $\quad$ ks-taw $] \quad$ tukuma $]$
here $=$ TOP I $=$ NOM before come-PST place
'This is a place I have been before.'

### 4.4.1.4 Modifier filled by an adjective

An adjective may also appear as a noun modifier.
(36) imi-imi $=n u \quad$ suma-kaa iar-iiri $=t u \quad$ pari $=$ mai
small-small $=$ NOM island-DIM COP-CVB.IPF $=$ FOC field $=$ INCL
tar-a-n
suffice-IRR-NEG
'Since (O$\overline{\mathrm{O}} \mathrm{ami}$ ) is a small island, there are not enough fields.'

### 4.4.2 Head

The head nominal is always required in an NP, and no headless NPs seem to occur, though some headless relative clauses are attested.

Some NPs have a formal noun as their head. These nouns are more or less grammaticalized nouns which have the morphosyntactic properties of nouns but serve as grammatical markers. Relativization of a formal noun is a widely used strategy of complementation and subordination.

### 4.4.3 Extended nominal phrases

Nominal phrases also often carry role markers that indicate their grammatical, semantic and/or pragmatic role in the clause or sentence. Most of these grammatical morphemes are clitic particles and cannot be said to form a new kind of phrase that they would head, though some of the role markers do have postposition-like properties. They are better viewed as extensions of the NP, with whom they form an extended nominal phrase. Like simple NPs, extended NPs can act as predicates, though it is not very frequent.

$$
\begin{align*}
& \text { <iakuba>=nkai ia-tika uma=nu mks=kara=si ik-i }  \tag{37}\\
& \text { town.hall= DIR COP-ANT here= NOM road=ABL=INSTR go-IMP } \\
& \text { 'If you're going to the town hall, go by this way.' }
\end{align*}
$$

## 5 Verb morphology

All regular verbs can be divided into two main classes according to the shape of their stem and to which suffix they take for certain inflectional categories: the -i verbs class and the general class. There is only one completely irregular verb (kss 'come'), and less than a dozen verbs (including the copula) have one or two irregular forms in their paradigm.

### 5.1 The structure of the verb

The morphological structure of the verb can be symbolized as follows:

$$
\begin{gathered}
\text { (38) [ ROOT } \begin{array}{l}
\text {-derivation }]_{\text {STEM }}
\end{array} \text {-inflection } \\
\left\{\begin{array}{l}
\text {-honorific } \\
\text {-causative-passive }
\end{array}\right\} \quad\left\{\begin{array}{l}
\text { POLARITY-DEPENDENCY } \\
\text { TAM }
\end{array}\right\}
\end{gathered}
$$

### 5.1.1 Stem

The $-i$ verbs, which also include the passive and one class of derived causative verbs, have a single and invariable basic stem ending in -i. For non-derived verbs, the stem is identical to the root, and all inflectional affixes attach directly to it.

The general verb class is less homogeneous and has a more complicated morphology. Some of these verbs have not only a basic stem but also a special stem, whose form is not entirely predictable (table 5). Both stems take different inflectional suffixes and have to be listed in the lexicon. Some verbs also undergo some minor phonological alternations in their paradigms, but these are regular processes which apply elsewhere in the phonology. We also have to mention the gemination in $-f$ and $-v$ verbs:
(39) niv $+-i \rightarrow n i v-v i ~ ‘ s l e e p-I M P ' ~$

The irrealis form is also used as a stem to build other forms like the negative, negative past, negative converb, prospective and anti-commissive.

Table 5: Verb stems in Ōgami Ryukyuan

|  |  | Root |  | Basic stem | Special stem |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -i class |  | -i | 'get up' | $u k i$ |  |
| General class | 1 stem | -f | 'to water' | $i k \varepsilon f$ |  |
|  |  | -v | 'sleep' | niv |  |
|  |  | -m | 'drink' | num |  |
|  |  | -n | 'die’ | swn |  |
|  |  | -s | 'push' | us |  |
|  | 2 stems | -p | 'play' | asup | aswpu |
|  |  | $-k_{(1)}$ | 'row' | kuk | kuku |
|  |  | $-k_{(2)}$ | 'write' | kak | kaks |
|  |  | -t | 'wait' | mat | maks |
|  |  | -r | 'take' | tur | tum |
|  |  | -u | 'think' | umu | итии |
|  |  | -a | 'laugh' | para | parau |

### 5.1.2 Inflection

Inflection is marked by suffixes attaching to a stem, though it can also be marked by particles and some formal nouns attached to a predicate. Inflection covers the categories of tense, aspect, mood and polarity, but also encodes differences in the syntactic status of forms.

### 5.2 Inflectional morphology

A primary distinction is made between dependent and independent verb forms. This roughly corresponds to the finite/non-finite distinction, but finiteness is an ambiguous concept which can refer to morphological deficiency, syntactic autonomy, or both. ${ }^{4}$ Dependent verb forms are defined here as special verb forms that cannot head an independent sentence and are morphologically overtly marked as such.

[^41]
### 5.2.1 Independent verb forms

Independent verb forms appear in main independent clauses, as well as in relative clauses, but independent verb forms inflected for the directive moods are restricted to main clauses.

The bare basic stem is used as an independent verb form, called here the neuter form, to express generic non-past tense. Other forms show an overt marker for tense-aspect-mood and polarity. A list of suffixes appearing on independent verb forms is given in table 6.

Table 6: Independent verb suffixes in Ōgami Ryukyuan

| Category | Generic class 'say' awr- | -i verbs <br> 'see' mii- |
| :---: | :---: | :---: |
| neuter | au | mii |
| negative | $a u-a-n$ | mii-n |
| past | au-tar- | mii-tar- |
| negative past | au-a-tatar- | mii-tatar- |
| imperative | awr-i | mii-ru |
| precative | aur-Ėri | - |
| prohibitive | $a u=n a$ | $m i i=n n a$ |
| irrealis | au-a | mii- |
| previsional | $a u-a-t i$ | mii-ti |
| anti-commissive | au-a-tzen | mii-tesn |
| interrogative | ашг-ย์ | - |
| potential | $a u-a i$ | mii-rai |

### 5.2.2 Dependent verb forms: converbs

Ōgami Ryukyuan has a set of dependent verb forms that cannot head an independent sentence ${ }^{5}$ and appear only in adverbial subordinate clauses and nonfinal clauses of clause-chains. These verb forms can be labelled converbs as a whole, although some of them are not strictly confined to adverbial subordinated clauses. The definition of converb adopted here thus follows that of Nedjalkov (1995) rather than the narrower definition of Haspelmath (1995), and it partly overlaps with the category of medial verbs (Foley 1986).

At least some of the converb suffixes can combine, and some of them can follow an otherwise independent inflected verb form to mark it as dependent.

Table 7 lists the different converb forms and their major uses.

[^42]Table 7: Converbs in Ōgami Ryukyuan

| converb | attaches to | suffix | use |
| :--- | :--- | :--- | :--- |
| concessive | irrealis | - pamai | concession |
| negative concessive | irrealis | -tarapamai | negative concession |
| simultaneous | special stem | $-(s) s \varepsilon c n$ | simultaneity |
| purposive | special stem | $-k a$ | goal of motion |
| negative conditional | irrealis | - taka | negative condition |
| anterior | special stem | $-t i k a$ | anteriority, condition |
| circumstancial | basic stem | $-(r) i p a$ | circumstance, condition |
| imperfective | basic stem | $-(i) i r i$ | state parallel to the main event |
| conditional | basic stem | $-i i k a$ | condition |
| negative | irrealis | $-t a$ | negation |
| narrative | basic stem | $-i, \emptyset$ for -i verbs | sequentiality, manner, complex predicate |
| sequential | narrative converb | $-s i t i \sim-s t i$ | event sequence |

### 5.3 Derivational morphology

Non-class changing verbal derivation includes the voice categories (causative and passive) as well as honorification. These are marked by suffixes attached directly to the root.

### 5.3.1 Voice: causative and passive

Voice categories include the causative and the passive, which trigger the valency changes to be detailed in $\S 10.4$. The causative is marked by either -as or -(a)swmi, with no major distinction between the two, except that the former appears only with verbs from the general class. The passive is marked by the suffix -(r)ai and it should be distinguished from the potential even if both are marked by the same suffix and are historically related; while the passive triggers important changes in the verb's valency, the potential only adds a modal value to the verb.

### 5.4 Honorific

The honorific category marks deference toward the subject of the verb. Honorific verbs are scarcely used nowadays in Ōgami Ryukyuan, but it is still possible to elicit partial paradigms that involve the suffix -(s)amar-. Several verbs exhibit suppletive morphology for honorification.

$$
\begin{array}{llll}
\text { 'be' } & \text { ur- } & \rightarrow & \text { uramar- }  \tag{40}\\
\text { 'eat' } & \text { fa- } & \rightarrow & \text { nkek- } \\
\text { 'drink' } & \text { num- } & \rightarrow & n k \varepsilon k- \\
\text { 'come' } & \text { ks- } & \rightarrow & m m \varepsilon r- \\
\text { 'give' } & \text { fii- } & \rightarrow & \text { meras- }
\end{array}
$$

### 5.5 Complex verb forms

Ōgami Ryukyuan has several types of complex verb forms that involve several verb roots but function as a whole and do not form different clauses.

First, compound verbs are easily identifiable from their morphophonological and syntactic properties: the first member is always a special stem, the two terms form a single phonological word and cannot be separated by another element, and the second member does not affect the global valency of the compound, which is identical to that of the first one. For example $V$-pakwmi 'begin to $\mathrm{V}^{\prime}$ compounds where $V$ is intransitive do not acquire an extra argument though pakumi 'begin' is itself transitive. Most of the second members of compounds are thus more like auxiliaries and often add an aspectual or modal value. Some of the most frequent ones include pakumi 'begin', puskar 'want', kani 'cannot' and iuus 'can'.

Analytic verb forms on the other hand involve a narrative converb followed by a TAM auxiliary, and the two can be interrupted by a topic or focus marker attached to the converb. This structure is similar to that of complex predicates (§ 9.2.1), but the second term of analytical forms is not a fully lexical verb but an auxiliary verb. Auxiliary verbs have undergone grammaticalization, and thus have no argument structure. Moreover, auxiliaries have a value sometimes rather different from their original lexical meaning. The most frequent auxiliary verbs are given in table 8.

Table 8: Auxiliary verbs in Ōgami Ryukyuan

| Form | Auxiliary value | Lexical meaning |
| :--- | :--- | :--- |
| ur | imperfective | $<$ 'be' (animate) |
| ar | resultative | <'be' (inanimate) |
| $n \varepsilon \varepsilon n$ | completive | < 'not be' |
| mii | conative, experiential | <'see' |
| usk | preparative | $<$ 'put' |

Complex predicates are very similar to analytical verb forms, the main difference is that their second member retains its argumental structure and has not (yet) undergone full grammaticalization. They will be further detailed in §9.2.1.

## 6 Adjectives

### 6.1 The adjective class as opposed to nominals and verbs

A class of adjectives can be distinguished from both nominals and verbs. Unlike nominals, adjectives cannot stand as an argument of a predicate and cannot be marked for most case categories or for plural, nor can they be modified by a determiner. Adjectives also do not occur with the copula iar-. Unlike verbs, they do not inflect, and are thus incompatible with the tam suffixes.

Two subclasses of adjectives exist in Ōgami Ryukyuan. The reduplicated adjectives are formed by reduplication of a property concept stem, with lengthening of the final mora of the first part. The similative adjectives are formed with the suffix -ki added to a property concept stem and have the special meaning 'like, seemingly'.

### 6.2 The function of adjectives

The principal function of adjectives is to modify a noun. While similative adjectives can be placed just before the noun they modify, reduplicated adjectives
must be followed by the nominative-genitive case marker $n u$.
a. $u r \varepsilon=\varepsilon \quad u t u t u=n u \quad$ fau-pus-ki kaas ira PROX $=$ TOP younger.sibling $=$ NOM eat-DES-SIMIL cookie DISC
'This is the cookie my younger brother seems to want to eat.'
b. takaa-taka $=n u$ kii
high-high = NOM tree
'A tall tree'
Adjectives can also be used predicatively. In such a case, similative adjectives can be used alone while reduplicated adjectives must be followed by the imperfective auxiliary $u r$-.
a. $i m=n u \quad k s s i t i-k i \quad i r a$
sea $=$ nOM beautiful-SIMIL DISC
'The sea is beautiful, isn't it?'
b. ikima=a irav=nse=e upu-upa=a ur-a-n suma

Ikema $=$ TOP Irabu $=$ SIMIL $=$ TOP big-big $=$ TOP IPF-IRR-NEG island 'Ikema is an island not as big as Irabu.'

Reduplicated adjectives can also be used adverbially, though it is not their most frequent use.
(43) unu nkena=u upu-upu-na kitam-i fii-гu

PROX nigana = ACC big-big-DISTR cut-CVB give-IMP
'Cut me these nigana roughly.'
Adjectives also appear in fientive and causative constructions, and reduplicated adjectives then appear with a suffix $-f$
a. vva=ka tii=nu skata-ki nar-i ure=e ara-i you $=$ NOM hand $=$ NOM dirty-SIMIL become-CVB PROX $=$ TOP wash-IMP 'Your hands are dirty, wash them.'
b. pssi-f=tu nar-i kss
cold-SUFF = FOC become-CVB come
'The weather is becoming cold.'

## 7 Class-changing derivations

### 7.1 Nominalization

Nouns can be derived from a property concept stem in two ways:

- the suffix -sa derives abstract nouns
(45) taka 'high' $\rightarrow$ takasa 'height'
- the suffix -munu derives concrete nouns
(46) uturus 'frightening' $\rightarrow$ uturusmunu 'something/someone frightening'

Nominalization of verbs seems to be rather unproductive. It is difficult to identify synchronically the process of nominalization behind such examples as panas 'to speak' $\rightarrow$ panas 'story' or nika 'to pray' $\rightarrow$ nikau 'prayer'. On the other hand, it is possible to identify a suffix $-\mathcal{\varepsilon}$ deriving agent nouns:
(47) kupar- 'to stutter' $\rightarrow$ kupar- $\varepsilon \varepsilon$ 'stutterer'

### 7.2 Verbalization

Stative verbs can be derived from property concept stems, similative adjectives and property nouns by adjunction of the suffix -kar-.
(48) a. taka- 'high' $\rightarrow$ taka-kar- 'be high'
b. pus-ki 'seem to want' $\rightarrow$ pus-ki-kar- 'seem to want'
c. taia 'strength' $\rightarrow$ taiakar- 'be strong'

### 7.3 Adjectivalization

Adjectives are derived from property concept stems by reduplication with lengthening or by adding the similative suffix $-k i$.
a. taka- 'high' $\rightarrow$ takaa-taka 'high'
b. skata- 'dirty' $\rightarrow$ skata-ki 'seem dirty'

## 8 Role marking: case and information structure marking

Ōgami Ryukyuan has a set of role markers that can appear on NPs, as well as some converbs. Some of these markers have some suffixal properties, while others are more akin to cliticized postpositions, and still others exhibit a rather ambiguous combination of the two. For the sake of convenience I will write all of them as clitics (with the = boundary symbol) and assume they simply form an extended phrase with the phrase they attach to.

The main role markers of Ōgami Ryukyuan are given in table 9, where S, $\mathrm{A}, \mathrm{P}$ and E respectively refer to the single argument of an intransitive predicate $(\mathrm{S})$, the most agent-like (A) and patient-like ( P ) argument of a prototypical

Table 9: Role markers in Ōgami Ryukyuan

| Label | Marker | Categories or functions marked |
| :---: | :---: | :---: |
| nominative | $a$ | S/A, possessor, nominal modifier |
| nominative | $n u$ | S/A, possessor, nominal modifier |
| accusative | $u$ | P |
| accusative | $a$ | P |
| dative | $n$ | E, destination, location, passive/causative agent |
| directive | nkai | E, destination, agent in passive constructions |
| ablative | kara | source, mean or path of transportation |
| terminative | kami $\sim$ | temporal or spatial limit |
| instrumental | si | instrument, material |
| comitative | $t u \sim s u i$ | companion, addition |
| comparative | iunu | standard of comparison |
| similative | $n s i$ | standard of equal comparison |
| topic | $a$ | topic |
| topic object | $p a$ | topicalized object |
| focus | tu | focus |

transitive predicate, and to the extended core argument (E). The topic and focus markers will be further described in $\S 10.6$.

The difference between the two nominative-genitive markers lies within the nominal hierarchy: $k a$ is used with nominals located on the upper part of the hierarchy (pronouns and address nouns), and $n u$ with the other nominals.
a. $a=k a=t u \quad k s s$
$\mathrm{I}=\mathrm{NOM}=\mathrm{FOC}$ come
'Here I come!'
b. mii-tau=nu pstu=nu kss-i
three-CLF $=$ NOM person $=$ NOM come-CVB
'Three people came.'
The accusative marker $a$ is not very common in the O gami dialect in comparison to other Miyako dialects (Koloskova 2007, Shimoji 2009b), and contrary to the other accusative marker $u$, it can only appear in non-final clauses of a chain or in subordinate clauses.
a. faa-nummi=i saar-i $\quad i m=n k a i ~ i k-i$
child-PLUR $=$ ACC take.to-CVB sea $=$ DIR go-CVB
'We used to take the children to the sea...'
b. nnama = kara kam = ma nika-i
now $=$ ABL $\quad$ god $=$ ACC pray -CVB
'Going to pray the gods now...'

Case ellipsis occurs only with the core arguments SAP marked for nominative or accusative. It is not uncommon in the case of the accusative, but very rare in the case of the nominative, except for topicalized subjects, in which case the topic marker $a$ is obligatory and forbids the presence of the nominative marker. The nominative is also always ellipted when the inclusive marker mai appears on the NP.

## 9 Predicate phrase

### 9.1 The structure of the predicate phrase

A predicate can be verbal, nominal or adjectival in Ōgami Ryukyuan.

### 9.2 Verbal predicate

A verbal predicate can be a simple verb, a compound verb, an analytic form or a complex predicate.

### 9.2.1 Complex predicates

Complex predicates involve several verb forms that resemble complex phrasal constructions since they are formed by narrative converbs. In fact, complex predicates act as single mono-clausal predicates. In this way they differ from both subordinate constructions and clause-chains. They must also be distinguished from analytic verb forms, which they also resemble superficially: in the case of complex predicates all verbs retain their lexical meaning and argument structure, while only the first member of analytical verb forms is a lexical verb.

Complex predicates do not imply a temporal sequence of several events, and, contrary to clause-chains, it is never possible to replace the narrative converb with a sequential converb or to introduce a constituent between the two members without changing the meaning.

> pampin = nu mut-i(*-siti) $\quad$ kss-i $(*-s i t i) \quad$ fii-ru
> fritter = ACC hold-CVB(-SEQ) come-CVB(-SEQ) give-IMP
> 'Bring me some fritter!'

Complex predicates are also often not interpretable as involving a manner adverbial subordinate clause, though some cases can be ambiguous. However, contrary to subordinate clauses, members inside a complex predicate cannot be focalized or negated independently.

Moreover, all verbs of a complex predicate retain their argument structure which they share as a whole with the other members. For instance a complex
predicate with a motion verb like kss 'come' entitles the presence of a locative argument.

```
uma \(=\) nkai muti \(\quad\) kuu
here \(=\) DIR hold-CVB come-IMP
'Bring it here!'
```


### 9.3 Nominal predicate

A nominal can also serve as a predicate. It can appear without a copula if the clause is independent and does not require special TAM marking. In other cases, the copula iar- (negative stem ara-) is required and it bears the marks of coordination, subordination or TAM and polarity.
a. $u r \varepsilon=\varepsilon \quad m \varepsilon \varepsilon k u-p s t u$ ?

PROX = TOP Miyako-person
'Is he from Miyako?'
b. méku-pstu ar-a-n

Miyako-person COP-IRR-NEG
'He's not from Miyako.'

### 9.4 Adjectival predicate

Adjectives, too, can be used as predicates. In such cases, reduplicated adjectives must appear with the auxiliary ur-, while similative adjectives can stand on their own.

## 10 The simple sentence

### 10.1 Speech acts

The different types of sentences, declarative, interrogative and imperative can be distinguished by their morphosyntactic features. Intonation is also an important cue to distinguish between the three types, and it can be the only evidence to discriminate between declarations and questions.

### 10.1.1 Declarative sentence

Declarative sentences are the unmarked type: they exhibit the greatest variety of inflections and have no specific morpho-syntactic marking.

### 10.1.2 Interrogative sentence

Interrogative sentences are very much similar to declarative ones and often exhibit no morpho-syntactic differences. A special question marker ka can optionally be added to a sentence to mark it overtly as interrogative. Verbs of the generic class can also be marked with the interrogative suffix $-\varepsilon \varepsilon$. The interrogative mood is detailed in §10.5.2.4.

However, the main cue to discriminate interrogative sentences from declarative ones is the intonation: interrogative sentences are uttered with a special pitch pattern. The pitch is high and level and falls sharply on the last syllable.

### 10.1.3 Imperative sentence

Imperative sentences can easily be identified as the verb is always inflected for one of the directive categories: imperative, precative or prohibitive.

### 10.2 Existence

The expression of the various types of existence show isomorphism to some extent.

### 10.2.1 Equation and proper inclusion

Proper inclusion (e.g. 'he is a student') and equation (e.g. 'he is my father') are mainly expressed by a nominal predicate, which does not require the copula in most cases.

$$
\begin{align*}
& \operatorname{kar\varepsilon }=\varepsilon \quad \text { sinsii }  \tag{55}\\
& \text { DIST }=\text { TOP teacher } \\
& \text { 'He's a teacher.' }
\end{align*}
$$

### 10.2.2 Location

Location is expressed by an existential verb. The choice between the two verbs $u r$ and ar depends on the nominal hierarchy, and here correlates with the animacy feature: animate subjects (humans, gods, animals) require ur while ar is used with inanimate subjects. The place of location is marked by the dative case marker $n$.

$$
\begin{array}{ll}
\text { a. } & a=k a \quad \text { ast } a=a \quad n t a=n=t u \quad a u  \tag{56}\\
\mathrm{I}=\text { NOM } \operatorname{clog}=\text { TOP } \text { where } ?=\text { DAT }=\text { FOC be }
\end{array}
$$

'Where are my clogs?'
b. kama=n=tu tuш=nu <ippai> uu
there $=$ DAT $=$ FOC bird $=$ NOM lot be
'There are a lot of birds there.'

### 10.2.3 Possession

Existence of a possession can be encoded by the same construction as a locative existence, i.e. with an existential verb. In this case the possessed thing or being is marked for nominative.
a. $t i n=n u \quad n \varepsilon \varepsilon-n=s u k a=t u \quad t i n=n u \quad a r-i p a=t u$ money $=$ NOM be.NEG-NEG $=$ but $=$ FOC money $=$ NOM be-CIRC $=$ FOC iaa $=u \quad$ fks-pus-kau house-ACC build-DEs-vBz
'I don't have money but if I had I would like to build a house.'
b. suta=ka=tu uu=tim
elder. .brother $=$ NOM $=$ FOC be $=$ HS
'He said he has an elder brother.'
When the possessor is human, the verb ur can be used even if the possession is an inanimate object.
(58) kanu psta $=a \quad$ funi $=n u=t u \quad$ miu-uuna uw DIST person $=$ TOP boat $=$ NOM $=$ FOC three-CLF be 'He has three boats.'

Possession of animals can be expressed by the verb kskana 'to rear', and temporary possession of an object is usually expressed by the verb mut- 'hold'.

### 10.3 Negation

Negation is expressed by special suffixes carried by a predicative element (verb, copula, auxiliary). The main negative suffix is $-n$, which attaches to the irrealis form of verbs. However, the two existential verbs as well as the copula have irregular or suppletive negative forms. ${ }^{6}$

$$
\begin{align*}
& \text { 'be' : ur } \rightarrow \text { mii-n }  \tag{59}\\
& \text { 'be' ar } \rightarrow \text { nec-n } \\
& \text { copula jar } \rightarrow \text { ara-n }
\end{align*}
$$

Derived stative verbs in -kar exhibit special negative forms in which the verbalizing suffix is replaced by -ffance-n
(60) takakar- $\rightarrow$ taka-ffance-n

There are also several portmanteau morphemes that express both negation and another inflectional category:

- prohibitive na (imperative + negation);

[^43]- negative converb -ta;
- negative past -tatar-;
- anti-commissive -tzen (prospective + negation);
- impotential auxiliary kani (potential + negation).


### 10.4 Valency-changing operations

The are two valency-changing operations in O$g a m i ~ R y u k y u a n, ~ t h e ~ c a u s a t i v e ~$ and the passive, which can be also be combined together.

### 10.4.1 Causative

The causative has the main effect of increasing the verb's valency. A new participant is introduced as the subject, and the original subject of the corresponding active construction is demoted. The subject is demoted to the role of object in the case of intransitive verbs, and to an oblique dative role with transitive verbs. Typically, the new participant is a causer controlling the causee, the effective agent.

> a. $f a a=n u=t u \quad<$ hon $>=n u$ ium- $i$
> child $=$ NOM $=$ FOC book $=$ ACC read-CVB
> 'The child read a book.' (active)
b. sinsii $=k a=t u \quad f a a=n \quad<h o n>=n u$ ium- $a s-i$
teacher $=$ NOM $=$ FOC child $=$ DAT $\quad$ book $=$ ACC read-CAUS-CVB
'The teacher made the child read a book.' (causative)
We also find an adversative use of the causative, where the subject is not a real causer but a participant negatively affected by the event.
a. araa tin $=n u=t u \quad n u s t u=n \quad n i s w m-a s-i$
I.TOP money $=$ ACC $=$ FOC burglar $=$ DAT steal-CAUS-CVB
'I got my money stolen by a burglar.'

### 10.4.2 Passive

The passive voice has the main effect of demoting the subject of an active construction to the role of oblique argument. The demoted argument is marked as dative or directive. In the case of transitive verbs, the original object is also typically promoted to the role of subject.

$$
\begin{align*}
& \text { a. } p a v=n u=t u \quad f a a=i u \quad f f-i  \tag{63}\\
& \text { snake }=\text { NOM }=\text { FOC child=ACC bite-CVB } \\
& \text { 'A snake bit a child.' (active) }
\end{align*}
$$

b. faa=nu $\quad p a v=n=t u \quad f f-a i$ child $=$ NOM snake $=$ DAT $=$ FOC bite-PASS.CVB 'A child was bitten by a snake.' (passive)

The passive voice also has some uses more akin to that of a middle voice, with a decausative/anti-causative meaning: the subject is viewed as the center of a spontaneous event.
a. unu iata=a ff-ipa=mai suku aki-rai PROX door $=$ TOP close-CIRC $=$ INCL immediately open-PASS
'Even if we close this door, it opens right away.'
b. suma $=n u=$ tu mii-rai uu island $=$ NOM $=$ FOC see-PASS.CVB IPF 'We see an island.' ( $=$ is visible)

In some constructions the valency seems to be increased instead of being decreased; the subject is demoted but there is no promotion of the object, and another participant is introduced as the subject. The new subject is usually a possessor or controller, and such constructions can be interpreted as cases of possessor-raising.
a. araa paku=u=tu $u s=n \quad$ fumtar-ai $\quad$ akw $=u$
I.TOP leg = ACC = FOC COW = DAT trample-PASS.CVB leg = ACC
iam-as- $\varepsilon=\varepsilon u$
suffer-CAUS-CVB = RES
'I got my legged trampled by a cow and I'm injured.'
b. kau-tau ftakina $=n u \quad$ kuruma $=u=t u$ nisum-ai
buy-PST recently $=$ NOM $c a r=A C C=F O C$ steal-PASS. $C V B$
'The car I had just bought was robbed.'
However, Ōgami Ryukyuan seems to have no indirect passive, an adversative passive used with intransitive verbs, as attested in Japanese (Shibatani 1990).

### 10.4.3 Combination of the causative and the passive

Both the causative and the passive voice can be combined in a single construction, by attaching the passive suffix after the causative. There is no demotion of the subject nor promotion of the object, and instead a causer is newly introduced as an oblique argument, and the causee/detrimental assumes the role of subject.
(66) a. araa $k w n u=t u \quad$ sinsii $=n$ simuks ium-as-ai
I.TOP yesterday $=$ FOC teacher $=$ DAT book read-CAUS-PASS.CVB
'I was obliged by the teacher to read a book yesterday.'
b. kwna=a $\quad$ upu-wa $=n=$ tu $\quad$ <ippai $>$ saki $=i$ yesterday $=$ TOP grand-father $=$ DAT $=$ FOC lot alcohol $=$ ACC num-as-ai drink-CAUS-PASS.CVB
'Yesterday, I was obliged by my grand-father to drink a lot of alcohol.'

### 10.5 Tense, aspect and mood

### 10.5.1 Tense

Ōgami Ryukyuan has only one formally marked purely temporal category: the past tense, marked by the verbal suffix -tar-.
(67) < ұiteņ $a>=$ kara kss-i <kago> = sui nisum-i psu-tau bicycle $=$ ABL $\quad$ come-cVB $\quad$ basket-COM steal-cVB leave-PST
'He came by bicycle and robbed them with his basket.'
Perfective past tense can also be expressed by a desubordinated construction with a narrative converb.
(68) $k a t a m=m u=t u \quad$ kurus-i
mosquito $=\mathrm{ACC}=$ FOC kill-CVB
'I killed the mosquito.'
Non past-tense categories are not overtly marked. The neuter form can thus mark present or future, often with a value of generic truth or habitual.
$a n s i=t u \operatorname{tauf}=f u=p a \quad k f f$
$\mathrm{so}=\mathrm{FOC}$ tōfu $=\mathrm{ACC}=$ TOP. OBJ make
'This is how we make tōfu.'

### 10.5.2 Major moods

### 10.5.2.1 Indicative

The indicative mood is nowadays very rare in Ōgami Ryukyuan, though it seems it was more frequent some decades ago (Hirayama et al. 1967, Shibata 1972, Hōsei daigaku Okinawa bunka kenkyūjo 1977). The indicative suffix -m is now restricted to past tense forms and stative verbs. The exact semantic value of this decaying suffix is difficult to pin down, but the comparison with other dialects reveals its original value was to indicate the speaker's certitude and implication in the assertion (Shimoji 2008b).

### 10.5.2.2 Irrealis

The bare irrealis form in - $a$ is used with a hortative meaning, expressing request, invitation, or intention of the speaker.
(70) $s u u=n u \quad p s s-i=i r-i p a \quad i m=n k a i ~ i k-a$
tide $=$ NOM dry-CVB $=$ IPF-CIRC sea $=$ DIR go-IRR
'Let's go to the sea when the tide is out.'

### 10.5.2.3 Directive

Ōgami Ryukyuan has different types of directive mood that express more or less strong requests: the imperative ( $-i /-r u$ ), the precative ( $-\varepsilon \varepsilon r i /-n \varepsilon$ ) and the prohibitive ( $=n a$ ).
a. ara-i mut-i kss-i
wash-CVB carry-CVB come-IMP
'Wash it and bring it!'
b. kanu pau=iu tur-eとri

DIST staff = ACC take-PREC
'Give me that staff!'
c. uri=nkai savau=na

PROX $=$ DIR touch $=\mathrm{PROH}$
'Don't touch this!'

### 10.5.2.4 Interrogative

Interrogative mood is often unmarked, but can be marked by the particle ka. A special verb form with a suffix $-\varepsilon \varepsilon$ also exists but is limited to past tense forms, the copula and stative verbs.
(72) nauripa = tu kuu-tatar- $\varepsilon \varepsilon$ ?
why? = FOC come-PST.NEG-INTERR
'Why didn't you come?'

### 10.5.2.5 Emphatic

Emphatic mood indicates a special emphasis made by the speaker, often a strong assertion. It is formed by adding the focus marker to the special stem of a verb, followed by a reduced form $s$ of the verb 'do' (as).
a. naupasi $=n u w u=u=m a i \quad f a u=t u=s$
how $?=$ NOM fish $=$ ACC $=$ INCL eat $=F O C=E M P H$
'I do eat all sorts of fishes.'

> b. $a t a=a \quad$ kuu-rai $=$ tu $=s$ ?
> tomorrow = TOP come-POT = FOC = EMPH
> 'Can you come tomorrow?'

### 10.5.3 Possibility and obligation

### 10.5.3.1 Potential

Potential expressions can be formed by either the suffix -rai or compounding with iuus.
a. asate $=\varepsilon$
$k u u-$ rai $=$ ssuka ata $=a$
kuu-rai-n day.after.tomorrow come-POT = but tomorrow = TOP come-POT-NEG 'I can come the day after tomorrow but not tomorrow.'
b. upuusa iar-iiri=tu fau-iuus-a-n
lot $\quad$ COP-CVB.IPF $=$ FOC eat-POT-IRR-NEG
'There is a lot so I can't eat all of it.'

### 10.5.3.2 Impotential

Impotential indicates impossibility and is formed by compounds with kani.
(75) unu psta=a ukam=nu pstu $i a=s s u k a=t u \quad u k a m=n u$ PROX person $=$ TOP O Ogami $=$ NOM person COP $=$ but $=$ FOC O$g a m i ~=~ N O M ~$
типиш $=u=p a \quad$ au-kani $\quad u ш$
word = ACC = TOP.OBJ say-IMPOT IPF
'He's from Ōgami, but he cannot speak the local language.'

### 10.5.3.3 Permissive

Permissive expresses permission granted to the subject of the verb and is formed by desubordination of the concessive converb (see §11.5).
$a t a=a \quad$ kuu-pamai?
tomorrow $=$ TOP come-cSv
'May I come tomorrow?'

### 10.5.3.4 Debitive

Debitive expression is periphrastic and combines a negative conditional converb with a negative form of the verb nar- 'become'.
(77) $k a r \varepsilon=\varepsilon \quad$ uki-takaa nar-a-n=suka mmita uki-n DIST $=$ TOP get. up-COND.NEG become-IRR-NEG $=$ but still get.up-NEG 'He must get up but he's still not waking up.'

### 10.5.4 Volition

### 10.5.4.1 Intentional

Intentional indicates a concrete project of the subject and is formed by adding the formal noun sammin to the predicate.
(78) ara $=a$ ata $\quad$ pssara $=n k a i$ iks sammin
$\mathrm{I}=$ TOP tomorrow Hirara = DIR go INT
'Tomorrow I'm planning to go to Hirara.'

### 10.5.4.2 Desiderative

Desiderative is formed by compounding with puskar- and marks a wish or a desire of the subject.
(79) $a=k a$ fau-pus-ka-m muna $=a \quad$ uri
$\mathrm{I}=$ TOP eat-DES-VBZ-IND thing $=$ TOP PROX
'That's what I want to eat.'
10.5.4.3 Anti-commissive

Anti-commissive indicates a refusal or the lack of intention by adding the suffix -tesn to the irrealis form.
(80) $a<a=a i k-a-t \varepsilon \varepsilon n$
$\mathrm{I}=\mathrm{TOP}$ go-IRR-ACOM
'I won't go'

### 10.5.5 Conjecture

Conjectural categories express the commitment of the speaker regarding the truth of the information.

### 10.5.5.1 Presumptive

The presumptive ( $p a k u$ ) indicates the information is deduced by the speaker and is highly probable or logically expected to be true.
(81) $a t a=a \quad$ stumuti=kara=tu $a m i=n u \quad$ ff paku tomorrow $=$ TOP morning $=\mathrm{ABL}=\mathrm{FOC}$ rain $=$ NOM fall PRESUM
'Tomorrow it will probably rain from the morning.'

### 10.5.5.2 Prospective

The prospective (-ti) is used as a kind of modal future or conjectural imperfective. It expresses an event that has not yet occurred but is, or was, expected to occur. It can also express the intention of the subject.
a. $a=k a \quad v v a=k a \quad i a a=n k a i \quad k u u-t i=s s \varepsilon \varepsilon \quad m a t-i=i r-i$
$\mathrm{I}=$ NOM you $=$ NOM house $=$ DIR go-PROSP $=$ since wait-CVB $=$ IPF-IMP
'I'm coming to your house so wait for me!'
b. $a m i=n u \quad f f-a-t i$
rain = NOM fall-IRR-PROSP
'It's going to rain.'

### 10.5.5.3 Previsional

The previsional (kumata) expresses an expectation or a project of the speaker.

```
vva=ka ks-tau paa=n=na araa iti p\varepsilonu
you = NOM come-PST moment = DAT = TOP I.TOP go.out.CVB leave
kumata = tu iatau
PREV = FOC COP-PST
```

'When you came I was about to go out.'

### 10.5.6 Evidentiality

Ōgami Ryukyuan has four evidential categories which indicate the existence of an external source for the information provided.

### 10.5.6.1 Hearsay

Hearsay is marked by $=t i m$ or $=t t a:^{7}$
a. tunau=nu $<o z i i>=k a=t u \quad k w n u \quad$ swn-tau $=t t a$ neighbour $=$ NOM $\quad$ old. $\operatorname{man}=$ NOM $=$ FOC yesterday die-PST $=$ HS
'It'said the old man from the neighbour house passed away yesterday.'
b. ike\&m=n=na $\quad$ kama=nu im=ma suma=tu ia-tau=tim old.days $=$ DAT $=$ TOP there $=$ NOM Sea $=$ TOP island $=$ FOC COP-PST $=$ HS 'It is said this part of the sea was land during the old days.'

### 10.5.6.2 Inferential

The inferential is marked by sauna and expresses the existence of an external source of information and a certain unreliability of this information: the in-

[^44]formation is presented as what can be inferred to be true from the evidence available.
$<$ obaa $>\quad u w=t u=s \quad$ sauna
grand-mother be $=$ FOC $=$ EMPH INFER
'It seems grand mother is there.'

### 10.5.7 Aspect

### 10.5.7.1 Imperfective

Imperfective aspect is formed with the auxiliary verb ur-. It can express a habit, an ongoing action or state. It thus combines the values of habitual, progressive and durative.
a. makss $\varepsilon=\varepsilon$ mainiks $<k u \nLeftarrow i>=n=t u a k i=u$
store $=$ TOP everyday $\quad 9 \mathrm{~h}=\mathrm{DAT}=$ FOC open. $\mathrm{CVB}=\mathrm{IPF}$
'The store opens everyday at 9.'
b. pataka=n nar $-i=t u=u$
naked $=$ DAT become-CVB $=$ FOC $=$ IPF
'He's naked.'
c. $k a r \varepsilon=\varepsilon \quad$ skama $=u=$ mai asi-ta $=t u \quad$ niv-vi=tsen uu DIST $=$ TOP work $=$ ACC $=$ INCL do-CVB.NEG $=$ FOC sleep - CVB $=$ RESTR IPF
'He does not work and all he does is sleep.'

### 10.5.7.2 Completive

Completive aspect is marked by the auxiliary nesn and conveys the meaning of an event completed in an irreversible fashion.

$$
\begin{align*}
& <\text { bas }>=n u=t u \quad \text { kui } \quad p \varepsilon r-i \quad n \varepsilon \varepsilon n  \tag{87}\\
& \text { bus }=\text { NOM }=\text { FOC go.past.CVB leave-CVB CPLF }
\end{align*}
$$

'The bus has left (and won't come back).'

### 10.5.7.3 Inchoative

Inchoative aspect is marked by compounding with pakwmi and indicates the event is at its beginning stage.
(88) $u n u<h o n>=n u=p a \quad$ kuna $=a \quad$ ium-pakumi $=t u$

PROX book $=$ ACC $=$ TOP.OBJ yesterday $=$ TOP read- INCHO $=$ FOC
'I began to read this book yesterday.'

### 10.5.7.4 Terminative

Terminative aspect can be marked by the auxiliaries tukumi and uvar-. It marks an event at its final stage.
a. kak-i=tu uvar-i=u
write-CVB = FOC TERM-CVB $=$ IPF
'I have finished writing.'
b. fau-tukumi=tu
eat-TERM $=$ FOC
'I have finished eating.'

### 10.5.7.5 Resultative

Resultative aspect is formed with the auxiliary ar- and marks a persistent result of an event.
(90) $w a=k a=t u \quad$ mmita pssara $=n \quad i k-\varepsilon=u$
father $=$ NOM $=$ FOC still $\quad$ Hirara $=$ DAT go-CVB $=$ RES
'My father is still in Hirara.'

### 10.5.7.6 Perfect

The perfect is seldom used in O$g a m i ~ R y u k y u a n . ~ I t ~ i s ~ f o r m e d ~ w i t h ~ t h e ~ a u x i l i a r y ~$ $u k$ - and expresses a past event viewed as linked with a posterior situation.

Akaurse $=$ NOM sibling two $=$ NOM couple $=$ DAT
nar- $i=i k-i \quad$ mamuia $=u=$ mai nas-tau
become-CVB $=$ PARF-CVB Mamuiaa $=$ ACC $=$ INCL to.father-PST
'The brother and sister of the Akaurse house, having become husband and wife, gave birth to Mamujaa.'

### 10.5.7.7 Conative

Conative aspect is marked by the auxiliary mii and expresses an attempt, a try or an experience.
a. ansi=nu muna $=a \quad$ upu-mma $=n k a i \quad k s k-i \quad$ mii-ripa $=t u$
so $=$ NOM thing $=$ TOP grand-mother $=$ DIR ask-CVB CON-CIRC $=F O C$
$s s-i=u$
know-CVB $=\mathrm{IPF}$
'That kind of thing, if we ask grand-mother, she will know it.'
b. $u r \varepsilon=\varepsilon \quad m i i=i a$ mii-n $u u$ PROX $=$ TOP see $=$ TOP CON-NEG fish 'It's a fish I have never seen.'

### 10.5.7.8 Preparative

Preparative aspect indicates an action done ahead, in prevision of an other event. It is marked with the auxiliary usk-.
(93) urii ara-i-siti nukui-siti nnas-i usk-i PROX $=$ ACC wash-CVB-SEQ wipe.CVB-SEQ tidy;up-CVB PREP-IMP
'Clean it, wipe it and put it away (for next use).'

### 10.6 Information structure

### 10.6.1 Topicalization

Topicalization of a constituent is always formally marked in Ōgami Ryukyuan. The two different topic markers $a$ and pa have a different distribution:

- pa appears after object arguments only;
- $a$ can appear after all other kinds of constituents, subject and oblique arguments, as well as adverbial clauses; it follows case markers but prevents the occurrence of a nominative-genitive marker.

The topic marker $a$ is also used to mark arguments that are at the same time the object of a clause and the subject of another.

A topicalized constituent is free to appear in a non-canonical position, usually the sentence-initial position.

Topicalization is also used to express contrast or emphatic negation.
a. $\quad$ akaurse $=n u \quad$ mïtu-kam $=m a \quad$ uri $=k a r a=t u$

Akaurs $=$ NOM couple-god $=$ TOP PROX $=$ ABL $=$ FOC
suma $=u=p a \quad$ pssuki-tau
village $=$ ACC $=$ TOP.OBJ widen-PST
'The married gods of the house of Akaures then populated the village.'
b. unu <gaikoku>=nu psta=a unu ukam=nu

PROX foreign $=$ NOM person $=$ TOP PROX Ōgami $=$ NOM
pstu $=$ pa mmna <zenbu $>$ pstu-tukuma $=n$ matumar $-i$ person $=$ TOP.OBJ all all one-place $=$ DAT gather-CVB
'These foreigners gathered all the people of O Ogami in one place...'
c. unu katana $=s \varepsilon=\varepsilon \quad$ skss-ai-n

PROX knife $=$ INSTR $=$ TOP cut-POT-NEG
'I can't cut it with this knife.'

### 10.6.2 Focalization

Focalization of a constituent is also always morphologically marked, by the clitic marker tu. Focus marking is very common, and most sentences contain an overtly marked focus, even if its informative value is rather low. The variety of focus markers in Ōgami Ryukyuan is rather poor in comparison of other Miyako dialects (see Shimoji 2008a). The main focus marker is tu, which can appear after any constituent. However, it seems impossible to focalize a constituent embedded inside a subordinate clause or an NP.

$$
\begin{align*}
& \text { a. } \begin{array}{l}
\text { tauf }=f u=p a \quad<d a i z u>=s i=\text { tu } u \text { as } \\
\text { tōfu }=\text { ACC }=\text { TOP.OBJ } \quad \text { soy }=\text { INSTR }=\text { FOC do } \\
\text { 'Tōfu is made from soy beans.' }
\end{array} . \tag{95}
\end{align*}
$$

b. upusuu paur-ipa=tu <sizento $>$ tauf=n nar- $i=u$ seawater pour-CIRC $=$ FOC naturally tōfu $=$ DAT become $=C V B=I P F$ 'When you pour seawater in it, it naturally becomes tōfu.'

## 11 The complex sentence

### 11.1 Overview of complex clause structures

Apart from subordinate relative clauses, whose recognition is rather straightforward, the distinction between coordination and subordination in complex sentences is problematic in Ōgami Ryukyuan.

The main strategy to build complex sentences is by the combination of clauses headed by converbs, which are formally dependent verb forms. However, many clauses headed by converbs cannot be straightforwardly described as strictly subordinate. They rather encode coordinate events, and such clauses correspond to the co-subordinate structures defined by Van Valin and LaPolla (1997).

The distinction between coordination and subordination in Ōgami Ryukyuan is thus rather blurred, and the same clause can be interpreted as co-ordinate/co-subordinate or subordinate depending on the context. ${ }^{8}$

### 11.2 Coordination

Syntactic clausal coordination is not a prominent feature in Ōgami Ryukyuan, and clause-chains (§11.3) are used instead as a coordination strategy. The only coordination construction stricto sensu is by the disjunctives conjunction suka.

[^45](96) $\quad$ ara $=a$ saki num- $a-t i=s s u k a \quad v v a=a \quad$ num- $a$-tecn?
$\mathrm{I}=$ TOP alcohol drink-IRR-PROSP $=$ but you = TOP drink-IRR-ACOM
'I am going to drink alcohol, but will you drink too?'

### 11.3 Clause-chaining

Ōgami Ryukyuan exhibits syntactic constructs that resemble the clause-chains of the languages of Papua-New Guinea (Foley 1986). In such chains a series of clauses follow each other and only the final verb is an independent verb form carrying the TAM markers. In Ōgami Ryukyuan, such chain-medial clauses are usually headed by a narrative or sequential converb, and clause-chains are sometimes difficult to distinguish from adverbial subordinate structures. Clause chains are also close to coordinated structures, and indeed they are the only strategy to express conjunctive coordination in Ōgami Ryukyuan.

> a. $u r i=i \quad$ ara- $i$-siti nuku-i-siti nnas-i $\quad$ usk- $i$ PROX =ACC wash-CVB-SEQ wipe-cVB-SEQ put.in.order-CVB PREP-IMP 'Wash it, wipe it and put it away!'
b. kama-naki=kara <tomodatci> =nu kss-i pssui mmna there-APPROX $=$ ABL $\quad$ friend $=$ NOM $\quad$ come-CVB pick.up.CVB all kago = nkai wr-i tur-as-i-sitii =tu... basket $=$ DIR put.in-CVB take-CAUS-CVB-SEQ $=$ FOC
'Some friends came from somewhere, they picked (the pears) up, put them all in the basket and gave it to him...'
Clause chains are frequently used in narrations to express a sequence of events in their chronological order, and all of these events are seen as having the same semantic and discursive rank. Clause chains can easily include a dozen narrative or sequential converbs, to which many true adverbial subordinate clauses can be added. Chain-medial clauses are used for plot-advancing in narrations, while adverbial subordinate clauses are used to describe background information.
(98) fii-ripa $u \tau \varepsilon=\varepsilon \quad m u t-i \quad p \varepsilon r-i-s i t i i=t u . .$.
give-CIRC $\operatorname{PROX}=\mathrm{ACC}$ carry-CVB leave-CVB-SEQ $=$ FOC
'As they gave them to him, he took them and left...'

### 11.4 Subordination

### 11.4.1 Adverbial subordination

Adverbial subordinate clauses are most usually headed by converbs.
a. aspu-ka kuu
play-PURP come.IMP
'Come to have fun.' (purpose)
b. mainiks ffa-f nau-tikaa iatu=u=tu ff everyday dark-SUFF become-ANT door $=$ ACC $=$ FOC close 'Everyday I close the door when it gets dark.' (time)
c. iaa=nkai kss-ipa=tu $\quad a m i=n u \quad f f-i \quad$ taiku ia-tau house $=$ DIR come-CIRC $=$ FOC rain $=$ NOM fall-CVB terrible COP-PST 'While I was going home, it rained and it was terrible.' (simultaneous time)

The other adverbial subordination strategy available is through the use of an independent verb form followed by a subordinating conjunction or by formal noun in a relative-like construction (see §11.4.2).
(100) a. $a k s-k a u=k \varepsilon \quad n u m-i=r a$
hot-vBZ $=$ when drink-IMP $=$ DISC
'Drink while it's hot!'
b. suma $=n u \quad p s t u=n=m a i \quad m i i-r a i-n \quad$ iaun $k s s-i . .$. village $=$ NOM person $=$ DAT $=$ INCL see-PASS-NEG for come-CVB
'They came in a way that they would not be seen by the villagers...'
c. $u r i=i \quad$ sumar- $a-t i=s s \varepsilon \varepsilon \quad k a n u k i s k u=n u \quad p a a=u$

PROX $=$ ACC bind-IRR-PROSP $=$ car DIST Eulalia.grass $=$ NOM leaf $=$ ACC
mut-i kuu
carry-CVB come.IMP
'Since I'm going to bind this, bring me those leaves of Eulaliae grass!'

### 11.4.2 Relative subordination

Relative subordinate clauses appear just before the relativized domain noun, without any relativizer of any kind. Relative clauses are headed by independent verb forms, but there are some restrictions on the moods that can appear in a relative clause. There seem to be no internally headed relative clauses in Ōgami Ryukyuan, and headless relative clauses are very uncommon.

All kinds of syntactic and semantic roles can be relativized, like the subject, the object, as well as various oblique arguments.
a. [[pssara $=n k a i ~ i k s] ~ p s t u] ~$

Hirara = DIR go person
'the person going to Hirara' (subject)
b. $u r \varepsilon=\varepsilon \quad[[a=k a k f f] k s s]$

PROX $=$ TOP I $=$ NOM make fish-hook
'Here are the fish-hooks I make.' (object)
c. [[fii-taw] pstu] $=n u \quad n a a=u=t u \quad$ passi $=u$ give-PST person $=$ NOM name $=\mathrm{ACC}=\mathrm{FOC}$ forget. $\mathrm{CVB}=\mathrm{IPF}$
'I forgot the name of the person I gave it.' (dative)
d. $k u r \varepsilon=\varepsilon \quad[[<$ tegami $>=i k a k s-t a w]<$ pen $>]$
this $=$ TOP letter $=$ ACC write-PST spen
'This is the pen I used to write the letter.' (instrumental)
Relative clauses are also widely used as a complementation and adverbial subordination strategy. For example, the noun munu 'thing' often appears as a complementizer in relative-like structures which cannot be interpreted as relative clauses meaning 'the thing that...'.
(102) $[$ [kari=ka iaa $=n$ simuks ium-i=i-taw $] \quad$ munu $]=u=t u$ DIST $=$ NOM house $=$ DAT book read-CVB $=$ IPF-PST thing $=\mathrm{ACC}=$ FOC mii-tau
see-PST
'I saw him reading a book at home.'
Relativization of a formal noun is also often used to express adverbial subordination, like with paa 'moment' > 'when'.
(103) $[$ [imi-kau] paa] $=n=n a \quad$ iamutu $=n=t u \quad u$-tauu
small-vBZ time $=$ DAT $=$ TOP Japan $=$ DAT $=$ FOC be-PST
'When he was a child, he lived in mainland Japan.'

### 11.4.3 Complementation

For most verbs, the only complementation strategy available is through the munu construction described above. However, verbs of speech and thought have a complementation strategy with the quotative marker ti(i) following the quoted speech.
(104) $T a r o o=i a[n a a=k a=t u \quad p a u-k a u=t i] \quad u m u-i \quad u ш$

Tarō $=$ TOP LOG $=$ NOM $=$ FOC bad $-\mathrm{VBZ}=\mathrm{QUOT}$ think-CVB IPF
'Tarō thinks it's his fault.'
Interrogative complements are usually embedded questions marked by $k a$, and yes-no questions are marked by mukara.
a. [nau=iu $a s$-sipa $=$ tu $\quad$ tau-kau $=k a]$ ss-ai-n
what $?=$ ACC do-CIRC $=$ FOC good-vBZ $=\mathrm{Q}$ know-POT-NEG
'I don't know what I should do.'
b. maataki naw mukara ss-ai-n
together become Q know-PASS-NEG
'I don't know whether they are getting married.'

### 11.5 Desubordination

Ōgami exhibits a desubordination process whereby a dependent clause headed by a converb is used as a main clause. Though this phenomenon also applies to coordinate-like medial clauses of clause-chains and not only to strictly subordinate clauses, I shall retain the term of desubordination. ${ }^{9}$

### 11.5.1 From concessive to permissive

The concessive converb in -pamai is often used in a construction with iunumunu 'same' to express permission.
(106) $\quad$ kare $=\varepsilon$ kuu-pamai iunumunu

DIST $=$ TOP come.IRR-CSV same
'He can come.' (litt. 'Even if he comes, it is the same.')
The iunumunu part can be ellipted without altering the meaning of the sentence. This is a case of conventional ellipsis: the missing element can be recovered, but ellipsis is restricted to this particular element and the sentence cannot have another interpretation (Evans 2007).
a. $k a r \varepsilon=\varepsilon \quad i k-a$-pamai ias $=s u k a$ DIST $=$ TOP go-IRR-CSV COP = but 'He, he may go but...'
b. ata kuu-pamai?
tomorrow come.IRR-CSv
'May I come tomorrow?'

### 11.5.2 From narrative to past

Clauses headed by a narrative converb in -i can also undergo desubordination. The narrative converb then has a perfective past value, and no aspectual auxiliary may appear on the verb.

The desubordinate clause retains the characteristics of a dependent clause, and for instance the narrative converb can be followed by the focus marker tu.Indexfocus This is the only case where this marker can appear in the final position of a sentence. The desubordinate clause also cannot carry polarity or TAM markers, like many dependent clauses that depend on a matrix clause for the expression of these categories, and contrary to independent clauses.

> a. ffuu $=u=p a \quad m m \varepsilon \quad$ num $-i=t u$
> medicine $=$ ACC $=$ TOP.OBJ already drink-CVB $=$ FOC
> 'I have already taken my medicine.'

[^46]b. vva=a pssnii=pa asi=tu?
you = TOP nap = TOP.OBJ do.CVB $=$ FOC
'Did you take your nap?'
c. kuna=a $\quad n a u=i u=t u \quad a s i$ ? yesterday $=$ TOP what $?=$ ACC $=$ FOC do.CVB 'What did you do yesterday?'

The desubordinate clauses headed by a narrative converb have gone one step further on the desubordination scale, and contrary to the desubordinate concessive clauses, they cannot be considered as cases of ellipsis. No element can be recovered and added to the sentence, and the desubordinate clause is clearly fully independent.

The emergence of new tense-aspect forms through desubordination seems to be not very common from a typological point of view (Evans 2007), and the O Ogami case is thus remarkable.

## Sample text: the Pear story

(т.1) <ozii> =ka <nasi> =i mur-i=ir-ipa... mur-i... old.man $=$ NOM pear $=$ ACC pick.up-CVB $=$ IPF-CIRC pick.up-CVB
'An old man was picking up pears,'
(т.2) <epuron> $=n u<$ poketto $>=k a r a<$ poketto $>=n k a i u r i \quad m u r-i . .$. apron $=$ NOM $\quad$ pocket $=$ ABL $\quad$ pocket $=\operatorname{DIR} \quad$ PROX pick.up-CVB
mur-i-sitii $=t u$
pick. up-CVB-SEQ $=$ FOC
'he was picking them up into his apron's pocket, then'
(т.3) <epuron> $=n u<$ poketto $>=k a r a ~ m u t-i \quad k s s-i$ apron = NOM pocket $=$ ABL $\quad$ carry-CVB come-CVB
'he brought them from his apron's pocket'
(т.4) mmna uma = nkai mut-i-siti auk-i-siti
all there = DIR carry-CVB-SEQ pour-CVB-SEQ
'he brought them up over there and then poured them'
(т.5) $i k-i \quad<n a s i>m u u-k a \quad p \varepsilon r-\varepsilon=\varepsilon r-i p a=t u \quad$ mata go-CVB pear pick.up-PURP leave-CVB $=$ RES-CIRC $=$ FOC again 'and as he was gone to pick up pears,'
(т.6) tau-karaa... nau-karaa iarapi=nu kss-i
who?-INDEF what?-INDEF child = NOM come-CVB
'somebody, a child, came,'
(т.7) < ұiteņ $a>=$ kara kss-i <kago> = sui... nisum-i psu-tau bicycle $=$ ABL come-cVB basket-COM steal-cVB leave-PST 'he came by bicycle and stole them with his basket.'
(т.8) nisum-i peu-tau
steal-cvB leave-PST
'He stole them.'
(т.9) asi mut-i ik-i kama=nki ik-i
do.CVB carry-CVB go-CVB there = DIR go-CVB
'Then he took them away,'
(т.10) <zitenc $a>=$ kara <hikkurigaer>-i mmna sti-ripa $=$ tu bicycle $=$ ABL turn.over-CVB all loose-CIRC $=$ FOC 'he fell off his bicycle and as he lost them all,'
(т.11) kama-naki=kara <tomodatci> =nu kss-i pssui there-APPROX $=$ ABL $\quad$ friend $=$ NOM $\quad$ come-CVB pick.up.cVB 'some friends came from over there and picked them up,'
(т.12) mmna<kago>=nkaiur-i... tur-as-ipa... -sitii=tu psur-ipa all basket = DIR put.in-CVB take-CAUS-CVB -SEQ = FOC leave-CIRC 'they put them all into the basket, gave them to him, and as they went away,'
(т.13) <boosi> =i=tu passi per- $\varepsilon=u=t i \quad$ mut-i kss-i hat $=\mathrm{ACC}=$ FOC forget. CVB leave-CVB $=$ RES $=$ QUOT carry -CVB come-CVB tur-as-ipa
take-CAUS-CIRC
'they realized "he's leaving without his hat" and brought it and gave it to him,'
(т.14) unu <nasi> =i pstii-ks tama nakaar-i fii fii au fii-tau PROX pear = ACC one-CLF share share-CVB give.CVB give.CVB RES give-PST 'then he gave one of those pears to each one of them.'
(т.15) fii-ripa $u r \varepsilon=\varepsilon \quad m u t-i \quad p \varepsilon r-i-s i t i i=t u$ give-CIRC $\operatorname{PROX}=\mathrm{ACC}$ carry-CVB leave-CVB-SEQ $=\mathrm{FOC}$
'He gave them and they went away with them.'
(т.16) <ozii> =ka mai=nkai mata kss-i mii-taw=nu old.man $=$ NOM front $=$ DIR again come-CVB three-CLF $=$ NOM
$p s t u=n u \quad k s s-i$
person $=$ NOM come-CVB
'They came again in front of the old man, three of them,'
(т.17) maar-i <oæii> =ka mai maar-i-siti psu-taw... psut-au turn-CVB old.man = NOM front turn-CVB-SEQ leave-PST leave-PST 'they went past the old man and went away.'

## Abbreviations

| <...> | loanword from Japanese / | INDEF | indefinite |
| :---: | :---: | :---: | :---: |
|  | code-switching | INFER | inferential |
| ABL | ablative | INSTR | instrumental |
| ACC | accusative | INT | intentional |
| ACOM | Anti-comissive | INTERR | interrogative |
| ANT | anterior | IPF | imperfective |
| APPROX | approximative | IRR | irrealis |
| CAUS | causative | LOG | logophoric |
| CIRC | circumstancial | NEG | negative |
| CLF | classifier | NOM | nominative |
| COM | comitative | PASS | passive |
| CON | conative | PERF | perfect |
| COND.NEG | negative conditional | PLUR | plural |
| COP | copula | POT | potential |
| CPLF | completive | PREC | precative |
| CSV | concessive | PREP | preparative |
| CVB.IPF | imperfective converb | PRESUM | presumptive |
| CVB.NEG | negative converb | PREV | previsional |
| CVB | narrative converb | PROH | prohibitive |
| DAT | dative | PROSP | prospective |
| DES | desiderative | PROX | proximal |
| DIM | diminutive | PST.NEG | negative past |
| DIR | directive | PST | past |
| DISC | discourse marker | PURP | purposive |
| DIST | distal | Q | question |
| DISTR | distributive | QUOT | quotative |
| EMPH | emphatic | RES | resultative |
| FOC | focus | RESTR | restrictive |
| HON | honorific | SEQ | sequential |
| HS | hear-say | SIMIL | similative |
| IMP | imperative | SUFF | suffix |
| IMPOT | impotential | TERM | terminative |
| INCHO | inchoative | TOP.OBJ | topicalized object |
| INCL | inclusive | TOP | topic |
| IND | indicative | VBZ | verbalizer |

## Ikema (Miyako Ryukyuan)

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Figure 1: Miyako Islands

## Introduction

Ikema is one of the varieties of Miyako Ryukyuan. ${ }^{1}$ According to Pellard (2009b), it is one of the dialects which branched off from Common Miyako in an earlier

[^47]period with the Irabu dialects described in Shimoji (2008a). Basic morphosyntax of Ikema is that of a typical Japonic language, verb-final and modifierhead constituent order. Ikema shares some typologically distinctive features with other Miyako varieties such as Irabu and Ōgami. Prosodically, Ikema has tonal rhythm ${ }^{2}$ as its basic melody just as Irabu does. Unlike Irabu, however, Ikema also has a lexical word-tone system which makes the tonal realization of Ikema rather complicated. Ikema also shares with other Miyako varieties the richness in class assignment in adjectival stems ${ }^{3}$ (which cannot stand alone as a word), which is the basis of their "switch adjectival system" (Wetzer 1996). What is striking in this respect is that Ikema does not have the morphological strategy of reduplication typical of adjectives in Miyako Ryukyuan, which means that Ikema does not have adjective as a word class. As a language which has both topic and focus markers in its Information Structure (IS) coding system, Ikema (and some other Miyako varieties) can be also striking in that it has an extensive marking system related to is, especially on direct objects. That is, it has four variations of accusative marking expressing different statuses in Is. Ikema also has what is called the kakari-musubi ${ }^{4}$ construction observed in Old Japanese, which has been believed to be no longer active in other Miyako varieties. ${ }^{5}$

## 1 The language and its speakers

Ikema Ryukyuan is spoken on Ikema Island, Sarahama (Irabu Island) and Nishihara (main Miyako Island) in Miyako-jima City of Okinawa Prefecture. Like other Ryukyuan varieties, Ikema is generally not spoken by the younger generations. The number of the speakers of Ikema can be estimated at approximately two thousand if we assume that people over sixty all speak Ikema. ${ }^{6}$ Ikema is still used in everyday language situations among native speakers at home and in gatherings within the community. Ikema is not systematically taught in schools, but some effort has been made to give the children an opportunity to get in touch with the language as part of extra-curricular programs.

[^48]
## 2 Phonology

### 2.1 Vowels

Ikema has four main vowels and two other vowels which appear in restricted lexemes. Table 1 shows the vowel inventory.

Table 1: Vowels in Ikema Ryukyuan

|  | Anterior | Central | Posterior |
| :--- | :--- | :---: | :---: |
| High | i | $\dot{\mathrm{i}}$ | u |
|  |  | (e) |  |
|  |  |  | (o) |
| Low |  |  | a |

- /e/ and /o/ are only seen in lexemes of interjection or sentence final particles.
- /i/ must be preceded by a consonant, restricted to $/ \mathrm{s}, \mathrm{z}, \mathrm{c}, \mathrm{f} / .^{7}$
- Length is distinctive for all vowels.


### 2.2 Consonants

Table 2 shows the consonant inventory in Ikema.

Table 2: Consonants in Ikema Ryukyuan

|  | Labial | Alveolar | Palatal | Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stops | p b | t d |  | k g |  |
| Affricate |  |  | $\begin{gathered} c \\ {[\mathrm{ts}} \\ \sim \mathrm{t} \epsilon] \end{gathered}$ |  |  |
| Fricatives | $\mathrm{f} v$ | $\begin{gathered} \mathrm{S} \mathrm{Z} \\ {[\mathrm{~s} \sim \mathrm{G}][\mathrm{z} \sim \mathrm{z}]} \end{gathered}$ |  |  | $\begin{gathered} \mathrm{h} \\ {\left[\mathrm{~h}^{\mathrm{w}} \sim \mathrm{ç} \sim \mathrm{~h}\right]} \end{gathered}$ |
| Nasals | m | n n |  |  |  |
| Flaps |  | r [r] |  |  |  |
| Approximants | w |  | y [j] |  |  |

[^49]- $/ \mathrm{n} /([\mathrm{m} / \mathrm{n} \sim \mathrm{m} / \mathrm{n}])$ is a voiceless nasal that carries a mora by itself, as shown in § 2.3. It always precedes another nasal onset and its place of articulation assimilates to that of the following nasal.
- /n/ ([n $\sim \mathrm{n} / \mathrm{n} \sim \mathrm{y} \sim \mathrm{N}])$ changes its phonetic value depending on its position in the syllable. It can be an onset immediately preceding a vowel and also functions as a syllabic consonant.
- /y/ is a semi-consonant which occupies a specail position in the syllable.


### 2.3 Syllable and mora

The possible syllable types and the constraints in combining the syllables into a word are shown in (1). As Ikema has a mora-timed rhythm and syllables do not take an important role in prosodic phonology, the concept of syllable is introduced mainly to explain the phonotactics of segments. ${ }^{8}$
(1) Phonotactics in Ikema ${ }^{9}$
i. Syllables in Ikema
a) $\left(\mathrm{C}_{1}\right)\left(\mathrm{C}_{2}\right)(\mathrm{y}) \mathrm{V}(\mathrm{V})\left(\mathrm{C}_{3}\right)$
b) $\mathrm{NN}(\mathrm{N}=$ syllabic nasal)
ii. Restriction on the members of each slot
a) $\mathrm{C}_{1} \mathrm{C}_{2}$ : the consonants which can fill the slot $\mathrm{C}_{1}$ are $/ \mathrm{t}, \mathrm{c}, \mathrm{k}, \mathrm{f}, \mathrm{v}$, $\mathrm{s}, \mathrm{z}, \mathrm{m}, \mathrm{n} /{ }^{10} \mathrm{C}_{1}$ and the following $\mathrm{C}_{2}$ must be a geminate to $\mathrm{C}_{1}$. In the case of $/ \mathrm{n} /$ or $/ \mathrm{n} /$ as $\mathrm{C}_{1}$, partial gemination of the place of articulation is also allowed. (cf. /nta/ [nta] 'mud', /nkyaan/ [ $\mathrm{gkja:n}$ ] 'past times'). As for word internal geminates, /p/, /b/, and /d/ are allowed in addition to the ones which can stand word initially.
b) $\mathrm{C}_{3}$ : Only N is allowed in word final position.
iii. Constraints in combining the syllables into a word
a) Phonotactics prohibits the following within a root
i. Sequences of more than two Vs consisting of the same vowel

[^50]
## ii. Sequences of more than three consonants

b) Sequences of Ns are only found at the initial position of a word ${ }^{11}$

### 2.4 Tone/accent

Ikema is a language with a word-tone system. Lexical tone appears at the rightmost position of the lexical word. There are two patterns ( $\alpha / \beta$ ) in the system: the surface contour of Type $\alpha$ appears as a falling pattern and Type $\beta$ appears as a rising/high level pattern. If there is a falling pattern at the right-edge of the lexical word, the word is Type $\alpha$. We can assume that there is a floating $L$ tone at the right-edge of Type $\alpha$ words.

Just like the neighboring dialect Irabu, Ikema also has a HL tone sequence as its basic melody in which H and L are assigned to each tonal foot ${ }^{12}$ (consisting of two to three morae) iteratively (trochaic tonal rhythm). ${ }^{13}$
(2) koozaburoo + -gama $+=k a r a+=m a i$
(boys'-name) + -DIM $+=$ ABL $+=$ also
$(\mathrm{koo})_{\mathrm{H}}(\mathrm{zabu})_{\mathrm{L}}(\mathrm{roo})_{\mathrm{H}}(\mathrm{gama})_{\mathrm{L}}(\mathrm{kara})_{\mathrm{H}}(\mathrm{mai})_{\mathrm{L}}$
'also from Kozaburo' (Shimoji 2008a: 2-75d)
Unlike Irabu, however, Ikema has lexical tone in addition, which makes its tonal realization somewhat complicated. In Irabu, a HL pattern appears in each foot group (rhythmic unit) consisting of two or three feet. This HL pattern in Irabu is not lexically specified.

Tonal contour in Ikema is decided by the combination of both this nondistinctive melody and the lexical tone. Figure 2 shows an example of a fourmora (two-foot) word. The lowering can be seen in the middle of the lexical word in both the type $\alpha$ word and the type $\beta$ word where there is a nondistinctive one. On the other hand, in the case of the same set of words with some postpositions attached, we can see both the non-distinctive lowering in the middle of the lexical word and the lexical tone at the right-edge of each

[^51]lexical word. At the right-edge of the lexical word, we can see the falling pattern in type $\alpha$ words (bakamunu (•)) and the rising pattern in type $\beta$ words (sarahama (x)).

For reasons of space, I only mention that there are two factors that decide the pitch contour for the word here. See Hayashi (2010) for further information.



Figure 2: Normalized F0 contours for four-mora (two-foot) words, Type $\alpha$ bakamunu ( $\bullet$ ) and Type $\beta$ sarahama (x). Error bars indicate SE. ${ }^{14}$

[^52]
## 3 Basic clause structure and phrase structure

### 3.1 Basic clause structure

Ikema is a verb final-language. Like many other verb-final languages (Dryer 2007: 61), Ikema has sov word order. While verbs are strictly fixed at the last position, the order of arguments (and adjuncts) is somewhat variable according to pragmatic factors. (3)-(6) represent clauses of the different speech act categories. The difference in speech acts does not change the word order of the clause. Specific speech acts are often indicated by final particles and intonation ${ }^{15}$ (for the interrogatives) or inflection (for the imperative). As for the interrogatives indicated in (4) (5), the Yes-No interrogative and WH interrogative have different particles respectively. ${ }^{16}$
(3) $h u s i=n u=d u$ mii-rai ui
star $=$ NOM $=$ du look-POT CONT.NPST
'We can see the stars.'
(4) husi $=n u=d u$ mii-rai $u i \quad n a$ ?
star $=$ NOM $=$ FOC look-POT CONT.NPST Q.Y
'Can you see the stars?'
(5) $n a u=n u=d u$ mii-rai ui ga?
what $=$ NOM $=$ FOC look-POT CONT.NPST Q.W
'What can you see?'
(6) $u r u=u$ mii-ru
it = ACC see-IMP
'Look at it.'
As I discuss in §5.3, a dependent clause which is syntactically dependent on the main clause is indicated by different verbal forms from those of a main clause (7). Another construction for dependent clauses is the noun clause headed by formal nouns which function as adverbial clauses (8).
(7) kansi mutagi-tigaa uti-i hai-gamata that.way hold.up-COND fall.cVB-i go.away-FUT 'If you hold it up like that, you will drop it.'
(8) $\quad$ myaaku $=n$ ui tukya $=n=n a \quad$ nnaagyaa yarabi=du a-tai Miyako $=$ DAT be.NPST time $=$ DAT $=$ TOP1 still $\quad$ child $=$ FOC COP-PST 'I was still a child when I was in Miyako.'

[^53]
### 3.2 Basic phrase structure

The basic structures of two canonical phrases, namely the noun phrase and the verb phrase, are shown in (9) and (10) respectively. There are three strategies to make a noun phrase. As for the verb phrase, auxiliary verb constructions are often employed to express meanings such as aspect, benefactive and so on.
(9) Noun phrase structure
i. $\mathrm{N}=$ [Genitive marker] N <possessive construction> kai = ga ffa (3.SG = GEN child) 'his child'
ii. Adnominal $\mathrm{N}<$ modified by adnominal > kanu ffa (that child) 'that child'
iii. [Adnominal phrase] $\mathrm{N}<$ modified by adnominal phrase >
kama $=n$ tacyu $=u i$ ffa (there = DAT stand = CONT. NPST child) 'the child who is standing there'
(10) Verb phrase structure: [Converb.Absolutive] [Auxiliary verb] $h u s=s u=d u$ mii $u i(s t a r=A C C=$ FOC look.CVB be.NPST $)$
'(I'm) looking at the stars.'

## 4 Word classes

Ikema has the following word classes: Noun, Verb, Adnominal, Adverb, Final Particle, Conjunction, Interjection.

Each word class exept Adnominal holds a syntactic position which is not dependent on other word classes. The criteria to distinguish the different classes are mainly based on the morpho-syntax of the major categories (Noun and Verb) shown in §3.2.
(11) Criteria for the word classes. ${ }^{17}$
(A) Heads an NP
(B) Directly fills the dependent slot of an NP
(C) Inflects

The class for which (A) upholds is Noun, (B) for Adnominal, and (C) for Verb. The other classes can be identified by their unique distribution in the syntax or their function.

There are two other categories that should be mentioned here. One is adjectival stems and the other is postpositions.

[^54]Adjectival stems are a group of stems which describe certain property concepts and do not stand alone as a word. Instead, verbs, nouns and adverbs are derived from adjectival stems. Taking zyau 'good' as an example, nouns are formed by nominal compounding (zyau + munu), verbs and adverbs are formed by affixes (zyau-kai, zyau-fi). The two types of predicates formed from adjectival stems exemplify the so-called "switch-adjectival system" ${ }^{18}$ (Wetzer 1996).
a. $u r a=a \quad z y a u+m u n u$
3.SG = TOP1 good + thing
'This is good.'
b. $k u i=g a=d u \quad z y a u-k a i$ this $=$ NOM $=$ FOC good-vZ
'This one is better/the best.'
c. zyau-fi nai
good-AZ become.NPST
'It gets better.'
Postpositions in Ikema do not form a word class but take an important role in the phrase organization. I define them as function words which attach to each word and express grammatical relations, pragmatic salience and so on. Typical "postpositions" in descriptive studies are usually case markers attached to nouns (Evans 2000), but what I call postpositions here are not restricted to case markers of nouns. ${ }^{19}$ Postpositions in Ikema also do not form a postpositional phrase as they do in other languages.

## 5 Basic morphology

### 5.1 Morphological typology

A word can be a simple root or complex form in Ikema. Major morphological strategies are affixation and compounding. As for affixation, all the functional affixes are suffixes extensively employed in verbal morphology and lesser in nominal morphology. Compounding is more common in nominal morphology, though it is also a common strategy in verbal morphology, too. In compounding, usually two roots are just serialized to be combined and the latter part becomes a head. Compounding can occur between noun and noun, verb and verb,

[^55]adjectival stem and noun, verb and adjectival stems. As noted in the introduction to this chapter, Ikema does not have a productive reduplication strategy within its morphology, unlike other Miyako Ryukyuan varieties.

### 5.2 Basic nominal morphology

In nominal morphology, some suffixes are attached directly to the right edge of the noun. Table 3 is a list of nominal suffixes. The followings are examples of compounding between noun and noun (13a) and also adjectival stem and noun (13b).

Table 3: Nominal derivational suffixes

| Suffix | Gloss |
| :--- | :--- |
| -gama | Diminutive |
| -mmi | Plural 1 |
| -ta | Plural 2 |
| -nagi | Approximative |

(13)
a. midun $+f f a$
woman + child
'a girl'
b. $i m i+f f a$
small + child
'a small child'

### 5.3 Basic verbal morphology

Verbs have a rich and complex morphology compared to other classes in Ikema. Inflected verb forms can be categorized into finite verbs and converbs, which head dependent clauses. Converbs are not marked for mood/tense but head dependent clauses and indicate the relational meaning between a dependent and a main clause (Causal, Conditional, etc.). Suffixes of each verb form are shown in table 4 and table 5.

Two classes of verbs can be identified according to the pattern of morphological process. Class 1 verbs do not involve a stem change while Class 2 verbs change their stem along with the inflectional form they take. Class 2 verbs may also undergo suppletion in their stem formation in addition to suffixation. If the root-final segment is a consonant, a thematic vowel will be added to complete the stem. Figure 3 is the schema of verbal morphology. Derivational suffixes also appear within the stem, just after the root. Each suffix specifies the verb class of the derived stem. The different derivational suffixes are shown in table 6.

Table 4: Suffixes of finite verbs

| Label | Suffix | Example |  |
| :---: | :---: | :---: | :---: |
|  |  | Class 1 idi-i 'go-out' | Class 2 kuz-i 'row' |
| Hortative | -baa | idi-baa | kug-a-baa |
| Volitional | -di | idi-di | kug-a-di |
| Negative Volitional | -zyaan | idi-zyaan | kug-a-zyaan |
| Negative | -n | idi-n | kug-a-n |
| Negative Past | -ddan | idi-ddan | kug-a-ddan |
| Imperative | -ru / - $\square^{20}$ | idi-ru | kug-i-Ø |
| Non-past | -i / - $\emptyset$ | idi-i | kuz-i-Ø |
| Past | -tai | idi-tai | kuz-i-tai |
| Prohibitive | -na | idi(-i)-na | kuz-i-na |
| Future ${ }^{21}$ | -gamata | idi-gamata | kuz-gamata |
| Speculative | -n | mii-n | kuz-i-n |

Table 5: Converb suffixes

| Label | Suffix | Example |  |
| :--- | :--- | :--- | :--- |
|  |  | Class 1 idi-i 'go-out' | Class 2 kuz-i 'row' |
| Concession | -ban | idi-ban | kug-a-ban |
| Negative Absolutive | - da | idi-da | kug-a-da |
| Negative Conditional | -dakaa | idi-dakaa | kug-a-dakaa |
| Absolutive | $-i^{22}$ | idi-i | kug-i-i |
| Circumstantial | - -utui | idi-utui | kug-i-utui |
| Simultaneous | $-c c y a a n$ | idi-ccyaan | kuz-ctyaan |
| Immediate anterior | - tuu | idi-tuu | kuz-i-tuu |
| Purpose | - ga | idi-ga | kuz-i-ga |
| Conditional 1 | -tigaa | idi-tigaa | kuz-i-tigaa |
| Conditional 2 | -ttaa | idi-ttaa | kuz-i-ttaa |

[^56]

Figure 3: Components of verbal inflection

Table 6: Derivational suffixes

| Function | Original stem class |  | Derived stem class |
| :--- | :--- | :--- | :--- |
|  | Class 1 | Class 2 |  |
| Causative | - -ssas | $-a s$ | $\rightarrow$ Class 2 |
|  | $-s i m i$ | $-(a s i) m i$ | $\rightarrow$ Class 1 |
| Passive/Potential | -rai | $-a i$ | $\rightarrow$ Class 1 |
| Honorific | -sama | $-a m a$ | $\rightarrow$ Class 2 |

## 6 Argument marking

### 6.1 Case marking

Case is indicated by postpositions following an NP, as noted in § 4. Table 7 shows the list of case markers in Ikema. Subjects are usually marked by the nominative marker, and objects are usually marked by the accusative marker.

Table 7: Case markers

| Marker | Label | Marker | Label |
| :--- | :--- | :--- | :--- |
| $=g a /=n u$ | Nominative/Genitive | $=$ taahii | Limitative |
| $=u$ | Accusative | $=k a r a$ | Ablative |
| $=n$ | Dative | $=h i i$ | Instrumental |
| $=n k a i$ | Allative 1 | $=$ tu | Commitative |
| $=n k i$ | Allative 2 | $=n c i k y a a$ | Comparative |

### 6.2 Information structure marking

Like all other Ryukyuan varieties, Ikema has both topic and focus marking postpositions. They can be attached to most of the phrases from noun to clause, but here I will show only the case when they are attached to arguments. For reasons of space, I cannot explain the whole phenomena related to information structure in detail, so I will just discuss a difference between my analysis for Ikema and the analysis done in a previous study on a neighboring dialect.

Topic and focus markers can co-occur with other postpositions with some exceptions. Table 8 shows the possible combinations of each case marker and topic/focus markers. The core nominative and accusative markers are differentiated from other cases in that they have some different restrictions and options with topic/focus markers. It should be noted that the accusative marker has four different combinations marking information structure.

Table 8: Co-occurrence restrictions of focus/topic markers and case markers

|  |  | $=$ Focus | $=$ Topic 1 | $=$ Topic 2 |
| :--- | :--- | :--- | :--- | :--- |
| Nominative | $=n u / g a$ | $=n u / g a=d u$ | $=a$ | - |
| Accusative | $=u$ | $=u=d u$ | $=a$ | $=u=g y a a$ |
| Obliques | $=n$ (DAT) | $=n=d u$ | $=n=n a$ | - |

Topic 2 is the special topic marker for the accusative case, though it can also be used as the so-called contrastive marker, especially with the quantifiers. ${ }^{23}$ Topic 1 can also appear with a noun in the accusative case (direct object). A similar pattern has been discussed for Irabu by Shimoji (2008a) who calls it the "second accusative". This second accusative only appears as a direct object in dependent clauses and indicates "low-transitivity" on the object in the terminology of Hopper and Thompson (1980)'s transitivity parameters. According to Shimoji, it mostly appears in dependent clauses in clause chaining constructions. (14) is an example from Irabu.

$$
\begin{align*}
& \text { kasa }=a \quad \text { par- }-i-i=d u \quad n i v-v i+u-t a r=c a  \tag{14}\\
& \text { mosquito.net }=\text { ACC2 hang-THM-MED }=\text { FOC sleep-THM }+ \text { PROG-PST }=\text { HS } \\
& \text { 'Hanging a mosquito net, (they) were sleeping.' (Shimoji 2008a: 197, } \\
& \text { ex:4-62) }
\end{align*}
$$

A similar strategy for marking low-transitivity can also be observed in Ikema. However, unlike Irabu, the "second accusative" phenomenon is not necessarily restricted to the accusative marker (direct object). In Ikema, it can even appear in a main clause (15b) or with a subject in a dependent clause (15a).

[^57]a. midun-ta $=a \quad$ muitu $\quad$ kicigi $=n=t i=d u$
woman-PL $=$ TOP1 so.much beautiful $=$ DAT $=$ QUOT $=F O C$
kiree $=n=t i=d u \quad[$ cin $=n a \quad$ ccyu $=u$-tai $]$
beautiful $=$ DAT $=$ QUOT $=$ FOC dress $=$ TOP1 wear $=$ CONT-PST
'The women were trying so hard to be nicely dressed.'
b. $\quad$ amya $=a \quad$ ffi-i $\quad$ undookai $=y a \quad$ hirai-ddan
rain $=$ TOP1 fall-CVB athletic.festival $=$ TOP1 do-NEG.PST
'We could not hold the athletic festival because of the rain.'
Regarding the evidence in Ikema, I would analyze this marker as identical to TOP1, although it is not restricted to typical "topics". I analyze it as a marker which indicates the information is "backgrounded" ${ }^{24}$ or not important in terms of its informative value. That is, the TOP1 in Ikema can express both "topicalized" entities and entities which do not carry any important information for the hearer. See Hayashi (in prep) for further evidence and discussion.

## 7 Predicate categories (finiteness; tense, mood, and aspect)

### 7.1 Negation

Negation is mainly realized within verbal morphology. As for the nominal predicate phrase, copula verbs carry negation. Adjectival stems are exceptions in that they have a different construction to express negation. They employ adverbalization plus a verb nyaa-n, ${ }^{25}$ 'non-existent'. (16) and (17) show examples of each type of negation.
(16) $b a=a \quad u u g-a i-n$
1.SG = TOP1 swim-POT-NEG.NPST
'I cannot swim.'
(17) $\quad$ ura $=a \quad m m a-f=f a \quad$ nyaa- $n$
it $=$ TOP1 tasty-AZ $=$ TOP1 no.to.be-NEG.NPST
'It is not tasty.'

### 7.2 Tense, aspect and mood

Ikema has PAST/NON-PAST distinction expressed in the verbal morphology as in (18).

[^58]a. bas=sa kuma=kara=du idi-i
bus $=$ TOP1 here $=$ from $=$ FOC go-NPST
'(lit.) The bus departs from here.' (Non-Past)
b. bas =sa kuma=kara=du idi-tai
bus $=$ TOP1 here $=$ from $=$ FOC go-PAST
'(lit.) The bus departed from here.' (Past)
Aspect is carried mainly by the auxiliary verb in the verb phrase. Like Japanese, verbs of "existence" are used for expressing aspect. ${ }^{26}$ (19) shows the three representative verbs which carry the aspectual meaning. ${ }^{27}$
a. mizi=nu nagari-i ui water $=$ NOM stream-CVB CONT.NPST
'Water is streaming.' (Continuous)
b. $n n=n u \quad n i i=d u \quad a i$
potato $=$ TOP1 cook. $\mathrm{CVB}=$ FOC RES.NPST
'I have cooked potatoes.' (Resultative)
c. $m i z=z y a$ itaki-i nyaa-n
water $=$ TOP1 spill-CVB not.to.be-NEG.NPST
'I spilled water.' (Perfect)
As for modality, it is expressed by verbal morphology, a clausal postposition or final particles. Taking the broader sense of "modality" where all kinds of relationships between proposition and agent/speaker's attitude/status are involved (evidentiality, mirativity etc.), final particles in Ikema have a rich system of a kind of modality in which speakers maintain the knowledge status between speaker and hearer. For example, in (20a) the speaker assumes that the fact 'it is beautiful' is not shared with the hearer, and in (20b) the speaker assumes they are sharing the fact that 'it is beautiful.'
a. $\quad$ ura $=a$ kagi+munu doo
it = TOP1 beautiful + NZ FP
'It is beautiful.'
b. ura=a kagi+munu i
$\mathrm{it}=$ TOP1 beautiful +NZ FP
'It is beautiful, isn't it?'
From a typological perspective, it should be noted that Ikema has an inflectional suffix which expresses agent-oriented modality (table 4, Volitional

[^59]-di). According to Bybee et al. (1994), speaker-oriented modality tends to be closer to verbs and appearing within inflectional morphology of verbs, while agent-oriented modality tends to appear outside of the verb. There are a few exceptions to this trend, and -di in Ikema would be one clearly exceptional case.

### 7.3 Voice

Voice is expressed by derivational morphology as indicated in table 6, -as/-ssas and -simi for causative and -(r)ai for passive marker. As for valency operations, a demoted NP is marked by a dative or allative marker ( $=n,=n k a i$ ) as in (21) (22).
(21) $\quad z z a=a \quad k a i=n \quad f f a=u \quad$ dumi-ssasi-tai
father $=$ TOP1 3.SG $=$ DAT child $=$ ACC punch-CAUS-PST
'Father made him punch his child.' (Causative)
(22) $b a=a \quad z z a=n \quad$ dumi-ssasi-tai
$1 . \mathrm{SG}=\mathrm{TOP} 1$ father $=$ DAT punch-CAUS-PST
'I was punched by my father.' (Passive)

## Sample text: the Pear story

(т.1) gaabaa nasi + gii =ya mmya sidati=du mmya
big pear + tree $=$ TOP1 DSC raise. $\mathrm{CVB}=$ FOC DSC
'A man has grown a big pear tree'
(т.2) nasi=nu nusi $=n u \quad<k a g o>=$ mai miici muc-i tti pear $=$ GEN owner $=$ GEN basket $=$ also three have-THM.CVB come.CVB
nasi mur- $a-d=d i \quad h u u=k y a a$
pear gather-THM.IRR-VOL $=$ QUOT do.CONT.NPST $=$ while
'and he came to pick up the pears with three baskets.'
(т.3) tui-gama=nu kui=mai cik-ai mata hinzya=nu kui=mai bird-DIM $=$ GEN voice $=$ also hear-POT.CVB also goat $=$ GEN voice $=$ also cik-ai ui=suga are $n z y a=n=d u \quad$ hinzya $=n u u i$ hear-POT.CVB CONT.CVB $=$ but ah where $=$ DAT $=$ FOC goat $=$ GEN be.NPST ga cyau=kyaa
Q.W say_so.NPST = while
'He could hear the birds singing and also a goat bleating but he was wondering where the goat was.'
(т.4) naugara hinzya $=n u$ nusi $=n u \quad$ ffugara + hinzya ssabik-i-i

DSC goat=GEN owner= GEN black + goat take_along-THM.CVB-i
maar- $u=u$-tai
hang_out-THM = CONT-PST
'Then he noticed that the owner of the goat was taking along his goat.'
(т.5) hasigo $=0$ mak-i-i mma ba=a mmya nasyu=u
ladder $=\mathrm{ACC}$ write-THM.CVB-i DSC $\quad 1 . \mathrm{SG}=$ TOP1 DSC $\quad$ pear $=\mathrm{ACC}$
mur-i-i mmya
gather-тHM.CVB-i DSC
'I (the owner of the pear tree) put the ladder on the tree and was picking up the pears.'
(т.6) naugara $<$ kago $>=n u$ ttic $=$ cya mur-i-i mata

DSC $\quad$ basket $=$ GEN $\quad$ one $=$ TOP1 gather-THM.CVB-i also
mur-i tti mata mmya ikkai=mai mata nuur-i-i
gather-THM.CVB come.CVB also DSC once=also also climb-THM.CVB-i
ik-i-i nankai=mai nuur-i-i
go-тнM.CVB-i number_of_times = also climb-THM.CVB-i
'He picked up the pears and filled a basket and went back to the tree again and again'
(т.7) mmya unu kii=nkai nuui tukya $=n=n a \quad$ bata $=$ hii $\quad$ hukuru $=n u$ DSC the tree $=$ ALL climb time $=$ DAT $=$ TOP1 stomach $=\mathrm{INST}$ bag $=$ GEN
 similar $=$ TOP1 do.CVB tie-THM.CVB RES.NPST thing $=$ ALL there $=$ ALL iri-i
put_in.CVB-i
'When he climbed the tree he put the pears in a bag he tied around his body.'
(т.8) $[x . . x]$ mata uri tti mata $<k a g o>=n k a i ~ i r i-i$
[x..x] also step_down.CVB come.CVB also basket=ALL put_in.CVB-i
nankai $=$ mai urahi-i naugara mur-i-i
number_of_times = also put_down.CVB-i DSC gather-THM.CVB-i
mur-i-i ai mur-u=u=kyaa
gather-THM.CVB-i this_way gather- $\mathrm{THM}=\mathrm{ACC}=$ while
'Again he climbed down, put the pears in the basket. While he was doing so repeatedly,'
(т.9) yarabi=nu<zitensya $>=$ kara tti mmya
child $=$ GEN bicycle $=$ ABL come.CVB DSC
'A child was coming on a bicycle.'
(т.10) naugara unu ozisan =na ss-a-n=suga nus=sa

DSC the old_guy = TOP1 know-THM.IRR-NEG.NPST $=$ but owner $=$ TOP1
ss-a-n=suga saami
know-THM.IRR-NEG.NPST = but FP
'Well, the man didn't know (that the child was coming).'
(т.11) mur-u=u=kyaa mmya yarabi=nu mmya <zitensya> = kara
gather- $\mathrm{THM}=\mathrm{ACC}=$ while DSC child $=$ GEN DSC bicycle $=$ ABL
mmyatti mmya
DSC come.cvb DSc
'While he was picking up the pears a child came on a bicycle.'
(т.12) agai nasi=nu ar-u-utui=du unu hitici=nu <kago>=o mmya
oh pear $=$ GEN be-CIRC $=$ FOC the one $=$ GEN basket $=$ ACC DSC
hiyasa $=$ ti <zitensya>=nkai mutagi-i mmya
INTJ $=$ QUOT bicycle $=$ ALL hold_up.CVB-i DSC
'Oh, the child picked up one of the full baskets and put it on the bicycle,'
(т.13) nusumi-i mmya <zitensya> =ukug-i-i mmya
rub.CVB-i DSC bicycle =ACC row-THM.CVB-i DSC
hing-i-i ui=kyaa
get_away-THM.CVB-i CONT = while
'stole the basket full of pears, and he ran away on a bicycle.'

```
(т.14) midun \(+y a r a b i=n u i z y a-i\)
\(u r a=a \quad u i=t u\)
```

woman + child = GEN encounter-THM.CVB it $=$ TOP1 be $=$ COM
izya-i ui=kyaa
encounter-THM.CVB CONT $=$ while
'On the way, he encountered a girl and as they passed by each other'
(т.15) naugara <zitensya> burakairah-i-i mii-tigaa mmya

DSC bicycle turnover-THM.CVB-i look-COND DSC
'the child fell down with his bicycle.'
(т.16) nasi $=$ mai mmya $<$ kago $>[x . . x]$ har-i-i mmya
pear $=$ also DSC basket [x..x] go_away-THM.CVB-i DSC
sikyaar-i-i
mess_up-тнм.CVB-i
'The pears in the basket dropped out and scattered'
(т.17) naubai hu-di ga=ti hazi=mai yam-i ui mmya
how do-vOL Q.W = QUOT leg=also ache-THM.CVB CONT.NPST DSC
naubai hu-di ga cyau=kyaa
how do-vol Q.W say_so.NPST = while
'"How can I do. And my leg is also aching. How can I do"'
(т.18) aa mmya yarabi-mmi=nu mata micyaai tti

INTJ DSC child-PL2 = GEN also three_people come.CVB
'Then three children came.'
(т.19) nasi $=$ mai, $<k a g o>=n k a i ~ z e n b u ~ i r i-i ~ f i i ~$
pear $=$ also,basket $=$ ALL all put_in.CVB-i give.CVB
'They kindly gathered the scattered pears and put them back to the basket,'
(т.20) mata <zitensya> = mai ukk-ah-i-i naugara hii fii
also bicycle =also put-CAUS.CVB-i.CVB-i DSC do.CVB give.CVB ai-ba
RES-CSL
'and they helped him raise up the fallen bicycle.'
(т.21) unu nusum-i yaai yarabya =a mmya <zitensya> kug-i-i
the rub-THM.CVB RES child=TOP1 DSC bicycle row-THM.CVB-i
mmya har-i-i $\quad$ nyaa-ddan $=s u g a=d u$
DSC go_away-THM.CVB-i not_to_be-NEG.PST = but = FOC
'The thief child went away on a bicycle.'
(т.22) unu biki $+y a r a b i=n u$ micyaai $=y a \quad a i k-i-i$
the male + child $=$ GEN three_people $=$ TOP1 walk-THM.CVB-i
yuu=kyaa $\quad<b o o s i>=n u u t i \quad a r-u=u$-ba
CONT.NPST $=$ while hat $=$ GEN $\quad$ fall.. CVB be - THM $=$ ACC - CSL
'While the three boys were walking they found a hat.'
(т.23) ura $=a \quad$ kanu <zitensya $>$ nuur- $u=u$-tai $\quad$ yarabi $=n u<b o o s i>$ it $=$ TOP1 that bicycle ride-THM $=$ ACC-PST child $=$ GEN hat
hazi $i=t i \quad$ taukyaa $=$ ga ik-i-i
INFR FP = QUOT one = NOM go-THM.CVB-i
'They thought "this must be a hat of the boy with bicycle.'
(т.24) naugara <kutibii> aa sibabii=ya fik-i-i

DSC whistle INTJ whistle $=$ TOP1 whistle-THM.CVB-i
'He whistled, '
(т.25) $s i b a b i i=y a \quad f i k-i-i \quad o o i=t i \quad s i b a b i i=y a$
whistle $=$ TOP1 whistle-THM.CVB-i hey $=$ QUOT whistle $=$ TOP1
fik-i-i yurab-i-i namar-ah-i
whistle-THM.CVB-i call.CVB-i.CVB-i stop-CAUS.CVB-i
'He whistled and yelled to him "hey !"'
(т.26) $\quad u r a=a \quad v v a=g a \quad<b o o s i>=n a=t i=d u \quad[x . . x]$ it $=$ TOP1 2.SG $=$ NOM hat $\quad=\mathrm{QY}=\mathrm{QUOT}=\mathrm{FOC}[\mathrm{x} . . \mathrm{x}]$
$a r-u=u$-ba $\quad i k-i-i \quad<b o o s y a>=a$ tur-ah-i-i
be-THM = ACC-CSL go-THM.CVB-i hat $=$ TOP1 take-CAUS-THM.CVB-i
$u i=k y a a$
CONT $=$ while
'When they asked "is this your hat?" (he said yes) so they went to give it back to him.'
(т.27) $<$ boosi $>=n u$ ssui $\quad$ ccy $a=a \quad$ kaari $=n \quad$ nasi $=u$ hat $=$ GEN $\quad$ pick_up.CVB come. $C V B=$ RES alternative $=$ DAT pear $=$ ACC miicì fii ai-ba
three give.CVB RES-CSL
'The child gave them three pears in return for doing a nice thing for him.'
(т.28) ura=a hitit+tama tui-i fau-ccyaan=na fit=kyaa mmya it $=$ TOP1 oneportion take.CVB-i eat-SIM $=$ TOP1 come $=$ while DSC
'They take the pear and going on eating the pears.'
(т.29) naugara <ozisan $>=$ ga nasya $=a \quad<$ kago $>=n$ nci-i

DSC man=NOM pear=TOP1 basket=DAT fill_up.CVB-i
$u r-u=u$-tai $=$ suu $\quad$ mmya $u r-u=u$-tai
be-THM $=$ ACC-PST $=$ but DSC $\quad$ be-THM $=$ ACC-PST
'The man was filling up the baskets with pears.'
(т.30) unu nasi=nu nusi =nu ozisan=na mmya the pear $=$ GEN owner $=$ GEN old_guy $=$ TOP 1 DSC
'The owner of the pear tree,'
(т.31) mmya futaaci=n=na nti ai-ba mmya mmya hitici=n DSC two = DAT = TOP1 fill_up RES-CSL DSC DSC one = DAT $n t i-d i \quad=t i \quad$ mmya uri-i $\quad f i \ddot{i}=k y a a$ fill_up-vOL = QUOT DSC step_down.CVB-i come = while 'he already filled two baskets so he was trying to fill the other one and climbed doown the tree.'
(т.32) naugara uri tti $<$ kago $>=o$

DSC step_down.CVB come.CVB basket $=$ ACC
tara-a-n $=t i \quad$ hinna munu $i$
suffice-THM.IRR-NEG.NPST = QUOT strange thing FP
'When he climbed down and (he said) "it's weird, one of my baskets is missing."
(т.33) unaga miici muc-i $\quad t$-tai =suga hitic =cya self.NOM three have-THM.CVB come-PST $=$ but one $=$ TOP1
tara-a-n nusumi-i har-i-i
suffice-THM.IRR-NEG.NPST rub.CVB-i go_away-THM.CVB-i
nyaa-n
not_to_be-NEG.NPST
'"I brought three baskets but one of them is missing. Someone must have stolen it."'
(т.34) fituti $k a s a m a s i+m u n u=m a i ~ d a a i ~ c y a u=k y a a$ irritating frustrating + thing $=$ also FOC.RES say_so.NPST $=$ while '"So irritating," he said.'
(т.35) yarabi-mmi = nu nasi fau-ccyaan naugara micyaai fiz-ba child-PL2 = GEN pear eat-SIM DSC three_people come-CSL
'Then he saw three children comming eating pears.'
(т.36) $a a \quad u r a=a$ tarugana $a=g a=d u \quad m m y a$ INTJ it $=$ TOP1 someone $=$ NOM $=$ FOC DSC
'He thought, "ah, that's maybe someone'
(т.37) nusum-i ik-i-i kunu-kya=n mmya baki-i fii yaai rub-THM.CVB go-THM.CVB-i this-PL3 = DAT DSC share.CVB-i give RES
$=t i \quad u m u-i \quad y u u i$
= QUOT think-THM.CVB CONT.NPST
'took it away and he might give them the pears.'

## Abbreviations

| $<\ldots>$ | Loanword from Japanese | FOC | Focus | PROG | Progressive |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $[\mathrm{x} . . \mathrm{x}]$ | Unclear text | FP | Final Particle | PST | Past |
| ABL | Ablative | GEN | Genitive | QUOT | Quotation |
| ACC | Accusative | IMP | imperative | Q.Y | Question Yes-No |
| ALL | Allative | INFR | Inference | Q.W | Question WH |
| AZ | Adjectiviser | INST | Instrumental | RES | Resultative |
| CAUS | Causative | INTJ | Interjection | SG | Singular |
| COM | Comitative | IRR | Irrealis | SIM | Simultaneous |
| COND | Conditional | MED | Medial verb | THM | Thematic Vowel |
| CONT | Continuous | NEG | Negative | CIRC | Circumstantial |
| CSL | Causal | NOM | Nominative | TOP | Topic |
| CVB | Converb (Absolutive) | NPST | Non-Past | VOL | Volitional |
| DAT | Dative | NZ | Nominalizer | VZ | Verbalizer |
| DIM | Diminutive | PL | Plural |  |  |
| DSC | Discourse Marker | POT | Potential |  |  |

## Hateruma (Yaeyama Ryukyuan)

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Figure 1: Yaeyama Islands

## Introduction

Hateruma Ryukyuan has the basic characteristics of a typical Japonic language: verb-final with the modifier-head constituent order, agglutinative and suffixal morphology, and dependent-marking.

However, there are two striking features in Hateruma: strong aspiration and a neutral case system. A strong aspiration, which is not phonologically
distinctive, is observed with voiceless obstruents in word initial position. This strong aspiration devoices the vowels following them, and even subsequent sonorants (§2.1.2). Neutral case systems ${ }^{1}$ are rare in the Ryukyuan languages, which typically have a nominative-accusative case system. Core arguments are marked by the case marker $=\emptyset$ in Hateruma (§4.3).

## 1 The language and its speakers

### 1.1 Geography

Hateruma island (jpn. Hateruma-jima, vernac. be-sïma), which is the southernmost in Ryukyu archipelago, has a population of about 580 and belongs to the Yaeyama islands (figure 1). It is said that 'Hateruma' means 'far coral'. Hateruma Ryukuan (Hateruma hōgen in Japanese) is mainly spoken by people living on the Hateruma island or in the Shiraho district of Ishigaki, where hundreds of people from Hateruma immigrated in the $18^{\text {th }}$ century. ${ }^{2}$

### 1.2 Affiliation

Hateruma Ryukyuan belongs to the Yaeyama branch of Southern Ryukyuan, which also includes Yonaguni and Miyako Ryukyuan. According to Lawrence (2000), Lawrence (2008) and Pellard (2009b), both Yaeyama and Yonaguni belong to the Macro-Yaeyama sub-branch.

### 1.3 Sociolinguistic overview

### 1.3.1 The number of speakers

It is difficult to estimate the number of speakers, but my field work observation indicates that people who are over seventy years old can speak Hateruma Ryukyuan fluently. According to the 2005 census, the number of people over seventy is 190 for Hateruma and about 290 for Shiraho.

People who are around forty or sixty can understand Hateruma, but have difficulties speaking it. It seems that people under forty almost cannot understand the language and are monolingual in Standard Japanese.

### 1.3.2 Dialects

There are two major dialects: Hateruma and Shiraho. It seems that people in Shiraho used to visit their relatives or friends in Hateruma until some decades ago.

[^60]Hateruma island is divided into five areas, from West to East: Fuka, Naishi, Mae, Minami, Kita. Speakers report lexical differences between the different areas, but the different sub-dialects remain mutually intelligible. This work is based on the variety spoken on Hateruma.

### 1.4 Previous works

There is no reference grammar of Hateruma yet. Previous works have generally focused on individual topics in a comparative perspective with other Ryukyuan varieties, and have not given a detailed account of Hateruma Ryukyuan.

Among previous works, Shibata (1972) and Kuno (1992) focus on the phonology, while Hirayama (1988), Kajiku (1996) and Kajiku (1998) give a basic treatment of both the phonology and morphology. These previous works are criticized in detail in Aso (2009), which contains a description of the phonology and morphology of Hateruma Ryukyuan.

## 2 Phonology

### 2.1 Phoneme inventory

### 2.1.1 Vowels

Hateruma has the following seven vowels (table 1).

Table 1: Vowels

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| Closed | i | $\mathrm{i}[i \sim \mathrm{i}]$ | u |
| Closed-mid | e |  | o |
| Open(-mid) | ( $\varepsilon$ ) | a |  |

Only speakers over 90 distinguish the front open-mid vowel $/ \varepsilon /$ from the front close-mid vowel /e/, for which only a few minimal pairs are found.
(1) /me/ [me:] 'rice’
/me/ [me:] 'front'
The central closed vowel /i/ has two allophonic variants: the advanced front closed vowel variant [ị] appears after the voiceless bilabial plosive /p/, while the central closed vowel [i] appears in all other environments.
(2) /pïsïmari/ [psisisimari] 'noon'

I consider there to be no distinction between long and short vowels. A monosyllabic CV word is always lengthened (CV: unless followed by an affix or a
clitic. For example, the vowel of $m e$ [me:] 'front' (1) is short when the locative case marker is attached: $m e=n a$ [mena] 'in front'.

However, there are some problematic cases which cannot be above, especially concerning the central open vowel /a/. Some words exhibit free variation between short and long vowels:
(3) /nari/ [nari] ~ [na:si] 'fruit'

However, some words consistently appear with a long vowel, like pii 'coral reef', maagi 'big' or mii-cï 'three pieces'. Further research is needed to elucidate the environments where long vowels appear, and the relation with accent patterns.

### 2.1.2 Consonants and glides

Hateruma has the following sixteen consonants (table 2).

Table 2: Consonants and glides

|  |  | Bilabial | Dental | Alveolar | Velar / Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stop | voiceless <br> voiced | $\mathrm{p}\left[\mathrm{p} \sim \mathrm{p}^{\text {s }}\right.$ ] |  |  | k |
|  |  | b | d |  | g |
| Fricative | voiceless voiced | f | $\mathrm{s}[\mathrm{s} \sim \mathrm{C}] \mathrm{c}\left[\mathrm{ts} \sim \mathrm{t}_{6}\right]$ |  | $\mathrm{h}[\mathrm{h} \sim \mathrm{ç}]$ |
|  |  |  |  | $\mathrm{z}[\mathrm{z} \sim \mathrm{z} \sim$ |  |
| Nasal |  | m | n [ n | $\sim \mathrm{N} \sim \mathrm{m}]$ |  |
| Flap |  |  |  | $\mathrm{r}[\mathrm{r} \sim \mathrm{r}]$ |  |
| Approximant |  | w |  |  | j |

Main allophonic realizations include the following:

- $\left[\mathrm{p}^{\mathrm{s}}\right]$ appears only before the central closed vowel /i/ (2);
- Palatal or palato-alveolar allophones appear before the front closed vowel /i/;
- /n/ is usually a dental nasal [ n ] but is realized as [ N ] in final position, [ y ] before velars ( $/ \mathrm{k}, \mathrm{g} /$ ) and as [m] before bilabials.
- /r/ is sometimes trilled when the preceding vowel is devoiced: /garasï/ [ $\mathrm{g}^{\mathrm{h}}{ }_{0}{ }^{\text {arasi }}$ ~ [ $\mathrm{g}^{\mathrm{h}}$ arasi] .

One of the striking features of Hateruma is the strong aspiration of the wordinitial consonants /p, t, d, k, g, f, s/. All voiceless obstruents except /c/ and $/ \mathrm{h} /$ can devoice a following vowel when they are aspirated; in addition, this devoicing can also spread to a subsequent sonorant. ${ }^{3}$

[^61](4) /saki/ [s ${ }^{\text {haki] }}$ 'alcohol'
/turi/ [th ${ }^{\text {ºroic }}$ ] 'bird'
Other Yaeyama Ryukyuan dialects are reported to have a similar aspiration process, like Kohama, Taketomi, Iriomote or Ishigaki, but it is the strongest in Hateruma according to Uemura (1992).

### 2.2 Syllable structure and phonotactics

### 2.2.1 The syllable structure of the root word

The syllable in Hateruma contains an obligatory nucleus (N), which can be filled by vowels or $/ \mathrm{n} /(6 \mathrm{a}$ ), as well as optional onset (O), glide (G), and coda (C) slots. The approximants $/ \mathrm{w}, \mathrm{j} /$ can fill the G slot, and the onset and coda positions can be occupied by other consonants. The longest monosyllabic root word is /ssjan/ 'wore' (OOGNC). A sequence of different consonants cannot occur as an onset, while geminates can fill the O slot.
(5) ((O)O)(G)N(N)(C)

A root word consists of sequences of syllable of the type described above. There are however some restrictions: /r/ cannot appear word-initially, double onsets ( OO ) are restricted to $/ \mathrm{ss}, \mathrm{mm} /(6 \mathrm{~b})$.
a. /n.ta/ [nta] 'dirt'
b. /mman/ [m:an] 'horse'

### 2.2.2 Mora

The mora is a useful unit for the description of pitch patterns (see §2.3), and it must be recognized as a meaningful unit besides the syllable. A geminate onset, a nucleus and a coda each carry one mora, as $\mu$ shows below.
(7) ( (O) O) (G) N (N) (C)
$\mu \quad \mu \mu \mu$
Monosyllabic CV words are automatically lengthened when they constitute a phonological word on their own, but not when they are followed by a clitic, as mentioned in §2.1.1. This can be interpreted as the result of a minimal size constraint on phonological words: a phonological word must be at least twomora long.

### 2.3 Prosody

There are two distinctive pitch patterns, but only two minimal pairs are found.
$\begin{array}{lllllll}\text { (8) } & \text { /pa.na/ } & \text { HH } & \text { 'flower' } & \text { vs. } & \text { /pa.na/ } & \text { HL 'nose' } \\ \text { /ma.ju/ } & \text { HL } & \text { 'cat' } & \text { vs. } & \text { /ma.ju/ } & \text { LH } & \text { 'eye-brow' }\end{array}$
I analyze that there are number of mora +2 pitch patterns for nominals (table 3). ${ }^{4}$ Underlyingly monomoraic words surface as two-mora long as the result of a minimal size constraint on phonological words, see §2.2.2.

Table 3: Pitch patterns

| Pattern | $1 \mu$ | $2 \mu$ | $3 \mu$ |
| :--- | :---: | :---: | :---: |
| Level | HH | HH | HHH |
| Falling | HL | HL | HHL |
|  |  |  | HLL |
| Rising | LH | LH | LLH |
| Concave |  | FH | HLH |

There are many two or three morae words in Hateruma. Further work is needed in determining accent patterns of words containing four or more morae.

## 3 Descriptive preliminaries

### 3.1 Basic clause structure and phrase structure

### 3.1.1 Basic clause structure

A clause in Hateruma can be of the following two types: (a) containing a predicate, or (b) consisting of an interjection only. A clause of type (a) can contain:
i. Predicate
a) Verbal predicate
b) Nominal predicate
ii. Arguments
iii. Adjuncts

[^62]
### 3.1.2 Nominal phrase

A nominal phrase (NP) can be an argument of a predicate or the head of a nominal predicate. The NP in Hateruma has a '(Modifier + ) head noun' structure. The head noun can be modified by an NP with a genitive case marker, an adnominal (clause).
(9) $\left[\begin{array}{ll}d u=n u \quad<b j o o k i>\end{array}\right]_{N P}$

REFL $=$ GEN sickness
'My own sickness'5 (modified by NP with genitive case marker $=n u$ )

### 3.1.3 Predicate phrase

### 3.1.3.1 Verbal predicate

A verbal predicate consists of a verbal phrase (VP), and I consider the two to be equivalent. A verbal phrase has the structure 'verb ( + auxiliary verb)'.
(10) $\quad$ is $a-s i ̈ m a=c i \quad[n g-u-\emptyset-n]_{V P}$

Ishigaki-island = ALL go-NPRF-NPST-RLS
'(I) will go to Ishigaki island.'
(11) $\quad$ sigami $=\emptyset \quad$ [hak-i $\quad$ bir-ja- $\emptyset=r o o]_{V P}$
letter $=$ CORE write-MED PROG-PRF-NPST $=$ DSC
'(I) am writing a letter.' (with auxiliary verb)

### 3.1.3.2 Nominal predicate

A nominal predicate minimally consists of an NP and has a structure 'NP (+ copula verb)'. The copula verb inflects for tense, aspect and mood, as other verbs in Hateruma, but it does not occur in simple non-past tense.
(12) $b a=\emptyset \quad[$ sinsin]
$1 \mathrm{sg}=$ CORE teacher
'I am a teacher.'
In cases other than 'simple non-past', a copula verb is required.
(13) $\quad b a=\emptyset \quad[\operatorname{sinsin} j a-t a-n]$
$1 \mathrm{sg}=$ CORE teacher COP-PAST-RLS
'I was a teacher.'
(14) $b a=\emptyset \quad[\operatorname{sinsin} a r-a n-u-\emptyset]$
$1 \mathrm{sg}=\mathrm{CORE}$ teacher COP-NEG-NPRF-NPST
'I am not a teacher.'

[^63]
### 3.2 Word, clitic and affix

### 3.2.1 Word

A word is a free form and has the structure 'stem(-affix)'. One stem consists of one or more roots.

### 3.2.2 Affix vs clitic

Both an affix and a clitic are bound forms, but they differ on several points from each other. The main difference between them are that (a) an affix is morphologically attached to a bound stem, while (b) a clitic is syntactically attached to a phrase (Bickel and Nichols 2007). In general they have different distributions: an affix is located inside a word ([Stem-affix] ${ }_{\text {Word }}$ ), whereas a clitic appears outside a phrase ([Phrase] = clitic). For example, both katafukand bir- are bound stems in (15), and become words through the addition of suffixes: katafuk-i and bir-ja-ta. On the other hand, the clitic =roo is attached to a VP.
(15) $[\text { katafuk-i bir-ja-ta] }]_{V P}=r o o$ lie-MED PROG-PRF-PAST = DSC
'(I) was lying (in the room).'

### 3.3 Word classes

Hateruma Ryukyuan distinguishes between six word classes: nominals, verbs, adnominals, interjections and adverbs. The criteria defining the different classes are as follows:
(A) It can be the head of an NP (see §3.1.2);
(B) It inflects;
(C) It can fill in NP modifier slot directly, i.e., without a genitive clitic $=n u$;
(D) It can form a clause by itself.

### 3.3.1 Nominals

A nominal is a word which can head an NP, which can serve as an argument or a nominal predicate. There are three subclasses of nominals: nouns, pronouns and numerals (§4.2.1).

Table 4: Word classes

|  | NP | Infl | Modif | Clause |
| :--- | :---: | :---: | :---: | :---: |
| Nominals | + | - | - | - |
| Verbs | - | + | - | - |
| Adnominals | - | - | + | - |
| Interjections | - | - | - | + |
| Adverbs | - | - | - | - |

### 3.3.2 Verbs

A verb is a word that can inflect for tense, aspect and mood, and that can be the head of a verbal predicate. Inflection is marked on verbs by suffixes (§5).

### 3.3.3 Adnominals

An adnominal is a word that can directly fill the modifier slot of an NP. There are few adnominals, and the most common are unu 'this' and kunu 'that'. The word maagi is uncommon since it behaves both like an adnominal and like nominal. I treat it as an exceptional nominal in the present analysis.
i. $\quad[\text { maagi pïtu }]_{N P}$
big person
'A great person (lit. big person)' (adnominal-like)
ii. [unu pïtu] $]_{N P}=\emptyset$ maagi
this person = CORE big
'This person is big.' (nominal-like)

### 3.3.4 Interjections

An interjection is a word that can form a clause by itself, like oo 'yes', ai 'no', aga 'oh', sje 'hey', etc.

### 3.3.5 Adverbs

An adverb is a word for which none of the above criteria applies and that serves as an adjunct to a verbal predicate. Adverbs include words like unsiku 'very', goobi 'much', jaccin 'surely', kissa 'already', izanda 'steadily'.
(17) $\quad b e b i=n d u \quad h-o-\emptyset$
little $=$ FOC eat-NPRF-NPST
'(I) eat a little.'

## 4 Nominals and nominal phrases

### 4.1 Modifier

The modifier slot of an NP can be filled by another NP bearing a genitive case marker or by an adnominal (clause).

### 4.1.1 Modifier filled by NP

The genitive case marker $=n u$ is attached to an NP when it fills the modifier slot of another NP.
(18) $\quad[[\mathrm{NP}]=\text { GEN Head }]_{\mathrm{NP}}$
(19) $\quad\left[[a b o a]_{N P}=n u \mathrm{munu}\right]_{N P}$ mother = GEN thing
'Mother's thing'
The noun aboa 'mother' in (19) is a modifier and munu 'thing' is a head of the NP.

### 4.1.2 Modifier filled by adnominal (clause)

Contrary to NPS, adnominals and adnominal clauses can fill a modifier slot of an NP directly.
(20) [[adnominal (clause)] Head] $]_{\mathrm{NP}}$
(21) $[[k u n u] k i]_{N P}$
this tree
'This tree' (adnominal)
(22) $\quad[[b a=\emptyset=n d u \quad \text { sikur-ja-ru }] \quad \text { munu }]_{N P}$ $1 \mathrm{SG}=\mathrm{CORE}=\mathrm{FOC}$ make-PRF-NPST thing
'The meal I cooked. (lit. the thing which I made.)' (adnominal clause)
In (22), $b a=\emptyset=n d u$ sikur-ja-ru '(which) I made' is an adnominal clause, see also §10.4.2.

### 4.2 Head

### 4.2.1 Subclasses of nominals

Nominals can be classified into nouns, pronouns and numerals. Nouns include common nouns, proper nouns and temporal nouns (e.g., mana 'now', acca 'tomorrow'). Pronouns can further divided into five lower classes: personal, demonstrative, locative, interrogative, and manner (table 5). Both demonstrative and locative pronouns depend on the distance from the speakers.

Numerals always appear with classifier suffixes. There are at least 27 different classifier suffixes according to Ōno (1990). When speakers count from one to ten, the following cardinal numbers are used: pïtu-cï 'one', futa-cï 'two', mii-cï 'three', juu-cï 'four', issï 'five', nn-cï ‘six', nana-cï ‘seven', jaa-cï 'eight', hakona-cï 'nine', tu 'ten'. Numerals and time nouns behave like adverbs and can be used without a case marker clitic, as in (т.4).

Table 5: Pronouns

|  |  | singular | plural |
| :---: | :---: | :---: | :---: |
| Personal | first person | ba, banu | ba-ima, be(-ma) |
|  | second person | da | da-ima |
|  | third person | usita | usita-nda |
|  | reflexive | ha |  |
| Demonstrative | proximal | kuri |  |
|  | distal | uri |  |
| Locative | proximal | mo |  |
|  | mesial | na |  |
|  | distal | ha |  |
| Interrogative | what | nu |  |
|  | where | $z a$ |  |
|  | when | icï |  |
|  | why ~ how | ne |  |
|  | who | ta |  |
| Manner | this way | $e$ |  |
|  | that way | ke |  |

### 4.2.2 Derivational morphology of nominals

There are two classes of derivational suffixes that attach to nominals: (a) the diminutive suffix -(n)tama and (b) the plural suffixes -nda, -nzi or -(i)ma. These suffixes attach to a stem which is already a free form, i.e., a word. According to the definition of clitics given in section § 3.2.2, these suffixes look like clitics. However, since a clitic attaches to a phrase, 'clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems' (Zwicky and Pullum 1983). From this point of view, these are classified as suffixes as they can only attach to a noun.

The diminutive suffix -(n)tama is attached to a noun refering to an infant, human or animal.
(23) bidumu-ntama, otta-ntama, mman-tama
man-DIM frog-DIM horse-DIM
'A boy, a tadpole, a foal'
The plural suffixes -nda, -nzi or -(i)ma are less frequent than the diminutive and can only be used with nouns refering to humans.
(24) pïtu-nda, pa-ima, utama-nzi
person-PL grandmother-PL child-PL
'people, grandmothers, children'

### 4.3 Case

Case in Hateruma is indicated by case marker clitics following an NP. There are eleven case markers: core, genitive, dative, allative, locative, instrumental, comitative, comparative, ablative and terminative (table 6).

A core case marker $=\varnothing$ is attached to core arguments: the only argument of an intransitive clause (S), the most agent-like argument of a transitive clause (A), the most patient-like argument of a transitive clause (P), and the extended core argument (E). ${ }^{6}$ Hateruma has thus a neutral case system in the sense of Comrie (1978).
(25) pïtu= $\emptyset \quad$ budur-ja-ta-n
person = CORE dance-PRF-PAST-RLS
'People danced.' (S)
(26) $\quad a b o a=\emptyset \quad i j a=\emptyset \quad$ mir-i $\quad b i r-j a-t a-n$
mother $=$ CORE father $=$ CORE look-MED PROG-PRF-PAST-RLS
'(My) mother was looking at (my) father.'(A/P)
The grammatical relations of the core arguments aboa and ija in (26) are identified by constituent order, cf. (27) which has the opposite meaning.
(27) $\quad i j a=\emptyset \quad a b o a=\emptyset \quad$ mir-i $\quad b i r-j a-t a-n$
father $=$ CORE mother $=$ CORE look-MED PROG-PRF-PAST-RLS
'(My) father was looking at (my) mother.'
Further research is needed about the possibility of omission or fusion of $=\varnothing$ and other clitics.

[^64]Table 6: Case clitics

|  | clitics | Functions |
| :--- | :--- | :--- |
| Core | $=\emptyset$ | S/A/P/E |
| Genitive | $=n u$ | possessor, existent, S/A in subordinate clause |
| Dative1 | $=m u$ | beneficiary |
| Dative2 | $=g a,=n a g a$ | beneficiary, destination, causative agent, (E) |
| Allative | $=c i$ | destination |
| Locative | $=n a,=n a g i$ | location, partition, time |
| Instrumental | $=s i$ | instrument, material, time |
| Comitative | $=t u$ | companion |
| Comparative | $=j u r i$ | standard of comparison |
| Ablative | $=g a r a$ | a point of depature, passive agent, |
|  |  | standard of comparison |
| Terminative | $=b a g i$ | a point of arrival |

## 5 Verb morphology

### 5.1 The structure of the verb word

### 5.1.1 Stem

Hateruma has the following basic verbal structure.
(28) $\left[[\text { Root (-verbalizer) (-deriv. suffix) (-stem extender) }]_{\text {stem }} \text {-infl. suffix }\right]_{\text {word }}$

There are five verbal stem classes. The different verb classes are distinguished by the form certain suffixes take when they attach to a stem. There are four suffixes that define the different verb classes: (a) negative, which belongs to derivational suffixes, aspectual (b-1) perfect and (b-2) non-perfect, and (c) stem extender (SE) ${ }^{7}$ (table 7 and table 8).

Property concept stems, ${ }^{8}$ which express an attribution of people, objects or human feelings, combine with a verbalizer ( $\$ 7.2$ ) to form verbal stems. These verbal stems all and only belong to class 5 . Such verbal stems have been usually classified as adjectives, not verbs, in previous research. However, they inflect as ordinary verbs, and I thus classify them as a subclass of verbs.

[^65]Table 7: Verbal stem classes

|  |  | Class 1 | Class 2 | Class 3 | Class 4 | Class 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| (a) Negative | $-a n$ | $-a n$ | $-a n$ | $-u n$ | $-e n$ |  |
| (b) Aspect | (b-1) Perfect | $-j a$ | $-j a$ | $-j a$ | $-a$ | $-a$ |
|  | (b-2) Non-perfect | $-u$ | $-u$ | $-o$ | $-u,-i$ | - |
| (c) SE |  | $-i$ | $-e$ | $-e$ | $-a$ | $-a r i$ |

Table 8: Examples of verbal stems

|  | Stems |
| :--- | :--- |
| Class 1 | hak- 'write', jum- 'read', ng- 'go', mu- 'think' |
| Class 2 | aras-, arah- 'wash', utas-, utah- 'drop', nas-, nah- 'bear' |
| Class 3 | $k$ - 'buy', $h$ - 'eat' |
| Class 4 | $u r$-, urir- 'go down', m-, mir- 'see', ug-, ugir- 'get up' |
| Class 5 | taka-ha- 'high', go-ha- 'scary', sani-sja-ha- 'happy' |

### 5.1.2 Inflection

An inflectional operation is done by inflectional suffixes in Hateruma. It differs from derivational suffixes or other suffixes in that they terminate a verbal stem and "are required by the syntactic environment in which a root appears" (Payne 1997).

There are two types of inflection: (a) finite and (b) non-finite. The difference between them is whether they include TAM (tense, aspect and mood) information or not. If an inflected verb includes TAM information, it is finite. Otherwise it is non-finite.

A finite verb has the following structure:
(29) [Stem -aspectual suffix -tense suffix -modal suffix $]_{\text {word }}$

Finite verbs need to be marked for at least one of these three TAM categories. For example, if the conjugational category is 'finite realis', all three inflectional suffixes are needed.
(30) $\quad h$-ja-ta-n
eat-PRF-PAST-RLS
'(I had) eaten.'
A non-finite verb has the following structure:
(31) [Stem (-stem extender) -non-finite suffix $]_{\text {verb }}$
(32) $h-e$,
eat-MED
'(I) eat, (and...)'

### 5.2 Inflectional morphology

### 5.2.1 Finite inflection

A finite inflected verb can terminate a sentence. Finite inflectional suffixes include (a) aspectual suffixes (perfect or non-perfect), (b) tense suffixes (past or non-past), and (c) modal suffixes (realis or irrealis; imperative, intentional or prohibition). ${ }^{9}$ A verb also can include no modal suffix, in which case I call it an unmarked form here, see table 9.

A realis form is marked for all TAM categories, while an unmarked form lacks mood information and an irrealis form lacks both aspectual and tense information.

Table 9: Verb inflection (finite)

| Mood | Aspect | Tense | jum- 'read' |
| :---: | :---: | :---: | :---: |
| Realis | non-perfect | non-past | jum-u-Ø-п |
|  |  | past | jum-u-ta-n |
|  | perfect | non-past | jum-ja-Ø-n |
|  |  | past | jum-ja-ta-n |
| Unmarked | non-perfect <br> perfect | non-past | jum-u-ø |
|  |  | past | jum-u-ta |
|  |  | non-past | jum-ja-ø |
|  |  |  | jum-ja-ru |
|  |  | past | jum-ja-ta |
| Imperative |  |  | jum-i |
| Intentional |  |  | jum-a |
| Prohibitive |  |  | jum-una |

### 5.2.2 Non-finite inflection

A non-finite inflected verb cannot terminate a sentence. There are two kinds of non-finite inflectional suffixes: medial (sequential) and converb (simultaneous,

[^66]resultative, conditional) suffixes (table 10). Though they don't have a clear-cut distribution, basically they are used in different clauses, i.e., a medial verb is used in medial clauses while a converb is used in adverbial subordinate clauses (§10).

Table 10: Verb inflection (non-finite)

|  | Meaning | jum- 'read' |
| :--- | :--- | :--- |
| Medial | medial (sequential) 1 | jum-i |
|  | medial (sequential) 2 | jum-i-sita |
| Converb | simultaneous 1 | jum-i-ci |
|  | simultaneous 2 | jum-i-ncana |
|  | resultative | jum-i-ki |
|  | conditional | jum-i-ba |

### 5.2.3 Special inflection

There are some verbal stems which have a special inflection, i.e., those which do not suit the definition on stem classes (table 7). For example, $k$ - 'come' is irregular since it would be classified into class 1 by criteria (b) and (c), but into class 4 by criterion (a).

Besides $k$ - 'come', the existential verbs $a$ - 'be (inanimate)' and $b$ - 'be (animate)', the honorific verb or- 'come, go, be' and the copula ja- have special inflections.

### 5.3 Derivational morphology

### 5.3.1 Derivational affixes

There are three derivational suffixes in Hateruma: (a) causative, (b) passive, and (c) negative.

The causative suffix basically indicates someone makes (or has made) somebody do something, see also §9.4.1.
(33) utama $=g a z i=\emptyset \quad h a k-a h-j a-\emptyset-n$
child $=$ DAT letter $=$ CORE write-CAUS-PRF-NPST-RLS
'(I) made a child write letters.'
A passive suffix has basically two uses. One is to reduce a core argument as in (34), see also §9.4.2. The other is to express a possibility, as in (35).

> a. $i j a=\emptyset=j a \quad b a=\emptyset \quad$ tatag-ja-ta-n father $=$ CORE $=$ TOP $1 \mathrm{SG}=$ CORE hit-PRF-PAST-RLS '(My) father hit me.' (two core arguments)
b. $b a=\emptyset \quad i j a=$ gara tatag-ar-a-ta-n $1 \mathrm{sg}=$ CORE father $=$ ABL hit-PASS-PRF-PAST-RLS 'I was hit by (my) father.' (one core argument)

```
\(z i=\emptyset \quad\) jum-a-i-ru-n
```

letter $=$ CORE read-PASS-NPRF-NPST-RLS
'(I) can read letters.'
A negative suffix expresses the negation of a verbal stem, see also §9.3.
jum-an-u-Ø
read-NEG-NPRF-NPST
'(I) don't read.'

### 5.3.2 Compounding and serialization

Compounding and serialization are done through a non-finite medial form. There is no difference between compounding and serialization in respect of their forms. Both of them form one verbal stem from two (or more) stems. These combinations are of two kinds: (a) NP plus verb stem (compounding) or (b) verbal stem plus verbal stem (compounding or root serialization).

This is different from clause chaining (see § 10) since there is no pause between the two verbs. At the present the differences between compounding, serialization and verbal predicate constructions containing an auxiliary verb is still not clear.
(37) sondan-s-u-Ø-n
talk.with-do-NPRF-NPST-RLS
‘(I) talk with (someone).' (compounding)
(38) mir-i-bo-ha-Ø-n
see-MED-want-VLZ-NPST-RLS
'(I) want to see (it).' (compounding or serialization)

## 6 Predicate phrase

### 6.1 The structure of the predicate phrase

There are two kinds of predicate phrases: verbal predicate phrase (39) and nominal predicate phrases (40). ${ }^{10}$

[^67](39) $\quad[\text { lexical verb1 (+ lexical verb2) }]_{\mathrm{verb}}$ ( + auxiliary verb)
(40) NP (+ copula verb)

### 6.2 Lexical verbs and auxiliary verbs

If a verbal predicate includes an auxiliary verb, the main lexical verb is nonfinite. On the other hand, an auxiliary verb is finite, but doesn't express the main lexical meaning of the predicate.

There are ten auxiliary verbs in Hateruma, listed in table 11.

Table 11: Auxiliary verbs

|  | Stem | Lexical meaning | Example |
| :--- | :--- | :--- | :--- |
| Progressive | bir- | 'sit' | (T.18) |
| Perfect1 | $n$-en- | 'be not' | (T.24) |
| Perfect2 | ssir- | $(?)$ | $(78)$ |
| Experiential | m-, mir- | 'see' | $(41)$ |
| Prospective | sik- | 'put' | $(80)$ |
| Inceptive | $k$ - | 'come' | $(49)$ |
| Benefactive | $h$-, hir- | 'give' | (T.27) |
| Potential | ss- | 'know' | $(42)$ |
| Honorific1 | $o-$, or- | 'be, come, go' (honorific) | $(60)$ |
| Honorific2 | tabor- | 'give' (honorific) | $(43)$ |

(41) mir- $i \quad m i r-i=b a$
see-MED EXP-IMP $=$ IMP
'Try to see.'
(42) num-i $\quad s s-j a-\varnothing-n$
drinl-MED POT-PRF-NPST-RLS
'(I) can drink (alcohol).'
(43) or-i tabor-i
be.HON-MED HON-IMP
'Welcome here. (lit. Would you come (here)?)'

### 6.3 The nominal predicate

A copula ja- occurs when the predicate is overtly marked for inflection, i.e., past and/or negative (§3.1.3). A copula verb has thus the function to express TAM in a nominal predicate.
(44) $d a=\emptyset \quad$ sinsin $j a-t a=n a a \quad$ ?
$2 \mathrm{SG}=\mathrm{CORE}$ teacher COP-PAST $=\mathrm{Q}$
'Were you a teacher?'

## 7 Class-changing derivations

### 7.1 Nominalization

Nominalization of a verb to an agent noun is done by the suffix -dama, e.g., $h$ - 'eat' > he-dama 'good eater'. However, there are only a few examples of this formation, and more usually agents are expressed by an NP modified by an adnominal clause: munu-ss-ja-ru pïtu (thing-know-PRF-NPST person 'knowledgeable person').

The suffix -i derives agent nouns from verbs.
(45) asi-hak-i
sweat-scratch-nLz
'sweater'

### 7.2 Verbalization

A property concept stem is always verbalized by -ha, -sja and inflects like other verbs.
a. taka-ha-ø-n
high-vLZ-NPST-RLS
'(It's) high.'
b. mi-sja-ø-n
good-VLZ-NPST-RLS
'(It's) good.'
c. h-e-bo-ha- $\varnothing$-n
eat-MED-want-vLZ-NPST-RLS
'(I) want to eat.'

## 8 Clitics

### 8.1 Syntactic host and phonological host

The syntactic host and the phonological host of a clitic may not coincide. Syntactically, a clitic attaches to a phrase (§3.2.2), but phonologically it attaches to a word.

$$
\begin{equation*}
\text { [Host] }=\text { clitic } \tag{47}
\end{equation*}
$$

There are five subclasses of clitics: ${ }^{11}$ (a) conjunction clitics, (b) modal clitics, (c) post-nominal modifier clitics, (d) focus/topic clitics, (e) discourse marker clitics.

### 8.2 Conjunction clitics

A conjunction clitic can follow either a verbal or a nominal predicate phrase (table 12). A verb in a predicate phrase appears in the unmarked form (§5.2.1) when a conjunction clitic follows. Basically, a copula verb will occur when a conjunction clitic is attached to a nominal predicate, though there are a few exceptions.

Table 12: Conjunction clitics

|  | Form |
| :--- | :--- |
| Conditional | $=c j a(r a)$ |
| Resultative1 | $=(g a) r a$ |
| Resultative2 | $=k i$ |
| Adversative | $=s i k a$ |
| Sequential | $=t e$ |
| Quotative | $=t a$ |
| Soliloquy | $=d u$ |

Table 13: Modal clitics

|  | Form |
| :--- | :--- |
| Inferential1 | $=$ kaja |
| Inferential2 | $=$ sa |
| Inferential3 | $=$ dore |
| Inferential4 | $=$ pacï |
| Hearsay1 | $=$ cju |
| Hearsay2 | $=$ noa |
| Question | $=$ naa |

### 8.3 Modal clitics

Modal clitics also basically attach to both verbal and nominal predicate phrases. They express inference, hearsay and interrogation (table 13).
(48) $h a=j a, \quad m a, k i r-a r-u n-u-t a=c j u$

REFL $=$ TOP INTJ COMe-PASS-NEG-NPRF-PAST $=$ HS
'(I) hear that he couldn't come.'

### 8.4 Post-nominal modifier clitics

A post-nominal modifier clitic attaches to an NP. These include two limitative clitics: $=n$ and $=c j a$.
(49) $\quad$ suиси $=\emptyset=n \quad$ zjunbi-s-i $\quad k-j a-\emptyset-n=s i k a$, suit $=$ CORE $=$ LIM prepare-MED come-PRF-NPST-RLS $=$ but
'(I) prepared my suit and came but...'

[^68]$n e=n u \quad$ fuciri $=t a \quad$ muc- $i \quad k$ - $i-b a=r u$
how $=$ GEN medicine $=$ QT bring-MED come-SE-CND $=$ FOC
sinsin $=\emptyset=c j a \quad$ fuciri $=\emptyset \quad n d-$ $a s-u-\emptyset=d o$
doctor $=$ CORE $=$ LIM medicine $=$ CORE come $. o u t-C A U S-N P R F-N P S T ~=~ D S C ~$
'If (he) brings the medicine and comes (here), then the doctor gives him the medicine.'

### 8.5 Focus/topic clitics

Focus clitics are $=(n) d u$ and $=r u$, and topic clitics are $=j a$ and $=b a$. Focus clitics attach to any phrase, but topic clitics attach to NPs only.

The differences between $=(n) d u$ and $=r u$ are still unclear. See § 9.6 for details about the functions of focus/topic clitics.

### 8.6 Discourse marker clitics

A discourse marker clitic follows any kind of phrase or word. There are nine discourse markers:

- $=u$ and $=b a$, which express emphasis;
- = (r)oo, =jo and =juu, which express politeness;
- = (du)ra and =do, which express certainty;
- $=$ sita and $=(w) a$, which express surprise.


## 9 Simple sentence

### 9.1 Speech acts

### 9.1.1 Declarative clause

Declarative clauses differ from interrogative clauses in that they do not attach the modal clitic = naa nor include interrogative pronouns.

Generally, the verbal predicate of a declarative clause is inflected for realis or irrealis (51). Even when the verb is an unmarked form, it frequently attaches a discourse marker clitic or a modal clitic, except =naa, as in (52). This is also the case with the copula verb, see also (13) and (14).
(51) $\quad b a=\emptyset \quad$ sunu $=\varnothing \quad$ aras-u- $\varnothing-n$
$1 \mathrm{SG}=$ CORE clothes $=$ CORE wash-NPRF-NPST-RLS
'I wash clothes.'
suno $=r u \quad k-j a-\emptyset=r o o$
yesterday = FOC come-PRF-NPST = DSC
'(I) have come yesterday.'

### 9.1.2 Interrogative clause

Interrogative clauses fall into two types: Yes-No and Wh. Yes-No interrogative clauses include the modal clitic = naa.
(53) $\quad$ acca-ha- $\emptyset=n a a$ ?
hot-VLZ-NPST $=\mathrm{Q}$
'(Are you) hot?' (verbal predicate phrase)

'Are you a teacher?' (nominal predicate phrase)
On the other hand, Wh interrogative clauses contain interrogative pronouns (see table 5, §4.2.1). The verb is most often in the unmarked form and followed by the discourse marker clitics $=b a$ or $=r a$.
$z a=g a=r u \quad$ or- $j a-\emptyset=b a \quad$ ?
where $=$ DAT $=$ FOC go. $\mathrm{HON}-$ PRF-NPST $=$ EMP
'Where have you been?'
A copula verb occurs in interrogative clauses with a nominal predicate.
$k u r i=\emptyset=j a \quad n u \quad j a-\emptyset \quad ?$
this $=$ CORE $=$ TOP what COP-NPST
'What is this?'

### 9.1.3 Imperative clause

Imperative clauses usually consist of a verbal predicate phrase with a verb inflected for the imperative mood. The discourse marker clitic $=b a$ is often attached to imperative clauses to soften the meaning.
$h a=g a \quad n g-i$
over.there $=$ DAT
go-IMP
'Get out of here. (lit. Go over there.)'
(58) $m o=g a \quad k-u=b a$
here $=$ DAT come-IMP $=$ EMP
'Come here.'
In addition, the discourse marker $=j o$ and the honorific auxiliary verbs ( $o$-, or- or tabor-) are also often used to soften the meaning of imperative clauses.
(59) $h a=g a \quad n g-i=j o$
over.there = DAT go-IMP = DSC
'Please go over there.'
(60) $h a=g a$ ng-i or-i
over.there = DAT go-MED HON-IMP
'Would you please go over there?'

### 9.2 Equation, proper inclusion, location and possession

### 9.2.1 Equation and proper inclusion

Equation and proper inclusion are both expressed by nominal predicate phrases. The copula verb occurs according to the rule stated in §3.1.3.2.
(61) $k u r i=\emptyset=j a \quad$ boma
this $=$ CORE $=$ TOP oldest.daughter
'This (girl) is the oldest daughter.' (equation)
(62) $b a-h i=n u \quad$ sakosï $=\emptyset=j a \quad$ isjan $j a-t a-n$

1 SG -house $=$ GEN oldest.son $=$ CORE $=$ TOP doctor COP-PAST-RLS
'My house's oldest son was a doctor.' (proper inclusion)

### 9.2.2 Location

Location is expressed by the locative case markers $=n a$, $=$ nagi attached to a locational NP. The locative case marker $=n a$ is used with existential verbs, while $=$ nagi is used with other verbs.
(63) $d a=\emptyset \quad a c c a \quad h i=n a \quad b-u-\emptyset=n a a \quad$ ?
$2 \mathrm{SG}=$ CORE tomorrow house $=$ LOC be-NPRF-NPST $=\mathrm{Q}$
'Will you in the house tomorrow?' (existential verb)
(64) utama = ga fuka=nagi $\quad$ kucu $=\emptyset \quad$ aras-imir-u- $\emptyset-n$
child $=$ DAT outside $=$ LOC shoes $=$ CORE wash-CAUS-NPRF-NPST-RLS
'(I) make my child wash his shoes outside.' (non-existential verb)

### 9.2.3 Possession

Possession is usually expressed by the genitive case marker, as in (9) and (19). However, when a possessor is a first or second person, possession is expressed by juxtaposition.
(65) ba-aboa, da-gakku

1sG-mother 2sG-school
'My mother, your school'

A phrase combining a locative case marker with an existential verb or mucjag'have' can also express possession.
(66) $\quad b a-h i=n a \quad \operatorname{mina}=\emptyset \quad a-\emptyset-n$

1 SG-house $=$ LOC garden $=$ CORE be-NPST-RLS
'There is a garden in my house.'
(67) $\quad b a=\emptyset \quad$ mari $=\varnothing$ goobi mucjag-u-ta-n
$1 \mathrm{SG}=$ CORE bowl $=$ CORE many have-NPRF-PAST-RLS
'I had many bowls.'

### 9.3 Negation

Negation is expressed by derivational operation, attaching negative suffixes to verb stems. ${ }^{12}$ See also (36).
(68) go-h-en-u-Ø
scary-VLZ-NEG-NPRF-NPST
'(I am) not scared.'
The two existential verbs $a$-, $b$ - and the copula $j a$ - have special negative forms $n$-, $m$-, ar- respectively.
(69)
$n$-en-u- $\emptyset=r a$
be-NEG-NPRF-NPST $=$ DSC
'Nothing.'

### 9.4 Valency-changing operations

### 9.4.1 Causative

Causative increases a verb's valency by adding a core argument, marked by $=\emptyset$. The original subject core argument is demoted to an oblique argument marked with dative $=g a$.
(70) a. utama $=\emptyset \quad$ maagi $k u i=s i \quad$ sumuci $=\emptyset$ jum-ja-ta-n
child $=$ CORE big $\quad$ voice $=$ INS book $=$ CORE read-PRF-PAST-RLS '(My) child read a book aloud.'
b. $\quad b a=\emptyset \quad$ utama $=$ ga maagi $k u i=s i \quad$ sumucï $=\emptyset$
$1 \mathrm{SG}=$ CORE child $=$ DAT big voice $=$ INS book $=$ CORE
jum-as-u-ta-n
read-CAUS-NPRF-PAST-RLS
'I made (my) child read a book aloud.'

[^69](71)
a. utama $=\emptyset$ par-ja- $\varnothing$-n
child = CORE run-PRF-NPST-RLS
'(My) child run.'
b. $b a=\emptyset \quad$ utama $=$ ga par-ah-ja- $\varnothing-n$
$1 \mathrm{SG}=$ CORE child $=$ DAT run-CAUS-PRF-NPST-RLS
'I made (my) child run.'

### 9.4.2 Passive

Passive suppresses one core argument and demotes the original agent to the role of oblique argument (marked with ablative $=$ gara), see (34).

### 9.5 Tense, aspect and mood

### 9.5.1 Tense

Hateruma has a past/non-past tense system. Past is expressed by the tense suffix $-t a$ and non-past by $-\emptyset$ or $-r u .^{13}$
(72) e ja=ta m-u-ta-n
so $\mathrm{COP}=\mathrm{QT}$ think-NPRF-PAST-RLS
'(I) thought so.'
(73) e ja=ta m-u-Ø-n
so COP $=$ QT think-NPRF-NPST-RLS
'(I) think so.'
Perfect aspect ( $\S 9.5 .2 .1$ ) also expresses past as the meaning of completion of the action.

### 9.5.2 Aspect

### 9.5.2.1 Perfect

Perfect aspect expresses that some event has (or had) occured. Perfect is expressed by the suffix -(j)a. When the perfect suffix -(j)a does not appear on a verb, the suffixes $-u,-i$, $-o$ attach, depending on the class of the verb. These suffixes are labeled non-perfect, but this does not mean they have a special imperfect value. They simply encode the absence of a perfect aspect and are thus unmarked. See also (т.14), (т.15) and (т.16).
(74) ha-amasikuru= Ø noor-ja-Ø-n

REF-head = CORE cure-PRF-NPST-RLS
'My head (headache) is cured.'

[^70]```
asi \(=\emptyset=n d u \quad\) goobi nd-a-ta-n
sweat \(=\) CORE \(=\) FOC many come.out-PRF-PAST-RLS
```

'(I) had sweat a lot.'
One example of the differences between perfect non-past and perfect past is whether the action is lasting or not, as in (75) and (76).
(76) $\quad a s i=\emptyset=n d u \quad$ goobi $n d-a-\emptyset-n$
sweat $=$ CORE $=$ FOC many come.out-PRF-NPST-RLS
'(I) have sweat a lot (and am still sweating).'
Auxiliaries $n$-en- and ssir- also express perfect aspect. They also sometimes convey the meaning that the event has (or had) happened against the speaker's wish.

```
(77) ng-i n-en-u-\emptyset
    go-MED PRF-NEG-NPRF-NPST
    '(He) has gone (though I didn't want him to).'
```

(78) h-e ssir-o- $\emptyset, \quad m a$
eat-MED PRF-NPRF-NPST INTJ
'Oh, (he) has eaten (though I didn't want him to).'

### 9.5.2.2 Progressive

Progressive aspect express a continuance of an event and is expressed by the auxiliary bir-, see also § 6.2. The auxiliary bir- is often accompanied by the perfect suffix -ja.
(79) $\quad a b o a=\emptyset \quad i j a=\emptyset \quad$ mir-i $\quad b i r-j a-t a-n$
mother = CORE father $=$ CORE look-MED PROG-PRF-PAST-RLS
'(My) mother was looking (my) father.'

### 9.5.2.3 Prospective

Prospective aspect expresses a preparation for a future event. Progressive aspect is marked by the auxiliary sik-.
(80) benkjoo-s-i $\quad$ sik- $i=b a$
study-do-MED PROS-IMP = EMP
'Put yourself in condition for study (for the future).'

### 9.5.2.4 Inceptive

Inceptive aspect is expressed by auxiliary $k$ - and expresses the starting point of an action.
(81) ee, mund-a $k$-ja- $\emptyset-n$

INTJ remember-MED INC-PRF-NPST-RLS
'Oh, (I) began remembering.'

### 9.5.3 Mood

### 9.5.3.1 Realis

Realis mood expresses the speaker's assurance that something is true or certain. The inflectional mood suffix $-n$ and the discourse marker $=(r)$ oo mark realis mood.
(82) $f-u-\emptyset-n=d o r e$
rain-NPRF-NPST-RLS = INFER
'It must be rain.'
agan $=\emptyset \quad$ gaasi $h-o-t a=r o o$
potato $=$ CORE only eat-NPRF-PAST $=$ DSC
'(We) ate only potatoes (in the old days).'

### 9.5.3.2 Irrealis

On the other hand, irrealis expresses the speaker's uncertainty. Irrealis mood is expressed by the unmarked form of the verb.

$$
\begin{align*}
& o t t a=\emptyset \quad z a=g a=r u \quad \text { per- } j a-\emptyset=k a j a \quad ?  \tag{84}\\
& \text { frog }=\text { CORE where }=\text { DAT }=\text { FOC jump-PRF-NPST }=\text { INFER } \\
& \text { 'Where has the frog jumped out?' }
\end{align*}
$$

### 9.5.3.3 Imperative

Imperative mood expresses a command given to the hearer. It is marked by the mood suffix -i or $-e$, see more examples in §9.1.3.
(85) gangan $h-e=b a$
quickly eat-IMP = EMP
'Eat quickly.'

### 9.5.3.4 Intentional

Intentional mood expresses an invitation to the hearer or the intention of the speaker. It is expressed by intentional form suffixed by $-a$. It is often followed by the discourse marker clitic $=r a$.
(86) $\quad \operatorname{sino}=m u \quad h-a=r a$

Shino $=$ DAT give-INT $=$ DSC
'Let's give (it) to Shino.'
(87) $s j e, ~ m a, j a=c i \quad n g-a$, sje

INTJ INTJ house = ALL go-INT INTJ
'Hey, let's go home.'

### 9.5.3.5 Prohibitive

Prohibitive mood expresses prohibition for the hearer to do something. It is marked by the suffix -una, but in some (rare) cases it can be expressed by the negative suffix followed by the emphatic clitic $=b a$.
mir-una
look-PROH
'Don't look.'
(89) mir-an-u- $\emptyset=b a$
look-NEG-NPRF-NPST = EMP
'(You absolutely) don't look.'

### 9.6 Information structure

### 9.6.1 Topicalization

Topicalization in Hateruma is done by attaching a topic marker clitic, $=j a$ or $=b a$, to an argument. The marker = ja attaches to any argument, i.e., core and oblique arguments, see brackets 1 on line one in (90). There are a few examples that $=b a$ attaches to object arguments, see brackets 2 on line two to three in (90).
(90) $[\text { munu }=\emptyset \text { sis-ja-ru } \quad \text { pїtu }]_{1}=\emptyset=j a, \quad$ kjuureki $=<n o>$ thing $=$ CORE know-PRF-NPST person $=$ CORE $=$ TOP lunar.calendar $=$ GEN
$<$ san-gacu-san-nici> $=$ na $[m a-s a-m u n u]_{2}=\emptyset=b a \quad$ sikor-i, three-month-three-day $=$ LOC delicious-?-thing $=$ CORE $=$ TOP make-MED
$z u$-bagu $=$ naga ir- $a, \quad$ ina $=c i \quad m u c-i \quad n g-i \quad h-e-s i t a$,
big-box $=$ DAT put-MED sea $=$ ALL have-MED go-MED eat-SE-MED
midumu $=\langle o\rangle$ pii $=$ gara $\quad$ bunc-ah- $e=b a=t a$
woman $=$ ACC $\quad$ coral.reef $=$ ABL jump-CAUS-IMP $=\mathrm{EMP}=\mathrm{QT}$
$e n-u-t a=c j u$
say-NPRF-PAST $=$ HS
'It is said that a knowledgeable person said "Cook delicious food, put it in a big lunch box, bring it to the sea and eat it, then make your daughter jump over the coral reefs on March $3^{\text {rd". }}$.

### 9.6.2 Focus construction

There are two focus marker clitics: $=(n) d u^{14}$ and $=r u$. The difference between the two is still unclear, but $=(n) d u$ is more common and tends to mark subject arguments more frequently than $=r u$.
$u w a=\emptyset=n d u \quad m e=\emptyset \quad$ h-e $\quad b i r-j a-\emptyset=r o o$
pig $=$ CORE $=$ FOC rice $=$ CORE eat-MED PROG-PRF-NPST $=$ DSC
'Pigs are eating rice.'
(92) $u w a=\emptyset=j a \quad$ agan $=\emptyset=d u \quad h-o-\emptyset$
pig $=$ CORE $=$ TOP potato $=$ CORE $=$ FOC eat-NPRF-NPST
'(Usually) pigs eat potatoes.'
$n a=r u \quad b e-h i=n u \quad$ pite $=d o$
here $=$ FOC 1PL-house $=$ GEN field $=$ DSC
'Here is our field.'
The marker $=r u$ can attach not only to arguments but also to adverbial subordinate clauses.
(94) sooiu sizen $=<n o>$ типи $=\emptyset$ sikec $-i=r u \quad$ h-e
like.that nature $=$ GEN thing $=$ CORE make-MED $=$ FOC eat-MED
bir-ja- $\emptyset=$ gara
PROG-PRF-NPST = RES
'(Because we) plant natural (vegetables) like that and eat...'

## 10 The complex sentence

### 10.1 Overview of complex clause structures

Complex clause structures are classified into three types: (a) coordination, (b) clause-chaining and (c) subordination. These are marked respectively by independent clauses, medial clauses and dependent clauses. Subordination falls in turn into three subtypes: (c-1) adverbial, (c-2) adnominal, and (c-3) complementation.

An independent clause contains a fully inflected verb, i.e., a finite verb, while a medial clause contains a non-finite medial verb and a subordinate (or dependent) clause can contain both a finite or a non-finite verb depending on its subtypes.

[^71]Table 14: Complex clause structures

| Linkage type | Clause type |
| :--- | :--- |
| (a) Coordination | independent |
| (b) Clause chaining | medial |
| (c) Subordination | subordinate |

### 10.2 Coordination

Coordinated clauses have an equal grammatical status, and both are independent clauses. The conjunction clitics = sika 'but' or =te 'and' attach to the head of a preceding clause.
(95) $[b a=\emptyset \quad n g-u-\emptyset]=s i k a \quad[d a=\emptyset \quad n g-u-\emptyset=n a a] \quad$ ?
$1 \mathrm{SG}=\mathrm{CORE}$ go-NPRF-NPST $=$ but $2 \mathrm{SG}=$ CORE go-NPRF-NPST $=\mathrm{Q}$
'I will go but will you go?'
(96) $\quad[k a c c e=n u \quad n a k a-s j a=\emptyset=n d u \quad k j u$

Katsuren $=$ GEN second-brother $=$ CORE $=$ FOC today
or-ja-ta] $=t e=j o=r a, \quad[h a=\emptyset=j a=j o, \quad k j u$
come. $\mathrm{HON}-\mathrm{PRF}-\mathrm{PAST}=\mathrm{and}=\mathrm{DSC}=\mathrm{DSC} 1 \mathrm{SG}$. REFL $=$ CORE $=$ TOP $=$ DSC today
kunu fuciri $=\emptyset \quad$ num- $a n-u-\emptyset=c j a, \quad h a=\langle o\rangle$
this medicine $=$ CORE drink-NEG-NPRF-NPST $=$ CND 1 SG. REFL $=\mathrm{ACC}$
sïn-as-u- $\varnothing-n]=t a$
die-CAUS-NPRF-NPST-RLS $=$ QT
'Katsuren's second son came here today, and he said "I will make myself die unless I take this medicine.""

### 10.3 Clause-chaining

Clause-chaining usually directly expresses temporal relations such as 'overlap' and 'succession' (Payne 1997). A clause chain consists of minimally a medial clause and an independent final clause in Hateruma. There are many cases where a clause chain has two or more medial clauses.
(97) $\quad[s u n u=\emptyset \quad a r a h-e], \quad[s i ̈ m u c i ̈=\emptyset ~ j u m-i], \quad[n u f-j a-t a-n]$
clothes $=$ CORE wash-MED book $=$ CORE read-MED sleep-PRF-PAST-RLS
'(I) washed clothes, read a book and slept.'

### 10.4 Subordination

### 10.4.1 Adverbial subordination

In adverbial subordination, a dependent clause fills the role of adjunct of a predicate in an independent clause. The verb of a dependent clause is a non-
finite converb (simultaneous, resultative, conditional) or a finite verb followed by a conjunction clitic $=(g a) r a$ 'because' or $=c j a(r a)$ ' if'.
(98) [jum-i-ci] [arug-i bir-ja-Ø-n]
read-SE-SIM walk-MED PROG-PRF-NPST-RLS
'Reading a book, (she) is walking.'
(99) $[j a m-i-b a]=r u \quad[g o k k a=n u k e=\emptyset \quad h-a-i-t a]=r o o$
be.sick-SE-CND $=$ FOC hen $=$ GEN $\quad$ egg $=$ CORE eat-PASS-NPRF-PAST $=$ DSC
'If (we) were sick, (we) could eat eggs.'
(100) $\quad[b a=\emptyset \quad n g-u-\emptyset]=g a r a \quad[d a=\emptyset \quad n g$-una $]$
$1 \mathrm{SG}=\mathrm{CORE}$ go-NPRF-NPST $=$ RES $2 \mathrm{SG}=\mathrm{CORE}$ go-PROH
'Don't go because I go.'

### 10.4.2 Adnominal subordination

In adnominal subordination, an adnominal dependent clause fills the role of an NP modifier, like the adnominals (§3.3.3 and §4.1.2). A verbal predicate in an adnominal clause is always finite.
(101) [[en-ja- $\emptyset] \quad$ pïtu] $]_{N P}=\emptyset=j a \quad m o=g a \quad k-u$
say-PRF-NPST person $=$ CORE $=$ TOP here $=$ DAT come-IMP
'People who spoke, come here.'
There are a few examples where a special non-past suffix appears (see also §9.5.1).
(102) $\left[\left[[\text { типи }=\emptyset \text { ss-ja-ru] pïtu }]_{N P}=n u \quad t a\right]_{N P}=g a \quad n g-i\right.$, thing $=$ CORE know-PRF-NPST person $=$ GEN place $=$ DAT go-MED
'(I) will go to where a knowledgeable person lives...'

### 10.4.3 Complementation

Complementation is the "syntactic situation that arises when a notional sentence or predicate is an argument of a predicate" (Noonan 2007). Predicates including en- 'say', mu- 'think', eg- 'do' take a complement clause as an argument. The conjunction clitic $=t a$ (quotative) attaches to a complement clause.

```
(103) }da=\emptyset=ndu\quad[b-u-\emptyset-n=ta]\quadmu-\emptyset=cj
    2SG=CORE = FOC be-NPRF-NPST-RLS = QT think.NPRF-NPST = CND
    mi-sja-\emptyset-n
    good-VLZ-NPST-RLS
    'If you think you can be (here), it is good.'
```

(104) sitomuci $=$ jo $\quad[$ sinrjoosjo $=g a n g-u-\emptyset-n=t a] \quad$ eg-i-ba, unsiku morning = DSC hospital = DAT go-NPRF-NPST-RLS = QT do-SE-CND very kotekitai $=\emptyset=n d u$ nar- $u-\emptyset=t e=j o=r a$
band $=$ CORE $=$ FOC sound-NPRF-NPST $=$ and $=\mathrm{DSC}=\mathrm{DSC}$
'When I was going to go to the hospital in the morning, a drum and fife band was playing the music, and'

There are some examples where the conjunction clitic $=d u$ attaches to a complement clause, meaning 'whether or not'.
(105) $\quad[b e-$ sïma $=n u \quad$ funi $=\emptyset=j a \quad m i-s j a-\emptyset-n=d u]$ 1PL-island $=$ GEN boad $=$ CORE $=$ TOP be.good-VLZ-NPST-RLS $=$ or [mi-sjah-en-u- $\emptyset=d u] \quad$ bagar-an-u-Ø good-VLZ-NEG-NPRF-NPST $=$ or know-NEG-NPRF-NPST
'(I) don't know whether our boat is safe or not.' (Shibata 1972)

## Sample text: the Pear story

(т.1) $j a m a=n a \quad$ maagi $k i=n u \quad a-t a=r o o$ forest $=$ LOC big $\quad$ tree $=$ GEN be-PAST $=$ DSC
'There is a tree in a forest.'
(т.2) $k u n u k i=\emptyset=j a \quad$ goobi nar-i $\quad b i r-j a-t a=r o o$
this tree $=$ CORE $=$ TOP many fruit-MED PROG-PRF-PAST $=$ DSC
'This tree fruited a lot.'
(т.3) $z a=n u \quad i j a=d u \quad$ bagar- $a n-u-\emptyset=s i k a$, where $=$ GEN father $=$ or know-NEG-NPRF-NPST $=$ but 'One father, I don't know where he is from but,'
(т.4) kagu $=\langle o\rangle$ mii-cï muc-i $k-i$, narab-a, basket $=$ ACC three-piece bring-MED come-MED align-MED '(he) brought three baskets and put them in line,'
(т.5) meedarikaki $=\langle o\rangle$ hak-a-ci, $k i=n u \quad u i=n a g a ~ n u b u r-i$, apron = ACC $\quad$ put.on-SE-SIM tree = GEN up = DAT climb-MED '(he) put on an apron and climbed on the tree,'
(т.6) meedarikaki $=$ naga mansin nari $=\langle 0\rangle$ ir-a, apron= DAT full fruit = ACC put-MED '(he) put fruits fully into the apron,'
(т.7) sïta = naga ur-a $k$-i, kunu nari $=\langle o\rangle$ kagu $=$ naga muru down = DAT down-MED come-MED this fruit=ACC basket=DAT all $i r-a$,
put-MED
'(he) came down from the tree and put all the fruit in the basket,'
(т.8) $e-s-u-\emptyset \quad k a m i=j a \quad$ pïtu-sïn $=\emptyset=j a$
so-do-NPRF-NPST during $=$ TOP one-piece $=$ CORE $=$ TOP
$u t-a-t a=s a=r o o$
fall-PRF-PAST $=$ INFER $=$ DSC
'Then one might fall down.'
(т.9) ha-sacï=si keesi fuk-i-sita, kagu=naga mansin

REFL-hadnkachief $=$ INS cleanlily wipe-SE-MED basket $=$ DAT full
nar-ja-ta-n
become-PRF-PAST-RLS
'He rubbed it clean with his handkerchief , the basket became full.'
(т.10) $e-s-u-\emptyset \quad k a m i=j a \quad$ pïtu-ri=nu bidumu $=\emptyset=n d u$
so-do-NPRF-NPST during $=$ TOP one-people $=$ GEN $\operatorname{man}=$ CORE $=$ FOC
рїтїz $a=\langle o\rangle$ safuk-i $\quad k-u-t a=s i k a$,
goat $=$ ACC $\quad$ pull - MED come - NPRF - PAST $=$ but
'Then, one man came pulling a goat but,'
(т.11) ипи рїтїz $a=\emptyset=j a \quad$ muttun arug-i-bo-s-an-u- $\emptyset$
that goat $=$ CORE $=$ TOP at.all walk-SE-want-vLZ?-NEG-NPRF-NPST 'that goat doesn't want to walk at all.'
(т.12) $s a f u k-i=b a=n \quad s a f u k-i=b a=n \quad s a f u k-a r-u n-u-\emptyset$
pull-IMP $=$ EMP $=$ LIM pull-IMP $=$ EMP $=$ LIM pull-PASS-NEG-NPRF-NPST
'(the goat) is never pulled no matter how much he pulled it.'
(т.13) рїтїz $a=\emptyset=j a \quad$ unu nari $=\langle o\rangle h-e-b o-h a-t a=k a j a=t a$
goat $=$ CORE $=$ TOP that fruit $=$ ACC eat-SE-WANT-VLZ-PAST $=\mathrm{INFER}=\mathrm{QT}$
mu-ta $=$ roo
think.NPRF-PAST $=$ DSC
'(I) thought the goat might want to eat fruits.'
(т.14) e-s-u- $\emptyset \quad k a m i=j a, \quad u n u$ bidumu, рӥтїza $=\emptyset$ safuk-ja-ru so-do-NPRF-NPST during $=$ TOP that man goat $=$ CORE pull-PRF-NPST
bidumu $=\emptyset=j a$ jatto $=s i \quad$ unu pїmїza $a<o>h a=g a$
man $=$ CORE $=$ TOP finally $=$ INS that goat $=$ ACC over.there $=$ DAT
safuk-i par-u-ta=roo
pull-MED go.away-NPRF-PAST = DSC
'Then, the man with the goat finally pulled the goat and went away.'
(т.15) sipi $=$ gara <zitensja> = nu nubur-ja-ru bidumu-ntama $=n u$ back $=$ ABL $\quad$ bicycle $=$ GEN $\quad$ ride-PRF-NPST man-DIM $=$ GEN
$k$-u-ta = sika,
come-NPRF-PAST $=$ but
'A boy riding a bicycle came but,', ${ }^{15}$
(т.16) $a i$, na unsiku ma-ha-sja-ru nari $=\emptyset=n d u$ INTJ here very delicious-vLZ-vLZ?-PRF-NPST fruit $=$ CORE $=$ FOC
$a-\emptyset=k a j a=t a \quad m u-i, \quad u i=\emptyset \quad$ mir-i-ba, be-NPST $=$ INFER $=$ QT think-MED above $=$ CORE look-SE-CND
'(he thought) "oh no, how delicious these fruits are" and looked up to the tree then,'
(т.17) $i j a=\emptyset=n d u \quad n a r i=\emptyset \quad$ tur- $i \quad b i r-j a-t a=s i k a$, father $=$ CORE $=$ FOC fruit $=$ CORE pick.up-MED PROG-PRF-PAST $=$ but 'the father was picking up fruits but,'
(т.18) $i j a=\emptyset=n \quad n u=\emptyset=n \quad$ bagar-an-u- $\emptyset, \quad n a r i=<0>$
father $=$ CORE $=$ LIM what $=$ CORE $=$ LIM know-NEG-NPRF-NPST fruit $=$ ACC
tur-i $\quad b i r-j a-t a=r o o$
pick.up-MED PROG-PRF-PAST = DSC
'the father didn't notice anything, and continued to pick them up.'

[^72](т.19) $b i d u m u-n t a m a=\emptyset=j a \operatorname{mana}=n u d u=s i=n d u \quad$ kunu man-DIM $=$ CORE $=$ TOP now $=$ GEN place $=$ INS $=$ FOC this nari $=\emptyset=j a \quad$ muc- $i \quad n g-a i r-u-\emptyset-n=t a \quad m u-i$, fruit $=$ CORE $=$ TOP bring-MED go-PASS-NPRF-NPST-RLS $=$ QT think-MED
$<$ zitensja $>=<o>$ toh-e-sita,
bicycle $=$ ACC $\quad$ lay.down-SE-MED
'The boy thought he can bring out some fruits now, then he laid down his bicycle,'
(т.20) mansin nar-ja-ru $\quad k a g u=\emptyset \quad$ muc-i, <zitensja> $=n u$
full becomePrF-NPST basket $=$ CORE bring-MED $\quad$ bicycle $=$ GEN
katamuta = naga sik-i-sita,
beside $=$ DAT $\quad$ put-SE-MED
'bringing the basket which is full of fruits, he put it beside his bicycle,'
(т.21) bidumu-ntama $=\emptyset=j a<z i t e n s j a>=n a g a ~ m a t a s a n g a r-i, k a g u=<o>$ man-DIM $=$ CORE $=$ TOP $\quad$ bicycle $=$ DAT $\quad$ ride-MED $\quad$ basket $=$ ACC $d u=n u \quad<z i t e n s j a>=n u$ me=naga jatto=si nubus-a, muc-i REFL $=$ GEN $\quad$ bicycle $=$ GEN $\quad$ front $=$ DAT finally $=$ INS load-MED bring-MED $n g-u-t a=r o o$
go-NPRF-PAST = DSC
'the boy riding on his bicycle, loaded the basket in front of it and carried it away.'
(т.22) $e-s-u-\emptyset \quad k a m i=j a, \quad m e=$ gara midumu-ntama $=n u$
so-do-NPRF-NPST during $=$ TOP front $=$ ABL woman-DIM $=$ GEN
<zitensja $>=r u$ nubur-i $\quad k$-u-ta $=$ sika,
bicycle $=$ FOC ride-MED come-NPRF-PAST $=$ but
'Then, a girl riding a bicycle came from the front but,'
(т.23) midumu-ntama $=\emptyset=j a \quad$ igebari-s-i, $\quad$ bidumu-ntama $=$ ga hakar- $i$
woman-DIM $=$ CORE $=$ TOP cross-do-MED man-DIM $=$ DAT hang-MED
$k$-i, bidumu-ntama $=\emptyset=j a$ kagu $=\emptyset \quad$ mabutah-e,
come-MED man-DIM $=$ CORE $=$ TOP basket $=$ CORE roll.over-MED
$<z i t e n s j a>=\emptyset=n \quad$ mabutah-e, bicycle $=$ CORE $=$ LIM roll.over-MED
'when they crossed, the boy snagged her bicycle and he rolled over the basket and his bicycle too.'
(т.24) $e-s-u-\emptyset \quad k a m i=j a, \quad$ muru nari $=\emptyset=j a$
so-donPRF-NPST during $=$ TOP all fruit $=$ CORE $=T O P$
kupur- $a=s a \quad n$-en-u- $\emptyset$
spill.over-MED $=$ INFER PRF-NEG-NPRF-NPST
'then he spilled all the fruits.'
(т.25) utama $=\emptyset=j a \quad<$ zitensja $>=\emptyset$ mabuta-ta $=r a \quad$ pan $=\emptyset$
child $=$ CORE $=$ TOP $\quad$ bicycle $=$ CORE roll.over-PAST $=$ RES foot $=$ CORE
kega-s-i sïccah-e bir-ja-ta=roo
injury-do-MED rub-MED PROG-PRF-PAST = DSC
'the boy was injured on his foot because he rolled over his bicycle, and he rubbed the wound.
$e-s-u-\emptyset \quad k a m i=j a, \quad h a=r a \quad$ mita-ri=nu
so-donPRF-NPST during $=$ TOP over.there $=$ ABL three-people $=$ GEN
utama-nzi=nu $k-u-t a=s i k a$,
child-PL $=$ GEN come-NPRF-PAST $=$ but
'Then three children came from over there but,'
(т.27) unu utama-nzi= $\emptyset=n d u \quad$ kagu $=$ naga nari $=<o>$ muru püs-i
that child $-\mathrm{PL}=\mathrm{CORE}=\mathrm{FOC}$ basket $=\mathrm{DAT}$ fruit $=\mathrm{ACC}$ all pick.up-MED
ir-a $\quad h-a-t a=r o o$
put-MED give-PRF-PAST = DSC
'these children picked up all the fruit and put them into the basket for the boy.'
(т.28) e-sita, <zitensja>=naga nubus-a, bidumu-ntama $=\emptyset=j a$
do.so-MED bicycle $=$ DAT load-MED man-DIM $=$ CORE $=$ TOP
zitensja $=\langle o\rangle$ safuk-i par-u-ta $=$ roo
bicycle $=$ ACC pull-MED go.away-NPRF-PAST $=$ DSC
'Then, the boy loaded the basket on his bicycle and went away pulling his bicycle.'
(т.29) mata utama-nzi= $\emptyset=n \quad$ mata $h a=g a$

INTJ child-PL=CORE=LIM INTJ over.there= DAT
par-u-ta $=s i k a=r u, \quad$ tocju $=n a g i \quad$ mïci $=n a \quad$ maagi
go. away-NPRF-PAST $=$ but $=$ FOC halfway $=$ LOC road $=$ LOC big
$i s i=n u \quad a-t a=r a$,
stone $=$ GEN be-PAST $=$ RES
'The children went away too but, they found a big stone on the halfway then,'
(т.30) utama-nzi=Ø=ja mita-ri=<no> utama-nzi=Ø=ja kunu
child $-\mathrm{PL}=\mathrm{CORE}=$ TOP three-people $=$ GEN child-PL $=\mathrm{CORE}=$ TOP this
$i s i=\langle o\rangle$ katazuk-a par-u-ta=roo
stone $=$ ACC clear-MED go.away-NPRF-PAST $=$ DSC
'the three children cleaned off the big stone and went away.'
$e-s-u-\emptyset \quad k a m i=j a, \quad s i p i=t u \quad$ mari $=\emptyset$ so-do-NPRF-NPST during $=$ TOP back $=$ COM around $=$ CORE
mir-u-ta $=r a, \quad \quad u n u<z i t e n s j a>=n u$ utama $=n u<$ boosi $>=n u$
look-NPRF-PAST $=$ RES that bicycle $=$ GEN child $=$ GEN $\quad$ hat $=$ GEN
$u t-a \quad b i r-j a-t a=r a$,
fall-MED PROG-PRF-PAST = RES
'Then looking around there, because there was a hat which the boy riding a bicycle dropped,'
(т.32) utama $=\emptyset=j a \quad$ unu $<$ boosi $>=<o>$ tur-i, unu
child $=$ CORE $=$ TOP that hat $=$ ACC take-MED that
$<$ zitensja $>=$ nu utama $=$ ga kafuc-a-ta $=$ roo
bicycle $=$ GEN $\quad$ child $=$ DAT put.on-PRF-PAST $=$ DSC
'one child picked up the hat and let the boy put it on.'
(т.33) e-sita, bidumu-ntama-nzi=ga mita-ri=<no> bidumu-ntama $=$ ga do.so-MED man-DIM-PL = DAT three-people = GEN man-DIM $=$ DAT
pïtu-sïn $=n a \quad$ nari $=<o>h-a-t a=r o o$
one-piece $=$ LOC fruit $=$ ACC give-PRF-PAST $=$ DSC
'Then, the boy gave one fruit to each of the three children .'
(т.34) utama-nzi= $\emptyset=j a$, mita-ri $=<n o>\quad u t a m a-n z i=\emptyset=j a \quad$ kunu child $-\mathrm{PL}=\mathrm{CORE}=$ TOP three-people $=$ GEN child $-\mathrm{PL}=\mathrm{CORE}=$ TOP this
nari $=\langle o\rangle$ muc-i-ci, unu kagu, ija $=n u \quad$ nari $=n u$
fruit $=$ ACC bring-SE-SIM that basket father $=$ GEN fruit $=$ GEN
katamuta $=$ gara $h a=g a \quad$ tuur-i $\quad n g-u-t a=$ roo
beside $=$ ABL $\quad$ over.there $=$ DAT pass-MED go-NPRF-PAST $=$ DSC
'Bringing the fruits, the three children went away passing beside the father's fruit.'
(т.35) e-s-u- $\emptyset \quad k a m i=j a, \quad i j a=\emptyset=j a \quad$ sitari $=$ gara
so-do-NPRF-NPST during $=$ TOP father $=$ CORE $=$ TOP down $=$ ABL
ur-a $\quad k-i \quad k a g u=<o\rangle m i r-i \quad k-i-b a$,
come.down-MED come-MED basket = ACC look-MED come-SE-CND
'Then the father came down to see these baskets,'
(т.36) mana-bi=ja mii-cï= $\quad a-t a=s i k a \quad n e=k i=r u$
now- $?=$ TOP three-piece $=$ CORE be-PAST $=$ but why $=$ RES $=$ FOC
$h a-k a g u=\emptyset=j a \quad$ futa-cï= $\quad$ nar-ja- $\emptyset=k a j a, \quad$ unu
REFL-basket $=$ CORE $=$ TOP two-piece $=$ CORE become-PRF-NPST $=$ INFER that
$k a g u=\emptyset=j a \quad n u-s-u-t a=k a j a=t a \quad u n s i k u$
basket $=$ CORE $=$ TOP what-do-NPRF-PAST $=$ INFER $=$ QT very
amasikuru = Ø katafuk-i-ci kange-e bir-ja-ta=roo
head = CORE $\quad$ decline-MED think-MED? PROG-PRF-PAST $=$ DSC
'(he) was thinking "it seems there were three baskets just now, but why were there only two? What happened to my baskets?" tilting up his head.
(т.37) utama-nzi=Ø=ja unu nari $=<o>$ mama ma-ha-s-i-ci
child - PL $=$ CORE $=$ TOP that fruit $=$ ACC very delicious-VLZ-CAUS-SE-SIM
$h$-e-ncana, $h a=g a \quad$ kaer- $i=s a$
eat-SE-SIM over.there $=$ DAT go.home-MED $=$ INFER
$n$-en-u-ta = roo
PRF-NEG-NPRF-PAST $=$ DSC
'These children went away home eating fruit very deliciously.'
(т.38) $p a n a s i=\emptyset=j a \quad o b i=b a g i=n d u$ panas-i ss-ja- $\emptyset=r o o$
story $=$ CORE $=$ TOP end $=$ TER $=$ FOC tell-MED POT-PRF-NPST $=$ DSC
'That's all I can tell you.'

## Abbreviations

| $<\ldots>$ | loanword from Japanese | HON | honorific | POT | potential |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | first person | HS | hearsay | PRF | perfect |
| 2 | second person | IMP | imperative | PROG progressive |  |
| ABL | ablative | INC | inceptive | PROH prohibitive |  |
| ACC | accusative | INFER inferential | PROS prospective |  |  |
| ALL | allative | INS | instrumental | Q | question |
| CAUS | causative | INT | intentional | QT | quotative |
| CND | conditional | INTJ | interjection | REFL reflexive |  |
| COM | comitative | LIM | limitative | RES | resultative |
| COP | copula | LOC | locative | RLS | realis |
| CORE | core argument | MED | medial | SE | stem extender |
| DAT | dative | NEG | negative | SG | singular |
| DIM | diminutive | NLZ | nominalizer | SIM | simultaneous |
| DSC | discourse marker | NPRF | non-perfect | TER | terminative |
| EMP | emphatic | NPST | non-past tense | TOP | topic |
| EXP | experiential | PASS | passive | VLZ | verbalizer |
| FOC | focus | PAST | past tense |  |  |
| GEN | genitive | PL | plural |  |  |

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[^0]:    *I am grateful to Dr. Thomas Pellard for his valuable comments on an earlier draft of this chapter.
    ${ }^{1}$ There is an ongoing debate as to whether Ryukyuan is a dialect or a group of dialects of Japanese. However, this issue is socio-political and ideological rather than linguistic. Even linguistically, there is no strong argument for referring to Ryukyuan languages as Japanese dialects: there is no mutual intelligibility between Ryukyuan and Japanese, and even between Amami, Okinawan, Miyako, and Yaeyama. See Shimoji and Heinrich (forthcoming) for a fuller and intense discussion.

[^1]:    ${ }^{2}$ These figures are based on the following websites: http://www.pref.kagoshima.jp/ tokei/bunya/kokutyo/h17kokutyo/nennrei.17.html, http://www.pref.okinawa.jp/toukeika/ estimates/2005/year/year.html

[^2]:    ${ }^{3}$ Alternatively, this kind of system may be interpreted as a word tone system, where specific pitch contour patterns are attributed not to the locus of accent but to specific tonal melodies (see Hayashi and Aso, this volume). Tonal melodies are either lexically distinctive or nondistinctive. Yuwan (Niinaga, this volume) has three tonal melodies, and it is lexically determined which tonal melody appears in which lexeme.

[^3]:    ${ }^{4}$ In Japonic languages, genitive case (or attributive case) is used to mark possessor, attributive modifier, and other various relations established between the modifier and the head of an NP. Thus the term genitive should not be interpreted in the restrictive sense of possessive. Thus dus = nu sjasin (friend = GEN picture) in Irabu, for example, may be interpreted as (a) a friend's picture (possessive reading) or (b) a picture of a friend (non-possessive reading), the exact interpretation being dependent on pragmatic inference (e.g. contextual information).

[^4]:    ${ }^{5}$ In addition, a PC root may be transformed into an adverb and a state noun. For example, Yuwan (Niinaga, this volume) has a PC adverb such as həa-ku (fast-AVLZ) 'quickly' and a PC state noun such as taa-sa (high-NLZ) 'height'.

[^5]:    ${ }^{6}$ The following webpage describes the aim of the program and lists links to three accepted projects including ours. http://lingdy.aacore.jp/en/activity/wakate.html

[^6]:    $1 / 3 /$ can appear in front of both the G and C slots in a syllable (ex: ['ja:] 'you', [kju:] 'today', [ ${ }^{1} \mathrm{kwa}$ ] 'child’, see §2.4), it seems thus better to analyze $/ \mathrm{j} /$ and $/ \mathrm{w} /$ as a sub-class of consonants.

[^7]:    ${ }^{2}$ I consider this to be due to a rule stating / $\mathrm{T} /$ drops before distinctively voiced consonants. This rule applies only to obstruents, for which there exists a voiced/voiceless opposition. This accounts for the fact that when /Rkin/ [ $\left.{ }^{2} \mathrm{kin}\right]$ appears as the second member of a compound the root-initial $/ \mathrm{k} /$ shifts to $/ \mathrm{g} /$ and not $/ \mathrm{Rg} /$ (ex: /kjora + gin/ 'beautiful kimono). On the other hand, in the case of roots with an initial sonorant, like /?ma/ ['ma] 'horse', the laryngeal does not drop in compounds: /waasan + ?ma / 'young horse'.

[^8]:    ${ }^{3}$ Both forms may designate 'et al' approximative; see also below
    ${ }^{4}=k j a$ is a clitic and can also attach to verbs: num-i=nkja s-jur-i drink-NPST $=$ APPR do-IPFVNPST 'drink or do something else'.

[^9]:    ${ }^{1}$ This data is provided by courtesy of H. Shigeno (2009 p.c.)

[^10]:    ${ }^{2}$ The first C slot and the G slot cannot take the same consonant, and there is no sequence like /ww/ or /jj/; furthermore, /w/ in G slot can only follow /k/.
    ${ }^{3}$ However, there is a strong tendency for voiced labial and voiced dental geminates to become voiceless, i.e. $/ \mathrm{bb} / \rightarrow / \mathrm{pp} /$, /dd/ $\rightarrow / \mathrm{tt} /$.

[^11]:    ${ }^{4}$ A morphophonological rule must precede this flap deletion rule; if an affix -ar (PASS) is followed by $/ \mathrm{j} /$, the $/ \mathrm{j} /$ has to be deleted:ut- 'hit' + -ar (PASs) + -jaa (NLZ) $\rightarrow u t-a r-a a$.

[^12]:    ${ }^{5}$ About the vowel $/ \mathrm{u} /$ insertion between in 'dog' and $=n$ (DAT), see the phonological rule of epenthesis in (9).
    ${ }^{6}$ There are no words that end with a single vowel /a/.
    ${ }^{7}$ However, if a clitic does not follow the word, the pitch falls between the ultimate mora and the penultimate mora of the word.

[^13]:    ${ }^{8}$ See Shimoji (2008a) for a similar characterization of the basic clause structure of Irabu Ryukyuan.

[^14]:    ${ }^{9}$ Another piece of evidence that kurir- should be considered an auxiliary verb is that it can be used in the first verb slot and in the second verb slot simultaneously: kusui naikwa kuri-tit kurir-i (medicine a.little give-MED BEN-IMP) 'Please give me some medicine!'.

[^15]:    ${ }^{10}$ See Shimoji (2008a: 134) for similar criteria in Irabu Ryukyuan.
    ${ }^{11}$ See Shimoji (2008a: 135-136) for a similar characterization of adnominals in Irabu Ryukyuan.

[^16]:    ${ }^{12}$ Yuwan has two second person pronouns. The pronoun naa is used for honorific referents, i.e. referents older than the speaker, and ura is used for non-honorific referents, i.e. referents as old as (or younger than) the speaker.
    ${ }^{13}$ When a dual human pronoun fills the modifier slot of an NP, it attaches a genitive case clitic, e.g. $w a-$ tta $=g a$ hon ( $1 \mathrm{sG}-\mathrm{DU}=$ GEN book) 'a book belonging to the two of us'.

[^17]:    ${ }^{14}$ waa zjuu 'my father' is not a compound but a (nominal) phrase; in other words, waa 'my' is not the component of a word, but an adnominal word (see §3.2.3 for details).

[^18]:    ${ }^{15}$ The term "property concept" itself also appears in Thompson (1988).
    ${ }^{16}$ See Dixon (2004: 3-4)

[^19]:    ${ }^{17}$ The choice of the two morphemes -sa or -sja is lexically determined: taa-sa (high-NLZ), hoora-sja (happy-NLZ), etc.

[^20]:    ${ }^{18}$ This morpheme can be regarded as a clitic since it can attach not only to nominals but also to verbs (see §3.2.2 about the criterion of clitic), e.g. $a b i-t i z=n k j a ~ i k-j u-m i ? ~(c a l l-M E D=A P P R ~ g o-~$ IPFV-YNQ) 'Do (we) go (there) and call (him or her)?'. In Yuwan and Ura (Amami Ryukyuan), the approximative marker is a clitic (H. Shigeno 2010 p.c.), while in Tsuken (Okinawan), Ögami and Irabu (Miyako Ryukyuan) it is a suffix (S. Matayoshi, M. Shimoji and T. Pellard 2010 p.c.).
    ${ }^{19}$ See §2.4.2 for more details about sequential voicing.

[^21]:    ${ }^{20} \mathrm{~A}$ similar phenomenon is found in many other Ryukyuan languages (Nohara 1986, Shimoji 2008a, and others).

[^22]:    ${ }^{21}$ Here the terms possession or possessive are used in a rather arbitrary meaning.
    ${ }^{22}$ This form cannot be analyzed as an adnominal since it can fill the head slot of an NP (see §3.3): $a k i r a=g a i k-j u-i(A k i r a=$ NOM go-IPFV-NPST) 'Akira goes'.

[^23]:    ${ }^{23}$ In Yuwan, an animate referent is a living creature, and animates do not include plants like kï̈ 'tree'.

[^24]:    ${ }^{24}$ The negative form of the copula verb has the same stem as the inanimate existential verb -ar, but they differ in that the former can have animate subject, as in (58), while the latter cannot.
    ${ }^{25}$ See § 5.2.2.3 about insubordination.

[^25]:    ${ }^{26} \mathrm{The} / \mathrm{r} /$ of -tar is always deleted in the syllable-final position, but it undergoes assimilation if it is followed by the clitic = doo (EMP): mu-tat = too (pick.up-PST = EMP) '(I) picked (it) up'.
    ${ }^{27}$ If this inflection follows one of the four derivational suffixes -ar/-arir (PASS), -jur (IPFV), -tur (PROG), or -tzar (RES), it has a suppositional meaning as well as the past inflection -taroo (PST.SUPP); however, -tur (PROG) + -oo with a $1^{\text {st }}$ person subject has an intentional meaning, e.g. $w a n=g a j u-d u r-o o$ ( $1 \mathrm{SG}=$ NOM read-PROG-INT) 'I intend to be reading'.
    ${ }^{28}$ About the aspectual affix -jur (IPFV) between a verbal root and some inflections, see §5.3.1.
    ${ }^{29}$-mai needs the stem extender -i in order to follow a verbal root that does not end with a nasal, cf. jum-mai $=$ doo (read-OBL = EMP) '(I) have to read (it)'.

[^26]:    ${ }^{30}$ However, there are cases where this form appears in an adverbial clause with a clitic (see $\S 7.1$ and §7.2).
    ${ }^{31}$ About the aspectual affix -jur (IPFV) between a verbal root and the inflection $-n$ (NPST.ADN), see §5.3.1.

[^27]:    ${ }^{32}$ As mentioned in footnote 3 of $\S 2.3 .1$, the sequence of voiced stop/bb/ often becomes voiceless /pp/.
    ${ }^{33}$ Regarding the aspectual affix -jur (IPFV) between a verbal root and the inflection -sa 'because (causal 2)', see §5.3.1.

[^28]:    ${ }^{34}$ However, the past finite form cannot be used with the question marker $=n a$, i.e. $* j u$ $d a=n a$.

[^29]:    ${ }^{35}$ In addition, $-\operatorname{ar}(i r)$ can be used as a malefactive (§8.4.3) or a potential. The potential use is as follows: uroo an cizin=nu kikj-ari-n=nja? (2sG.NOHN.TOP that hand.drum=NOM hear-POT-NPST $=$ YNQ) 'Can you hear that (sound of) hand drum?'
    ${ }^{36}$ Although an affix generally cannot occur twice, the resultative suffix -tzar can be repeated: $a m a=n a n z i i=n u k a-c j \partial z-t z-i$ (there $=$ LOC1 character $=$ NOM write-RES-RES-NPST) 'There is a written character.' (The resultative -tar loses one of its vowel when it precedes the non-past inflection -i.).
    ${ }^{37}$ However, $-u i$ (FOC.YNQ) and $-u$ (FOC.WHQ) cannot follow $-\operatorname{ar}($ ir $)$ (PASS).

[^30]:    ${ }^{38}$ The form -ju-tan mun = doo (-IPFV-PST.ADN thing = EMP) expresses a habitual/continuous aspect in past tense.
    ${ }^{39}$ The causative affix -as can be used when it precedes the other derivational suffixes, e.g. jum-as-ju-i (read-CAUS-IPFV-NPST) 'to make (someone) read'.
    ${ }^{40}$ If a root-final $/ \mathrm{m} /$ is followed by a verbal root whose initial is a vowel, a stem extender $/ \mathrm{j} /$ is inserted after the initial root.

[^31]:    ${ }^{41}$ However, this nominalized form cannot take any case clitics but necessarily takes limiter clitics or focus/topic clitics (see §7.3 and §7.4).

[^32]:    ${ }^{42}$ The semantic types the PC affixes express seem to be peripheral (e.g. -cja 'want' (HUMAN PROPENSITY) ), or 'not existing' (e.g. -cjagi ‘seem') in the semantic types adopted in Dixon (2004) (see also §3.5).

[^33]:    ${ }^{43}$ Among these clitics, $=$ joo (CFM1) and $=j \partial \partial$ (CFM2) are used only with intentional or imperative verb forms, and other clitics do not intervene between them. These forms may thus be regarded as affixes according to the criteria in §3.2.2; however, they are rather to be classified as affixes since if we consider them to be inflectional suffixes, they should be obligatory, and if they do not appear we have to posit a zero-inflectional suffix - $\varnothing$ indicating unmarked modality, but this seems rather unnatural.

[^34]:    ${ }^{44}$ If $=n a$ follows a non-past inflection $-i$, a mutual assimilation happens: $-i($ NPST $)+=n a$ (YNQ) $\rightarrow-i=n j a \rightarrow n=n j a$.
    ${ }^{45}$ In (86) a supposed predicate ju-ta 'said' was omitted, which is a kind of insubordination (Evans 2007; see also §5.2.2.3 about insubordination).
    ${ }^{46}$ Shimoji (2008a).

[^35]:    ${ }^{1}$ This is valid as of November, 2009.

[^36]:    ${ }^{2}$ This forms is the result of a phonological change $i h-i=j a \rightarrow i i h j e e$.

[^37]:    ${ }^{3}$ This has two variants, -sa and -wa, depending on the preceding phoneme.

[^38]:    ${ }^{4}$ waka-ha-aru $\rightarrow$ wak-a-aru.

[^39]:    ${ }^{5}$ turasu-ta $\rightarrow$ tura-ca. The verb turasun 'let somebody take' is inherently (i.e., lexically) causative.

[^40]:    ${ }^{1}$ In O Ogami the dental consonant has subsequently devoiced (suta), but the fact the preceding vowel has not undergone syncope shows the $-t$ - we now observe comes from an earlier voiced - $d$-.
    ${ }^{2}$ See Pellard (2009b) for a detailed treatment of the inner classification of the Ryukyuan languages and the Miyako dialects.
    ${ }^{3}$ See Pellard (2009b) and Pellard (2010) on the reconstruction of Proto-Miyako.

[^41]:    ${ }^{4}$ See Creissels (2006a,b), Nikolaeva (2007b).

[^42]:    ${ }^{5}$ See $\S 11.5$ for the special desubordination constructions.

[^43]:    ${ }^{6}$ The regular forms in $-a-n$ are however used when the existential verbs are used as auxiliaries.

[^44]:    ${ }^{7}$ The difference between the two remains unclear.

[^45]:    ${ }^{8}$ See Bickel (1998) for a typological overview of the blurred distinction between coordination and subordination as well as the converb category in Asian languages.

[^46]:    ${ }^{9}$ See Aikhenvald (2004). The same phenomenon is labelled insubordination by Evans (2007).

[^47]:    *The research for this work was supported by Grants-in-Aid for Scientific Research (Kakenhi) \#20.6104 from the Japan Society for the Promotion of Science (JSPS).
    ${ }^{1}$ This paper is mainly based on data from Nishihara, one of the three areas of Miyako Islands on which Ikema is spoken.

[^48]:    ${ }^{2}$ Rhythmic alternation is usually seen as a phenomenon of stress languages, but Ikema as well as Irabu have a rhythm which is clearly tonal.
    ${ }^{3}$ It is what is called "PC stems" in Shimoji (2008a), and "racines adjectivales" (lit. 'adjectival roots') in Pellard (2009b).
    ${ }^{4}$ A certain restriction between focus structure and the verb form of the predicate.
    ${ }^{5}$ For reasons of space, I omit the discussion about the kakari-musubi system in Ikema in this chapter. See Hayashi (in prep) for further information.
    ${ }^{6}$ As Iwasaki and Ono (2009) reported, however, there is a possibility that we can lower the youngest age of fluency at least to fifty-five. In fact, some speakers in their forties (in 2009) can be seen as native speakers of Ikema.

[^49]:    ${ }^{7}$ It could be analyzed that $/ \dot{\mathrm{j}} /$ is an epenthetic vowel and that $/ \mathrm{s}, \mathrm{z}, \mathrm{c}, \mathrm{f} /$ are syllabic consonants (like nasals) in the underlying structure.

[^50]:    ${ }^{8}$ The CCV structure I mention here is a syllable which carries two morae. Usually, onsets are considered to be entities which do not have syllable weight (Hayes 1989). However, in Ikema (and other Miyako varieties) CCV is clearly a unit in terms of phonotactics.
    ${ }^{9}(1)$ explains the phonotactics in Ikema found in the surface structure. See Hayashi (in prep) for further discussion.
    ${ }^{10}$ It is hard to conceive that these form some natural class. As for word internal CCs, approximants and a glottal cannot form a geminate, and for word initial CCs, bilabials and alveo-dental voiced stops are not allowed in addition to the approximants and a glottal.

[^51]:    ${ }^{11}$ Shimoji (2008a) calls this a "presyllable" in his study of Irabu with some more "resonants" (/r/, /v/) which fill the slot of the syllable that contains long consonants. In Ikema, only a nasal can fill this slot.
    ${ }^{12}$ It should be noted that this is a unit for a tonal event based on the mora length, but not the domain of stress.
    ${ }^{13}$ Shimoji (2008a) analyzed this contour as the presence of the marked prosodic feature $/ \mathrm{H} /$ at as regular intervals as possible, in accordance with the PRA (Principle of Rhythmic Alternation, Selkirk 1984), rather than as the presence of a specific tonal melody such as /HL/. That is, the HL pattern appears to result from the assignment of a marked tone (H) to the rhythmic head, in the same way a marked feature is assigned to the rhythmic head in languages with a stress-based rhythm.

[^52]:    ${ }^{13}$ Figures by Yōsuke Igarashi (Hayashi et al. 2008).

[^53]:    ${ }^{15}$ The intonational pattern for interrogatives seems to occur within the final particles. If there is no final particle, the Yes-No interrogative can be the same as the declarative either in morpho-syntax or intonation.
    ${ }^{16}$ Ikema has another question marker $=d a$, which only attaches to the topic marker and express the meaning 'how about $\sim$ ?'. Ex: $v v a=a=d a(2 . \mathrm{SG}=\mathrm{TOP} 1=\mathrm{Q})$ 'How about you?'

[^54]:    ${ }^{17}$ These are three out of the four criteria in Shimoji (2008a: 3-33). Another one is "(D) Is a reduplicated form with the input-stem-final phoneme lengthened", which can not be applied to Ikema because it does not have the reduplication system as in Irabu.

[^55]:    ${ }^{18}$ Shimoji (2008a) as well as Koloskova and Ohori (2008) claim that the nominal strategy is used when the predicate is in the focus domain while the verbal strategy is used when the predicate is presupposed.
    ${ }^{19}$ In languages in which function words follow content words agglutinatively, it is sometimes hard to distinguish adpositional clitics from case affixes, as is shown in Dryer (2007). As for the case of Miyako Ryukyuan, there is a detailed discussion in Pellard (2009b) on Ōgami.

[^56]:    ${ }^{20}$ I put the zero marker here just for notational convenience. I do not assume the zero marker as a suffix.
    ${ }^{21}$ The -gamata form shows highly nominal features with its syntactic behavior. However, I tentatively put it in the list of verbal suffixes because its function and morphological distribution show a certain extent of grammaticalization as a verbal suffix.
    ${ }^{22}$ The Absolutive Converb often appears in its bare stem form without this additional -i. There are some rules as to when it is lengthened and when it is not, but the whole problem has not been solved yet. In this paper I glossed the two versions in the same way, putting ' $-i$ ' after the functional label if it is lengthened.

[^57]:    ${ }^{23}$ Ex: tuka=gyaa mut-i-i $d u=u i$ (ten.days = TOP2 hold.out - THM.CVB-i FOC = CONT.NPST) 'It holds out at least ten days.'

[^58]:    ${ }^{24}$ This can be also seen in Shimoji's description: "chained clauses in which a second accusative appears tend to encode descriptive states (they are 'backgrounded' in Hopper and Thompson (1980)'s terms) rather than temporally sequential ('foregrounded') events." (Shimoji 2008a: 198)
    ${ }^{25}$ nyaa-n "no.to.be-NEG.NPST" only appears in negative form.

[^59]:    ${ }^{26}$ The difference is that Ikema (and other Ryukyuan varieties) has a verb meaning 'nonexistence', while Japanese does not.
    ${ }^{27}$ These auxiliary verbs are often cliticized in connected speech.

[^60]:    ${ }^{1}$ See Comrie (1978)
    ${ }^{2}$ See Karimata (2008)

[^61]:    ${ }^{3}$ There is only one example of aspirated $/ \mathrm{n} /: / \mathrm{nn} . \mathrm{cï} /\left[\mathrm{n}^{\mathrm{h}} \mathrm{ntsi}\right.$ ] 'six pieces'.

[^62]:    ${ }^{4} \mathrm{~F}$ means falling from high to low within a mora.

[^63]:    ${ }^{5}$ Angle brackets $<\ldots>$ indicate a loan word from Standard Japanese.

[^64]:    ${ }^{6}$ The extended core argument is an argument required by a verb like nar- 'become', see Shimoji (2008a).

[^65]:    ${ }^{7}$ Stem extender is a suffix lexically conditioned and that carries no meaning, see Bickel and Nichols (2007).
    ${ }^{8}$ See Thompson (1988) and Shimoji (2008a)

[^66]:    ${ }^{9}$ Some prohibitive forms can be analyzed in two different ways, i.e. with a non-perfect or a non-past suffix (jum-u- $\emptyset$-na or jum- $\emptyset-u=n a$ ).

[^67]:    ${ }^{10}$ See also §3.1.3.

[^68]:    ${ }^{11}$ See Aso (2009) for their different meanings and uses.

[^69]:    ${ }^{12}$ The negative suffix will be -an, -en, -un depending to the class of verbal stem.

[^70]:    ${ }^{13}$-ru is not the regular suffix for non-past. It is found only in some examples with class 4 verbal stems, after the passive suffix as in (35), and in adnominal clauses as in (22).

[^71]:    ${ }^{14}=d u$ follows an NP ending with a consonant $n$, otherwise $=n d u$ follows.

[^72]:    ${ }^{15}$ Genitive $=n u$ on this clause may be possibly an error of focus marker $=r u$.

