

An Introduction to the Japonic Languages

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Iheya (Okinawa, Northern Ryukyuan)

Salvatore Carlino

1 The Language and Its Speakers

1.1 *Geography*

Iheya is spoken in Iheya village, which extends over Iheya island and Noho island, located north of the Motobu peninsula, in the northern part of the Okinawan archipelago. There are five districts in Iheya: Dana, Maedomari, Gakiya, Shimajiri and Noho. The population is about 1200 people. Its economy is mostly based on fishing and agriculture. Whilst it is located in the northern part of Okinawa, together with the neighboring island of Izena, Iheya has historically had strong ties with the royal government in Shuri, located in the southern part of the island, since together with Izena it was considered to be the place of origin of the Shō Dynasty, which unified the Okinawan kingdoms of Nanzan, Chūzan, and Hokuzan, and later the whole Ryukyuan archipelago. This relationship may have influenced the language, an influence which manifests itself at the phonological, morphological and lexical levels.

1.2 *Language Outline*

Iheya Okinawan (henceforth Iheya) is a regional variation of the Okinawan language, the language spoken in the Okinawan archipelago. The Okinawan language belongs to the Northern Ryukyuan language group, which itself belongs to the Ryukyuan language family.¹ There are five districts in Iheya, but the internal linguistic difference between the districts is small. This paper mostly focuses on data collected in Dana.² Iheya is an endangered language, its speakers being mostly over 60 years old, and the number of speakers about 400. The younger generations may be only semi-fluent or not fluent at all.

1 In previous literature, Iheya has been before classified as belonging to the so-called Kunigami language, a proposed language group that would include include the dialects of northern Okinawa and southern Amami. However, as pointed out by Pellard (2015), there is no convincing basis for this subgroup, and the author will classify it as a member of the Okinawan subgroup.

2 I would like to thank everyone who collaborated with the language survey.

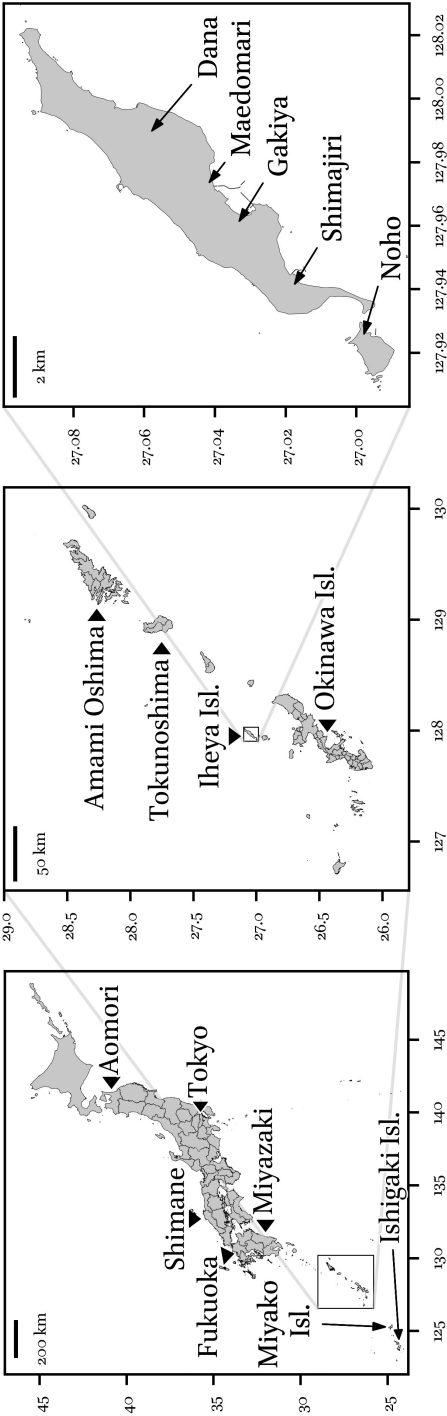


FIGURE 3.1 The location of Iheya

1.3 *Language Contact*

Within the Ryukyus the language of the capital, Shuri, has historically held the position of the prestige language, being the language of the court and the arts. This variety still has influence in the Okinawan archipelago, and many here are actually trilingual, being able to speak Japanese, their local dialect, and to at least at some degree the Shuri dialect. Iheya has always had strong ties with the Shuri court and language contact with speakers from there may have been more frequent than in other regions. Local religious events such as the *Shinugu* and the *Unjami* festivals also make use of the Shuri dialect in songs and rites. Language contact persists today, as many speakers head out to the main island to pursue work and higher education (there are only elementary and middle schools in Iheya), and may also occur through traditional Okinawan folk songs and plays (the so-called *Okinawa shibai*). Language contact is a topic which is need of further investigation.

2 *Phonology*

2.1 *Phoneme Inventory*

The vowel inventory is as in Table 3.1. /e/ and /o/ are very rare in their short form, some rare examples being /haberu/ [haberu] ‘butterfly’ and /sakko/ [sakko] ‘very’.

TABLE 3.1 Vowels in Iheya

	Front	Central	Back
High	i[i]		u[u]
Mid low	e[e]		o[o]
Low		a[a]	

TABLE 3.2 Consonants in Iheya

	Bilabial	Dental-alveolar	Velar	Glottal
Stop	p[p] b[b]	t[t] d[d]	k[k] g[g]	ʔ[ʔ]
Nasal	m[m]	n[n, ŋ, ɳ, m]		
Tap		r[ɾ, r]		
Fricative	f[ɸ]	s[s, ɕ]		h[h, ç]

TABLE 3.2 Consonants in Iheya (*cont.*)

	Bilabial	Dental-alveolar	Velar	Glottal
Affricative		c[ts] č[tɕ, ts]	z[z, d͡ʒ]	
Glide	w[w]	j[j]		

The consonants are shown in Table 3.2. /p/ is rare and found word-initially only in onomatopoeic words which may be loanwords like /pačipači/ [patɕipatei], an onomatopoeia for the sound of hands’ clapping, or word-internally as in /uppi/ [uppi] ‘only this much’. /d/ may alternate with /r/ in some contexts, such in the reflexive pronoun /duu/ [duu] or [ru:] or internally such as in /nadaa/ [nara:] / [nada:] ‘tear’, but this alternation is unattested in some words such as in /dakii/ [daki:] ‘bamboo’ or /Dana/ [Dana], a district in Iheya. /ʔ/[ʔ] is optional and non-phonological in word-initial position before vowels and there are no attested minimal pairs. It is distinctive in front of glides such as in /ʔwaa/ [ʔwa:] ‘pig’ vs. /waa/ (1.SG) and /ʔjaa/ [ʔja:] (2.SG) vs. /jaa/ [ʔja:] ‘house’. It also appears before nasals initially such as in /ʔnčaa/ [ʔntɕa:] ‘soil’.

/n/ is realized as [n], and as [ŋ] in front of velars /k/ and /g/, as [m] in front of bilabials and [ɳ] in word-final position.

/č/ is realized either as [tɕ] or [ts] in front of /u/, but only as [tɕ] in front of other vowels, so we can have /aččun/ ‘to walk’ realized as [attɕun] or [attsun] but, for example, with /ačisan/ ‘hot’ only [atɕisan] is acceptable. In certain words such as like /cukuin/ [tsukuin] ‘to make’ and /cuin/ [tsuin] ‘to hang’, only [ts] is acceptable, so it was necessary to postulate another phoneme, /c/ [ts], distinct from /č/. /f/ [ɸ] can be realized as [ɸw] in front of /a/, as in faa [ɸwa:] ‘leaf’. Sometimes it is realized as /h/, probably due to the influence of Japanese. It is in a partial complementary distribution with /h/ but is distinctive at least in front of /a/ and /e/, as shown by /faa/ [ɸwa:] ‘leaf’ vs. /haa/ [ha:] ‘leather’ vs. /fee/ [ɸe:] ‘flatulence’ and /h-ee/ (do-seq). /s/ palatalizes to [ɕ] in front of /i/, as in /asii/ [aci:] ‘sweat’. /z/ is realized either as [d͡ʒ] or rarely [z] in front of every vowel but not in front of /i/, so we can have /hiiza/ [hiiza] / [hi:d͡ʒa] ‘goat’ and /zii/ [dzi:] ‘earth’ but not *[zi:]. /z/ has been observed to freely alternate with /d/ in one single case: /zuusi/ [d͡ʒu:ɕi] / [du:ɕi] ‘rice porridge’. Long consonant segments are limited to voiceless stops such as in /uttuu/ ‘younger sibling’, fricative /s/ as in /assamijo/ (an interjection), the voiceless affricate /tɕ/ i.e. /aččun/ [attɕun] and the nasal /n/ i.e. /kennaa/ [kenna:] ‘arm’.

2.2 *Mora, Syllable and Phonotactics*

The mora is an important unit in Iheya, as it is the tone-bearing unit. Because of the existence of word minimality, words must be at least 2-morae long in Iheya, being realized either as (C)VV (either as a diphthong i.e., /fai/ ‘needle’ or a long vowel i.e., /haa/ ‘skin’) or (C)VC (only the nasal /n/ [ɲ] is allowed in word-final position) i.e., /čin/ [tɕin] ‘clothing’, /in/ [in] ‘dog’. The syllable structure is (P) (C₀) (C₁) (G) V₁ (V₂) (C₂), with a bare V₁ in its minimal form. P is a special pre-onset slot³ which does not carry any weight and may only be filled by /ʔ/. C₀ can only be filled by /n/. Any consonant but /ʔ/ can fill C₁. Glides fill G. Any vowel can fill V₁ and V₂. Any sequence of the same vowel is acceptable, but with diphthongs V₂ can usually only be filled by /i/. In the coda, /n/, /s/ and any voiceless stops or affricates may appear, but word-finally only /n/ is acceptable.

2.3 *Phonological Rules*

The phonological rule of sequential voicing will be described. In Iheya verbs the final consonant of verbal bases changes according to the following suffixes, and this alternation will be described in §3.5. In compounds the onset consonant of the second element of the compound may undergo sequential voicing; that is, a voiceless segment can change into a voiced sound. For example /tamana/ [tamana] ‘cabbage’ and /haruu/ [haru:] ‘field’ compound to form /tamanabaru/ [tamanabaru:] ‘cabbage field’. Sequential voicing is blocked if the second element already contains a voiced obstruent as in /nisikazi/ (/ *nisigazi/) ‘northerly wind’; this is so-called Lyman’s law.

2.4 *Word-Level Prosody*

Iheya is a pitch-accent language. The position of a high pitch within the word is lexically determined and it is distinctive, as in /kii/ (HH) ‘hair’ vs /kii/ (LH) ‘tree’. There are two to three different patterns for accent realization for nominals and two each for verbs and adjectives. Monosyllabic words have two accent patterns. Disyllabic and longer nouns have three patterns. These patterns will be called A, B and C.⁴ Type-A nouns have a high pitch assigned from the word-initial mora, so /kii/ ‘hair’ and /mizi/ ‘water’ have a HH pattern. With longer nouns a pitch fall becomes noticeable so /kugani/ ‘gold’ is realized as HHL. Type-B nouns have a high pitch on the final mora, as in /kii/ LH ‘tree’. Disyllabic and longer nouns which belong to this class also undergo vowel lengthening

3 This kind of special slot in Japonic was first proposed by Shimoji (2008, 2017).

4 These three types correspond to the three tonal classes proposed by Matsumori (2012), thought to exist in proto-Ryukyuan. Exceptions are monosyllabic tonal class-C words, which are realized either as type-A (ʔwaa ‘pig’) or B (mee ‘front’).

when uttered in isolation, as in /fanaa/ ‘flower’. In type-B nouns the final high pitch moves to the right when a particle is attached to the noun, so /jamaa/ ‘mountain’ is realized as LLH, but /jama-ga/ is realized as LL-H. With type-C nouns, the high tone is assigned to the final mora of the noun, but it does not move even if a particle is attached, so /nuumi/ ‘flea’ is always realized as LLH. Verbs and adjectives have two types of accent realization, called A and B. Type-A verbs start with a high tone, while in type-B verbs the pitch rise is on the last mora, so the type-A verb /meein/ ‘to burn (intransitive)’ is realized as HHLL, while its transitive counterpart /meefun/ is LLLH. As with verbs, type-A adjectives have a level tone contour, as in /mii-sa-/ HH-L ‘new’, while in type-B adjectives the pitch rise is on the final part of the adjective stem as in /nii-sa-/ LL-H ‘slow’.

2.5 Intonation

In this section interrogative intonation will be described. In the world languages the intonation of interrogative sentences varies, with many languages having a rising intonation in polar questions (Gordon 2006). In Iheya both polar and content questions take a non-rising intonation when a form which has an interrogative meaning is present, that is an interrogative word (in content questions), an interrogative suffix or clitic. A rising intonation may be used when these are absent, and this is common in echo questions. In previous research, a similar behavior has been described by Nagano-Madsen (2015) for the Shuri dialect, where a terminal pitch rise is not used to express questions, since interrogative meaning is morphologically expressed. However, Nagano-Madsen does not mention what happens when forms with interrogative meaning are absent.

3 Descriptive Units

3.1 Morphological Units

Grammatical and phonological words, root, stem, base, affix and clitics will be defined.

3.1.1 Root, Stem, Base

A root is a minimal form bearing meaning which can not be divided into other morphemes (i.e. *jum-* ‘to read’). A stem is what results after inflectional suffixes are removed. For example, in *jum-ari-ta-n* (read-PASS-PST-IND), *jum-ari-* would be the passive stem. A base is a connecting point from the viewpoint of the affix. Roots, stems and bases may be bound or free. In this chapter, property-

concept (Thompson 1988; for its first use in Japonic see Shimoji 2008, 2017) roots will also be used as a descriptive unit. Property-concept roots bear meanings such as color, age, dimension and value. A PC root does not by itself have a word class, and it takes different suffixes to function as different word classes, such as adjectives or adverbs (see § 6 for details).

3.1.2 Affixes and Clitics

An affix is a morpheme dependent on its host phonologically and syntactically, and has roots and stems as hosts. A clitic is phonologically dependent, and takes words, phrases, clauses and sentences as hosts.

3.1.3 Phonological Words and Grammatical Words

A phonological word has to fulfill two main requirements to be independent: 1) it must be at least two morae long (word minimality); 2) it must have accent assigned to it (§ 2.4). A grammatical word consists minimally of a free root, and has semantic or grammatical meaning. It may consist of a single free root or may be formed from different elements. The order of these elements is fixed.

3.2 Word Classes

As word classes, we can recognize nominals, verbs, adjectives, adverbs, particles and interjections. Nominals include as subcategories lexical nouns, numerals, pronouns, nominal demonstratives and nominal interrogatives. Nominals fill the head slot of a argument phrase. Verbs head a predicate and can inflect for tense and mood. Adjectives can be divided into inflecting adjectives, which are similar to verbs and inflect for tense and mood, and non-inflecting adjectives which are similar to nouns and indicate tense and mood information by the use of a copular verb. Adverbs modify adjectival/verbal predicates, clauses and whole sentences. Particles are clitics which attach to phrases, clauses or sentences, and have grammatical and pragmatic meanings. They can be divided into case particles, limitative particles, information-structure particles, modal particles, conjunctive particles and sentence final particles. Interjections express a number of meanings such as surprise (e.g. *assami*), or pain (e.g. *agaa*), or function as discourse markers as *too*, a function marker with no clear meaning.

3.3 Grammatical Relations

As grammatical relations, we can recognize the subject, object and indirect object. A typical subject can be identified as follows: 1) Is usually marked with the nominative case; 2) semantically is usually the agent or the experiencer; 3) is the antecedent of the reflexive pronoun if present; 4) is in an agreement

TABLE 3.3 Iheya pronouns

	Referent	Singular	Plural
Personal pronoun	1st person	<i>waa, wan</i>	<i>wattaa</i>
	2nd person	<i>?jaa</i>	<i>ittaa</i>
		<i>ura</i>	<i>urataa</i>
		<i>uga</i> (polite)	<i>ugataa</i> (polite)
Reflexive		<i>duu</i>	<i>duunaa, duunaataa, duutaa</i> (2.PL)

relationship with honorific forms if present; 5) comes early in the sentence. The typical direct object 1) takes the accusative case (unmarked); 2) semantically is usually the target; 3) usually comes after the subject. The indirect object 1) takes the dative case; 2) is semantically a goal, a recipient, or in causative constructions the causee.

4 Nominals

In this section nominals will be described. Nominals include pronouns, lexical nouns, numerals, nominal demonstratives and interrogatives. Nominal demonstratives will be described in § 7.4, and nominal interrogatives in § 7.5.

4.1 *Pronouns*

In this section personal pronouns and reflexive pronouns will be described. Iheya is a so-called two-person language (Bhat 2008) that is a language which only has first and second person pronouns. The demonstratives *uri* (proximate/mesial demonstrative) and *ari* (distal demonstrative) may be used to indicate a third person, *uri* if this person is present, *ari* if s/he is absent. There is also a reflexive pronoun, *duu*. The pronouns of Iheya are summarized in Table 3.3. Number marking is obligatory with pronouns.

Iheya has two first-person singular pronouns, *waa* and *wan*. There is only one plural form, *wattaa*. Compared to *wan*, the use of *waa* is limited, and it can only be used with genitive and nominative case markers. There are three second-person pronouns, *?jaa*, *ura*⁵ and *uga*. Their respective plural forms are *ittaa*,

5 *?jaa* and *ura* are cognates, and one of the two may have re-entered the dialect as a loanword, but this topic needs further investigation.

urataa, and *ugataa*. *?jaa* and *ura* are used with listeners of the same or lower social standing and age, but *ura* is more polite than *?jaa*. A speaker mentioned that his father would use *ura* with his male firstborn and *?jaa* with all his daughters and younger sons. *Uga* is the most polite, and it is used with listeners older than or of a higher social standing than the speaker. *Duu* is the reflexive pronoun in Iheya. It is also used as a second person pronoun, a feature until now unattested in other Ryukyuan languages. In (36) *duu* is used to address another speaker, to ask if the area he is talking about is a certain area in Okinawa.

- (36) *duuga* *isija* <Isikawa>?
 duu=ga *i-si=ja* <Isikawa>
 REFL=NOM say-COMP=TOP Ishikawa
 ‘Is what you are talking about Ishikawa?’

Duu has three plural forms, *duunaa*, *duunaataa* and *duutaa*. The first two have the reflexive plural meaning, but *duutaa* is used only as a second-person plural.

4.2 *Lexical Nouns*

Lexical nouns include all the other types of nouns, proper and common.

4.3 *Nominal Affixes*

We can find nominal prefixes and suffixes in Iheya.

4.3.1 *Nominal Prefixes*

There are few prefixes and they are low in productivity, such as the polite suffix *u-* which occurs only with a small number of nouns like *uċaa* ‘tea’. *uu-* and *mii-* prefix onto only a limited range of nouns. One example is *mun* ‘thing’ as in *uumun* ‘male animal’ and *miimun* ‘female animal’. In other Okinawan varieties such as in Shuri *mii-* and *uu-* are also seen in words such as *miidui* ‘male bird’ and *uudui* ‘female bird’, and these may also be present in Iheya.

4.3.2 *Suffixes*

As suffixes we can find diminutive, plural, and exemplative suffixes. The diminutive suffix is *-gwaa*, such as in *ingwaa* ‘small dog/puppy’. In some cases the suffixed version is more common than the suffix-less version, such as in the case of *amigwaa* ‘candy’. A variation of *-gwaa*, *-nkwaa* is used with the so-called *yagō*, that is the traditional name of a home, as a physical building. When one member of a family moves out to a new house somewhere, they may bring the

yagō with them, so someone who has moved out of the *yagō Asataa* may be given the new *yagō Asatankwaa* for their new home.

There are plural suffixes in Iheya, but number marking is optional with lexical nouns. Inanimate lexical nouns are not marked for number. The plural suffixes are *-taa*, *-nčaa* (also appears as *-nučaa*), and *-naa*. *-taa* can be used with human-related nouns (for example *sinsiitaa* ‘teachers’), personal pronouns, demonstratives (see § 4.1, § 7.4), and in some cases with animals. It cannot be used with certain human-related nouns, such as *duusi* ‘friend’. Regarding animals, its use is limited. One speaker accepted *majataa* ‘cats’ but not **ŋwaataa* ‘pigs’ as grammatical. There may be idiolectal variation and further investigation is needed. The use of *-nčaa*/*-nučaa* is more limited, and is only used with human-related nouns, as in *warabinčaa* ‘children’. *-taa* can also be used as an associative plural, to mean ‘someone and the people associated with them’. *-naa* only connects to the reflexive pronoun *duu*, resulting in *duunaa*. As exemplative suffixes, we find *-nagee*, *-sinkaa* and *-rika*. *-nagee* is productive, but the use of *-sinkaa* is limited to indicating someone who has a relation with the noun it connects to. *-sinkaa* has been observed in cases such as *simazirisinkaa* and *uumisinkaa*. *Simaziri* is the name of a district in Iheya, and in this case it means ‘people from Shimajiri’, while with *uumi* ‘sea’ it is used to mean people whose work involves the sea, such as fishermen. The last exemplative suffix *-rika* is affixed to place demonstratives as in *uma-rika* (here-APPROX) ‘around here’.

4.4 Nominal Compounds

Lexical nouns undergo compounding, such as in the case of *ikigauttu*, formed by *ikiga* ‘man’ and *uttuu* ‘younger sibling’ resulting in ‘male younger sibling’. There are words which are historically compounds which then lexified, such as *ujakkwa* ‘parent and child’. Compound nouns may also form with a PC root or a verbal stem as its first element, such as *magiutu* (*magi*+*utu* big+sound) ‘loud sound’ or *kamimun* (*kam-i*+*mun* eat-THM+thing) ‘food’.

4.5 Numerals

Numerals are formed by a numeral root plus a quantifier suffix, such as in *tii-či* (one-QTF) ‘one’, where *tii-* is the numeral root and *-či* is the quantifier suffix. Numeral roots and quantifiers may be of native (such the above-mentioned *tiiči*) or Sino-Japanese origin (such as *gunin* ‘five people’). Different quantifier suffixes are used depending on the referent. For example *-či* is used in general for non-human entities, *-kei* for number of times. There is also a suffix which is used for people which has many allomorphs (see Table 3.4). For people, native numeral roots and suffixes are used up to four, and Sino-Japanese numerals and suffixes for five and up.

TABLE 3.4 Iheya numerals

Number	General	Person	Times	Number	General	Person	Times
1	<i>tii-či</i>	<i>čuu-i</i>	<i>ču-kei</i>	6	<i>muu-či</i>	<i>ruku-nin</i>	<i>mu-kei</i>
2	<i>taa-či</i>	<i>ta-i</i>	<i>ta-kei</i>	7	<i>nana-či</i>	<i>siči-nin</i>	
3	<i>mii-či</i>	<i>mič-čai</i>	<i>mi-kei</i>	8	<i>jaa-či</i>	<i>hači-nin</i>	
4	<i>juu-či</i>	<i>jut-tai</i>	<i>ju-kei</i>	9	<i>kukunu-či</i>	<i>ku-nin</i>	
5	<i>iči-či</i>	<i>gu-nin</i>		10	<i>tuu</i>	<i>zuu-nin</i>	

5 Verbs

In this section verbal morphology will be described. Verbs fill the predicative slot in a clause and inflect for tense and mood. The structure of the verb is as follows: root-(derivative suffix)-inflectional suffix. Morphologically, verbs are sub-categorized by base-ending: verbs with a base ending in a consonant and those ending in a vowel. There are also irregular verbs. Verbs whose base ends in a vowel take *-i* as a non-past suffix, and in some cases this may have zero realization, so ‘to buy’ may be realized as *koo-Ø-n* or *koo-i-n*. Verb bases which end in *-i* always have zero marking, such as *uki-Ø-n* ‘to wake up’.

Consonant-base verbs take *-u* as a non-past suffix, such as *jum-u-n* ‘to read’. With consonant base verbs the verb’s base-final consonant changes according to the connecting suffix (see §5.1). Other verbs such as *sun/fun* ‘to do’ and *čun* ‘to come’ will be classified as irregular verbs, since they have many suppletive forms in their paradigm as can be seen in Table 3.6. With the verb ‘to do’ we have two forms, *sun/fun*, where /s/ alternates with /f/ or /h/ depending on the form. The form *fun* may be a newer form, while the *sun* form may have entered the lexicon as a loanword. Examples of the verbal paradigm are given in Table 3.6.

5.1 Verb-Base Alternation

TABLE 3.5 Base alternation in consonant-base verbs

	NPST	PST	NEG	IMP	PROG	PASS	CAUS
	<i>-u</i>	<i>-ta</i>	<i>-ran</i>	<i>-ree</i>	<i>-joo</i>	<i>-rari</i>	<i>-ras</i>
read	<i>jumun</i>	<i>judan</i>	<i>juman</i>	<i>jumee</i>	<i>jumoon</i>	<i>jumarin</i>	<i>jumasun</i>
play	<i>asibun</i>	<i>asidan</i>	<i>asiban</i>	<i>asibee</i>	<i>asiboon</i>	<i>asibarin</i>	<i>asibasun</i>

TABLE 3.5 Base alternation in consonant-base verbs (*cont.*)

	NPST	PST	NEG	IMP	PROG	PASS	CAUS
wait	<i>mačun</i>	<i>mačan</i>	<i>makan</i>	<i>makee</i>	<i>mačoon</i>	<i>makarin</i>	<i>matasun</i>
write	<i>kačun</i>	<i>kačan</i>	<i>kakan</i>	<i>akee</i>	<i>kačoon</i>	<i>kakarin</i>	<i>kakasun</i>
swim	<i>eezun</i>	<i>eezan</i>	<i>eegan</i>	<i>eegee</i>	<i>eezon</i>	<i>eegarín</i>	<i>eegasun</i>
kill	<i>kuruf/sun</i>	<i>kuručan</i>	<i>kuruh/san</i>	<i>kuruh/see</i>	<i>kuruh/soon</i>	<i>kuruh/sarin</i>	<i>kurusimin</i>

In this section morphological alternations of verb bases will be described. In Iheya the bases of consonant-ending verb stems alternate depending on the following affix. In their underlying form, affixes are divided into consonant-initial affixes (*r*-affixes such as passive *-rari-*, *t*-affixes like past *-ta-*, *j*-affixes like progressive *-joo-*), and vowel affixes, such as sequential *-ee*. Consonant-initial affixes lose their initial consonant when connected to consonant bases. The final consonants of verbal bases alternate according to the following suffix. This alternation is predictable in most cases, but there are exceptions.

With *-m* base verbs such as *jumun*, the base consonant does not change with *r-*, *j-* and vowel affixes, as in *juman* ‘don’t read’ *jumoon* ‘reading’, and it changes to *d-* with *t*-affixes (*judan* read.PST.IND), but sometimes appears with an *-n* base with the non-past affix *-u-* and *t*-affixes (i.e. *junun*, *junan*). With *-g* bases the base is *-g* with *r*-affixes (as in *eegan* ‘don’t swim’) but palatalizes to *-z* with vowel affixes, *j-* and *t*-affixes such as in the past form *eezan* ‘swam’ and progressive *eezoon* ‘swimming’. *-b* base verbs as *asibun* ‘to play’ change with *t*-affixes, such as in the past form *asidan* ‘played’, but as with *-m* base verbs, a *-n* base variation is seen in the non-past and with bases which take *t*-affixes (i.e. *asinun*, *asinan*). With *-k* verbs the consonant is *-k* with *r*-affixes, as in negative form *kakan* ‘not to write’ and *-č* with *t-*, *j-* and vowel affixes, as in *kačan* ‘wrote’ or the sequential form *kačee*. *-t* verbs are highly irregular, as they have a *-t* consonant base with the causative suffix *-ras-* as in *matasun* ‘to make someone wait’, but behave as *-k* base verbs in other cases, so with the other *r*-affixes such as passive *-rari-* it is realized as *makarin* ‘to be waited for’ and not **matarin*. Verbs whose base ends in a *s-* have a paradigm similar to the verb *sun/fun* (see Table 3.6), with the one difference that the past form is, for example, *kuručan* ‘killed’ and not **kurusičan*.

5.2 Inflectional Morphology

Examples of verbal inflection for tense and mood are shown in Table 3.6. The indicative mood comes after a tense suffix, but other mood suffixes cannot

occur with tense suffixes and connect directly to the root, such as in imperative *numee* ‘drink!’.

TABLE 3.6 Verbal inflection

Mood	Tense	Example			
Indicative		‘to buy’	‘to read’	‘to do’	‘to come’
	Non-past	<i>koo(i)n</i>	<i>jumun</i>	<i>sun/fun</i>	<i>čun</i>
	Past	<i>kootan</i>	<i>judan</i>	<i>sičan</i>	<i>čan</i>
Volitive	Past(2)	<i>kooitan</i>	<i>jumutan</i>	<i>sutan/futan</i>	<i>čutan</i>
		<i>kooraa</i>	<i>jumaa</i>	<i>saa/haa</i>	<i>čaa</i>
		<i>kooruwa</i>	<i>jumuwa</i>	<i>suwa/fuwa</i>	<i>kuwa/čuwa</i>
Conditional					
Interrogative		<i>koojoo</i>	<i>jumoo</i>	<i>soo/hoo</i>	<i>koo</i>
Imperative		<i>kooree</i>	<i>jumee</i>	<i>see/hee</i>	<i>kee</i>
Prohibitive		<i>koorankee</i>	<i>jumankee</i>	<i>sankee/hankee</i>	<i>kunkee</i>

5.3 -i Form Verbs

Verb bases take a thematic vowel *-i* (this is different from the non-past suffix *-i*)⁶ to form an *-i* stem verb. This stem has a number of functions. First it may function as the base for a number of suffixes, such as the suffix *-gači* which expresses a simultaneous action, as in *kam-i-gači* (eat-THM-SIM) ‘while eating’. The *-i* form is also used when the verb is part of a light verb construction, where it takes an information-structure particle (§ 9.1.1). In other cases it may function as a nominal. This can be observed in compounds (see § 9.1.1).

5.4 Derivational Morphology

Derivation is used to express polarity with the suffix *-ran-*, aspect with *-joo-* and voice in passives with the suffix *-rari-* and in causatives with the suffix *-ras-*. The order of the voice suffixes is causative-passive, and aspect or polarity come after these, as in *ha-ras-ari-joo-n* (run-CAUS-PASS-PROG-IND) ‘To be made to run’ or *ha-ras-ari-ra-n* (run-CAUS-PASS-NEG-IND) ‘Not to be made to run’. Polarity and aspect suffixes do not co-occur, but a negative progressive construction may be formed by an auxiliary verb construction with the verb *neen* as an auxiliary verb (see § 9.1.1). This seems to be rarely used.

6 The notion of thematic vowel common in Indo-European linguistics was first introduced into Ryukyuan linguistics by Shimoji (2008, 2017).

5.5 *Existential Verbs and the Copula*

There are two types of existential verb, *un* (alternative form *uin*) which is used for animate entities and *an* (alternative form *ain*) for inanimate entities. As a copula we can find three different forms. One is *jan*, and another *dan*. It is possible that *jan* is a loan from Okinawa. Another form is *deeru*, which is limited in use. The negative copula has the suppletive form, *aran* (also pronounced *anan*).

6 *Adjectival Expressions*

Adjectives can be divided into inflected and non-inflected. Inflected adjectives are derived from property-concept roots (see § 3.1.1) to which an adjectivizer suffix *-sa-* has been attached, and they are similar to verbs in that they take tense and mood suffixes. Non-inflected adjectives are more similar to nominals as they take a copular verb to express tense, polarity, mood and focus. Next the internal structure of the two types of adjectives will be introduced.

6.1 *Inflected Adjectives*

Inflected adjectives are formed from a PC root and the adjectival suffix *-sa-* (also pronounced *-ha-*) and inflect for tense and mood. The combination of a PC root and the *-sa-* affix will be called an adjectival stem, so for example in *taka-sa-n* (tall-ADJ-IND) ‘tall’, *taka-* is the PC root, and *taka-sa-* is the adjectival stem. Tense and mood suffixes attach to the stem, so the past form of *taka-sa-n* would be *taka-sa-ta-n*, with *-ta* and *-n*. The non-past form is always unmarked for tense.

PC roots can form an adverbial form with the adverbial suffix *-ku*, so from the PC root *kuru-* ‘black’ one can form the adjectival stem *kuru-sa-* and adverbial stem *kuru-ku*, such as in *čin kuru-ku simi-ta-n* (clothing black-ADV dye-PST-IND) ‘dyed some clothing black’. An adverbial form can also be formed by reduplication of the root and affixation of the suffix *-tu*, as in *kuru-guru-tu* (black-black-ADV). In a very small number of inflected adjectives the suffix *-sa-* appears to have fused with the original root, such as in *wassan* ‘bad’, *gassan* ‘light’, *mussan* ‘funny’. In these cases the PC root has incorporated the *-sa-* suffix. In order to form an adverbial form from this, the adverbial suffix *-ku* is directly connected, so ‘lightly’ is realized as *gassa-ku* and not **gas-ku* or **gak-ku*.

6.2 *Non-inflected Adjectives*

In non-inflected adjectives tense and mood information is indicated with the use of a copular verb. Non-inflected adjectives are few in number and are

mostly loanwords, like *zootoo* ‘good’ (Sino-Japanese *zjootoo* ‘good’). Non-inflected adjectives stand as free roots and do not need an adjectivizer *-sa-*, but some have an inflected version which takes *-sa-*, like *ganzuu* ‘sturdy, healthy’ which also has an inflected form: *ganzuusan*.

7 Class-Changing Derivation

7.1 *Nominalizations*

Adjective stems with *-sa/ha-* can express a nominal meaning, such as in *takasa* ‘height’ (compare *takasan* ‘high’). Adjectives and verbs which take the suffix *-si* behave like nominals in that they appear as the head in a nominal phrase, such as in *ganzuuhan* ‘robust’ becoming *ganzuuhasi* ‘a robust one’ or *numusi* ‘the one that (someone) drinks’ from *numun* ‘to drink’. Verbs which take *-si* seems to be unable to take modifiers or suffixes which nominals usually take. Verbs that take the thematic vowel *-i* also behave as nominals, usually in compounds such as *sakinumi* (*saki+num-i* (alcohol+drink-THM) ‘drinking’).

7.2 *Verbalization*

It is hard to find true verbalization in Iheya, as in the formation of a verb stem from other word classes. Some nominals can take a light verb to express an action, such as with the noun *síwa* ‘worry’ becoming *síwa sun* ‘to worry’. With human emotion-related adjectives, the adjective stem may take a light verb, such as in *utura-sa s-u-n* (scary-ADJ do-NPST-IND) ‘to be afraid of’.

7.3 *Adjectivizations*

Adjectivization is possible with nouns and verbs through compounding where the second element is an adjective, such as in *tii+guma-sa-n* (hand+small-ADJ-IND) ‘skillful, precise’. A productive case is seen with the desiderative form of verbs, in which the adjective *fussan* ‘to want’ is connected to the verb stem, such as in *num-i+bussa-n* (drink-THM+to.want-IND) ‘wanting to drink’. Similar productive cases include the use of adjectives *jassan* ‘easy’ and *gurisan* ‘hard’ to express ‘easy to’ and ‘hard to’ as in *s-i+jassa-n* (do-THM+easy-IND) ‘easy to do’.

7.4 *Demonstratives*

‘Demonstratives’ indicates a functional category, whose members belong to different word classes. Demonstratives and the classes they belong to are summarized in Table 3.7.

TABLE 3.7 Iheya demonstratives

Word class	Category	Prox/Mes	Distal	Word class	Category	Prox/Mes	Distal
Nmn.	Ent.	<i>uri</i>	<i>ari</i>	Adv.	Mann.2	<i>untee</i>	<i>antee</i>
	Ent. (PL)	<i>uttaa</i>	<i>attaa</i>	Adn.	Qlt.	<i>untunu</i>	<i>antunu</i>
Nmn.	Place	<i>uma/?maa</i>	<i>ama</i>	Adv./Nmn.	Qnt.	<i>ussa</i>	<i>assa</i>
Adn.	Adn.	<i>unu</i>	<i>anu</i>	Adv.	Qnt.2	<i>uppi</i>	NA
Adv.	Mann.	<i>untu</i>	<i>antu</i>				

Entity demonstratives (demonstratives that indicate entities, mostly humans but in some cases non-humans) and place demonstratives are nominals and will be grouped under ‘nominal demonstratives’. Adnominal demonstratives are named after the class they belong to. Manner demonstratives are adverbs. Quantity demonstratives are more similar to nominals as they appear as modifiers in the AP phrase. Demonstratives have a two-way distinction, one class with a proximate or mesial meaning, and another with distal meaning. This differs from many Japanese-Ryukyuan languages that have a three-way distinction. There are two demonstrative roots, one for proximate/mesial that is *u-*, and one for distal, that is *a-*. These connect directly to a demonstrative suffix like *-ri* or *-ma*, but in some cases, there is insertion of a nasal /n/ or the gemination of the following consonant such as with the quantity demonstratives *ussa* and *uppi*. The proximate root *ku-* can be seen in fused forms as *arikuri* ‘this and that’ and *amakuma* ‘here and there’. The demonstrative *uma* may also be realized as *?maa*. The manner demonstratives *untee* and *antee* may have originated from the grammaticalization of the sequential form of the verb *sun* ‘to do’, *see*, with the fricative becoming a stop, so these forms may have originated as a verbal demonstratives.

7.5 Interrogative Words and Indefinite Pronouns

Interrogative words are as in Table 3.8. The same interrogative word may belong to different word classes, so the place interrogative *içi* may behave like a nominal and take case particles or modify the verb like an adverb. Indefinite words are formed from interrogative words. Specific indefinite words are formed by adding the indefinite suffix *-gara* such as in *taa-gara* ‘someone’ while unspecified indefinite words are formed with the additive particle *ɲn* such as in *taaɲn* ‘no one’.

TABLE 3.8 Iheya interrogative words

Word class	Target	Inter- rogative	Word class	Target	Inter- rogative
Nominal	Person	<i>taa</i>	Adverb	Reason	<i>nuuga</i>
Nominal	Person plural	<i>tattaa</i>	Adverb	Manner	<i>iĉaa</i>
Nominal	Thing	<i>nuu</i>	Adverb	Manner 2	<i>ĉaa</i>
Nominal	Place	<i>maa</i>	Adverb	Manner 3	<i>iĉantu</i>
Nominal	Place 2	<i>daa</i>	Adverb	Manner 4	<i>ĉantu</i>
Nominal/Adverb	Time	<i>iĉi</i>	Adverb	Manner 5	<i>iĉantee</i>
Nominal	Selective	<i>duuri</i>	Adnominal	Quality	<i>iĉantunu</i>
Nominal/Adverb	Degree	<i>ĉassa</i>	Adnominal	Quality 2	<i>ĉantunu</i>
Adverb	Quantity	<i>iku-</i>			

There are two forms for the place interrogative, *daa* and *maa*.⁷ The quantity interrogative root *iku-* can take different numeral suffixes depending on what is being counted, for example *-ĉi* for generic things, *-tai* for people, *-kei* for times (see § 4.5). Value, selection and manner interrogative words are morphologically related to the corresponding demonstratives.

8 Argument Phrase

The Argument Phrase (AP) consists in a modifier and a head. In (37) the adjective *ĉurasan* ‘beautiful’ fills the modifier slot, while *fanaa* fills the head slot.

- (37) *ĉurasanu* *fanaa*
 ĉura-sa-nu fana
 beatiful-ADJ-ADN flower
 ‘A beautiful flower’

8.1 The Head

The head is filled by a nominal. Some nominals may appear only if they are modified; these are formal nouns with an abstract meaning, which have many

7 *daa* and its variations can be widely seen in the Ryukyus, while *maa* is mostly seen in Southern-Central Okinawa, so this may be a loanword.

TABLE 3.9 Case particles in Iheya

Particle	Case	Function	Particle	Case	Function
<i>ga</i> / <i>nu</i> / \emptyset	Nominative	Subject	<i>kara</i>	Ablative	Point of origin
<i>ga</i> / <i>nu</i> / \emptyset	Genitive	Possession	<i>madi</i>	Limitative	Goal
Unmarked	Accusative	Direct object	<i>nkan</i>	Comparative	Comparison
<i>ke</i>	Dative	Indirect object	<i>hee</i>	Instrumental	Instrument, cause
<i>tu</i>	Comitative	Company	<i>ni</i>	Locative	Location

functions such as showing intention as with *čimui* or forming a temporal clause such with *baa*.

8.2 The Modifier

Adnominal clauses, adnominal demonstratives or another AP taking the genitive can stand as a modifier. Verbs and inflected adjectives take the *-nu* affix in order to act as a modifier. Non-inflected adjectives do not need any affix, as in *zootoo čin* ‘a good piece of clothing’.

8.3 Case and Other Role Markings

Case is marked with case particles. Case particles in Iheya are summarized in Table 3.9.

Iheya is a marked nominative language, as the nominative case is marked morphologically while the accusative is unmarked. In Iheya an animacy scale influences case marking, this scale may be represented as: personal pronouns > human-related > non-human entities. In the Okinawan language it is common to have distinction by animacy in the use of the nominative particle, *ga* for nouns with high animacy and *nu* for low animacy. In Iheya even older speakers seem to have lost this distinction, and *ga* is widely used. However, with the genitive case, which uses the same particle, there is still a clear distinction, so that pronouns and human-related nominals (including personal names) take *ga* and other words lower on the animacy scale take *nu*. The genitive can also be zero-marked for personal pronouns and when nominals take the plural suffix *-taa* such as in *wattaa jaa* (1.PL house) ‘our home’ or in *X-taa mun* (X-PL thing, where x is a personal name) ‘X’s place’. One feature of Iheya is that the accusative case is used with adjectival predicates, so one may say *zin fusssa-n* (money.ACC want.ADJ-IND) ‘I want money’, where *zin* takes the accusative case.

9 Predicate Phrase

Verbal, adjectival and nominal predication will be described below.

9.1 Verbal Predication

Simple and complex verbal predicates can be distinguished. In simple verbal predicates there is one verb stem. Complex verbal predicates with more than one stem are examined below.

9.1.1 Complex Verbal Predicates

As complex verbal predicates we find compound-verb constructions (CVC) and serial-verb constructions (SVC). CVCs include lexical compounds and syntactic compounds. In the first the meaning of the second part of the compound is preserved such as in *tatačikumun* ‘to hammer in’, in which the two meanings of hitting/hammering something (*tatačun*) and inserting (*kumun*) are preserved, while in syntactic compounds the second element takes a grammatical meaning such as completion, as in *numisimain* ‘to finish drinking’.

SVCs include symmetrical constructions and asymmetrical constructions. In symmetrical constructions there is no restriction on what verbs can be compounded. In asymmetrical constructions, one of the two verbs is taken from a closed class of verbs used to express aspect, voice, movement and other meanings.

As asymmetrical SVCs we have light verb constructions and auxiliary verb constructions. In light verb constructions, the main verb takes the thematic stem form and an information-structure particle. As a light verb we have the verb *sun/fun* ‘to do’. The meaning of these constructions is not clear. Tense and mood are shown on the light verb, as we can see in (38) where the tense is shown on the verb ‘to do’.

- (38) $\langle nenzuu \rangle$ *mizunu* *airu* *futasee*.
 $\langle nenzuu \rangle$ *mizu*~*nu* *a-i*~*ru* *f-uta*~*see*
 all.the.year water~NOM exist-THM~FOC do-PST2~EXP
 ‘There was water all year long.’

In auxiliary verb constructions the main verb takes the sequential form, and the auxiliary verb fully inflects for tense and mood. Auxiliary verbs and their functions are summarized in Table 3.10.

TABLE 3.10 Auxiliary verbs in Iheya

	Function	Verb	Lexical source
Aspect	Undesiderable result	<i>neen</i>	existential verb <i>neen</i> 'to not exist'
	Result	<i>an</i>	existential verb <i>an</i> 'to exist'
	Completion	<i>un</i>	existential verb <i>un</i> 'to exist (animate)'
	Progression	<i>aččun</i>	verb <i>aččun</i> 'to walk'
Movement		<i>nzun</i>	verb <i>nzun</i> 'to go'
		<i>čun</i>	verb <i>čun</i> 'to come'
Voice	Benefactive	<i>turasun</i>	verb <i>turasun</i> 'to give, to take'
Other	to try to	<i>nčun</i>	verb <i>nčun</i> 'to see'
		<i>učun</i>	verb <i>učun</i> 'to put'

neen indicates the completion of an action with an undesirable result. In (39) the speaker is speaking sadly about a type of tree which is going extinct in Iheya.

- (39) *murū cubuee neen.*
 murū cubu-ee nee-m
 all die-SEQ exist.NEG-IND
 'They are all dead.'

un indicates a perfective aspect (see §10.6.2). *Aččun* indicates a progressive aspect, as in (51). It can only be used with animate subjects. *Nzun* indicates movement to a point away from the speaker (40), or that the action is going to take place from that point in time, while *čun* indicates movement towards a point near the speaker, as in (41).

- (40) *tarooga hasi wataee nzan.*
 taroo=ga hasi wata-ee ng-ta-m
 taroo=NOM bridge cross-SEQ go-PST-IND
 'Taroo crossed the bridge.'

- (41) *nahake nzee kan.*
 naha=ke ng-ee k-ta-m
 Naha=ALL go-SEQ come-PST-IND
 '(I) went to Naha (and came back).'

turasun indicates a benefactive action. In (42) *turasun* is used to express that the ‘reading’ action is for the sake of the speaker.

- (42) *fun jume turačan.*
 fun jum-ee turas-ta-m
 book read-SEQ BEN-PST-IND
 ‘(He) read me a book.’

an indicates the result of a human action. In (43) *an* is used to express that the curry was the result of human action.

- (43) *karee cukuee atan.*
 karee cuku-ee a-ta-m
 curry make-SEQ exist-PST-IND
 ‘There was curry (that someone made).’

9.2 *Non-verbal Predication*

Nominal and adjectival predication are described below.

9.2.1 Nominal Predication

A nominal predicate is formed in its minimal form from a nominal, which may be followed by a copular verb. The minimal form is common, and the copula is obligatory only with negation, when the head is focused, or a past tense is used. So, for example, one may say *wanɟa sinsii* (1.SG≠TOP teacher) ‘I am a teacher’ but to say that this was their past occupation the copula is needed to express tense: *wanɟa sinsii ja-ta-n* (1.SG≠TOP teacher COP-PST-IND) ‘I was a teacher’.

9.2.2 Adjectival Predication

In minimal adjectival predication, the predicate is formed by an adjective by itself, as in *čuɟa ači-sa-n* (today≠TOP hot-ADJ-IND) ‘Today is hot’ (inflected adjective) or *uri-ga masi* (this≠NOM better) ‘This is better’ (non-inflected adjectives). With non-inflected adjectives the copula is obligatory in the same cases as with nominals (see § 9.2.1).

10 The Simple Sentence

10.1 *Sentence Type*

Sentence types can be divided into declaratives, interrogatives and imperatives.

10.1.1 Declaratives

Declaratives are unmarked and may take different forms. In declaratives different particles may be used such as the emphatic sentence-final particle *≈doo*, and modal particles *≈see* and *≈jo*.

10.1.2 Interrogatives

Interrogatives are divided into polar questions and content questions. Content questions include an interrogative word, and the predicate is marked with the particle *≈ga* or the mood suffix *-joo*. In polar questions the sentence-final particle *≈i* is used. Other types of question include the modal particle *≈kajaa* and the suffix *-ra* used in self questions.

10.1.3 Imperatives

In imperatives the verb is marked with an imperative mood marker (see §10.6.3). Prohibition is also marked with a prohibitive mood marker. Another type of imperative is marked with a conditional mood marker, such as in example (44).

- (44) *taagu mučee nzee sinzagaa nzee kumee*
 taagu muk-ee ng-ee sinzagaa ng-ee kum-ee
 bucket bring-SEQ go-SEQ Sinza.spring go-SEQ get.water-SEQ
 fwa.
 f-ruwa
 come-COND
 ‘Take a bucket go to the Sinza spring and get some water.’

10.2 *Alignment*

Iheya is a marked nominative language. Nominative is marked and accusative is left unmarked.

10.3 *Possession*

In possessive constructions, the possession fills the head slot, while the possessor is the modifier and marked with particles *≈nu* or *≈ga*, or zero-marked depending on the animacy of the possessor (see §8.3). With first- and second-person pronouns, the highest in the animacy scale, it can be left unmarked,

such as with *wan kwaasi* (1.SG sweets) ‘my sweets’. Nominals lower in the scale, such as personal names, can also be left unmarked if they take a plural suffix. Possession can be also expressed by use of the verb *mučun* ‘to bring/to have’. Existential verbs can also be used to show possession.

10.4 *Valency Changing*

Change in valency is expressed through the use of derivational suffixes in causative, passive, and benefactive constructions.

10.4.1 Causative

Causative construction increases the valency of verbs by one argument. Causative constructions are formed by adding a causative derivational suffix to the verb stem. With intransitive verbs the causee takes an accusative case (unmarked), while with transitive verbs it takes a dative case.

- (45) *ujaga warabi nakačan.*
 uja-ga warabi nak-ras-ta-m
 parent-NOM child cry-CAUS-PST-IND
 ‘The parent made the child cry.’
- (46) *ujaga warabike jasee kamačan.*
 uja-ga warabi-ke jasee kam-ras-ta-m
 parent-NOM child-DAT vegetable eat-CAUS-PST-IND
 ‘The parent made the child eat vegetables.’

10.4.2 Passive

In passive constructions valency decreases by one argument (47). The verb takes the passive suffix *-rari-*. The agent takes the dative case.

- (47) *wanja suuke suguraritan.*
 wan-ja suu-ke sugu-rari-ta-m
 1.SG-TOP father-DAT hit-PASS-PST-IND
 ‘I was hit by father.’

10.5 *Polarity*

Affirmative is morphologically unmarked. On verbs, negation is shown morphologically by adding a negative suffix *-ran*, so the negative form of *ukin* ‘wake up’ would be *ukiran* ‘not to wake up’. Nominal negation is formed by adding the topic particle to the nominal. The negative copula *aran* then follows to express negation, such as in *wan-ja sinsii-ja aran* (1.SG-TOP teacher-TOP COP.NEG) ‘I

am not a teacher'. In inflecting adjectives negation is formed by a combination of a PC root adverbialized with *-ku* and the negative copula *neen*, for example *taka-ku nee-n* (tall-ADV COP.NEG-IND) 'not tall'. With non-inflecting adjectives, negation is formed as with nouns, so the topic particle *ja* is added and then the negative copula is added, such as in *zoozi-ja aran* (good>TOP COP.NEG) 'not good'.

10.6 Tense, Aspect, Mood and Modality

In this section the TAM system is described together with modality.

10.6.1 Tense

Iheya has non-past and past tenses. There are two types of past tenses in Iheya. One indicates simple past, and the other type includes evidential information, such as the fact that the speaker actually witnessed or experienced the event as in (48) (the <> symbols are here used to indicate code switching).

- (48) *ɳwaaʒa* <ningen>*nu kusuu kwaaitandooʒaa*
 ɳwaaʒa <ningen>*nu kusu kwaa-ita-m<dooʒaa*
 pig>TOP human>GEN feces eat-PST2-IND>EMP>SFP
 'The pigs ate human feces.'

10.6.2 Aspect

Aspect is shown morphologically with the suffix *-joo-* or with the use of auxiliary verbs. *-joo-* can mark an action in progress, its completion, or even a state (such as in *gari-joo-n* slim-PROG-IND 'to be slim'). In example (49) with *-joo-* two interpretations are possible: the leaves are currently in the air falling to the ground, or they are already on the ground as the result of having fallen. In (50) the auxiliary verb *un* is used; in this case the only acceptable interpretation is that the leaves are on the ground.

- (49) *faaga utijoon.*
 faaʒga uti-joo-m
 leaf>NOM fall-PROG-IND
 'The leaves are falling.'

- (50) *faaga utiee un.*
 faaʒga uti-ee u-m
 leaf>NOM fall-SEQ exist-IND
 'The leaves are falling.'

The auxiliary verb *aččun* ‘to walk’ is used to express an action in progress.

- (51) *ari načee aččun.*
 ari nak-ee akk-u-m
 that cry-SEQ walk-NPST-IND
 ‘He is crying.’

Repetition of the verb in its sequential form can express the repetition of an action.

- (52) *ari čiee čiee <monozasi>nu <kawarini> futa*
 ari či-ee či-ee <monozasi>nu <kawarini> f-uta-nu
 that cut-SEQ cut-SEQ ruler=GEN instead do-PST2-ADN
hazidoojaa.
 hazi=doo=jaa
 FMN=EMP=SFP
 ‘He cut and cut that and probably used it instead of a ruler.’

10.6.3 Mood

Verbs and adjectives inflect for mood. Verbs have indicative, imperative, prohibitive, volitional and interrogative moods. The indicative mood is marked with *-m*. The imperative mood is marked with the suffix *-ree*. There is a separate prohibitive mood which is marked with the suffix *-rankee*.

- (53) *nahin feeku haree!*
 nahin fee-ku ha-ree
 more fast-ADV run-IMP
 ‘Run faster!’
- (54) *tarooga <sukudai> nkankee!*
 taroo=ga <sukudai> nk-rankee
 Taroo=GEN homework watch-PROH
 ‘Don’t watch Taro’s homework!’

The volitional mood is marked with the suffix *-raa*. It is often accompanied by the particle *jaa*, such as in *num-aa-jaa* (drink-VOL=SFP) ‘Let’s drink’.⁸ The inter-

⁸ A reviewer pointed out that when *jaa* is used, this may express the volition of a single speaker as in ‘I will drink it’, and this may indeed be the case.

rogative mood marker *joo* is used only in content questions, as in *taa=ga u-joo* (who=NOM exist-WHQ) ‘Who’s there?’.

10.6.4 Modality

Modality can be expressed by syntactic or lexical means. Obligation, desire, ability and permission will be described. Obligation (or necessity) is expressed through a construction formed by a main verb and the verb *nain* ‘to become’. In this construction the main verb takes the negative conditional form and *nain* the negative form, as in (55).

- (55) <wakučin> *ukankwa naran hazi jasiga ...*
 <wakučin> *uk-rankwa na-ra-nu hazi ja-siga*
 vaccine hit-NEG.CND become-NEG-ADN FMN COP.NEG=CNC
 ‘Probably (we) have to receive the vaccine but ...’

Desiderative modality is expressed by compounding in which the second part of the compound is an adjective, *čahan* or *fussan*, as in *num-i+fussa-n* (drink-THM+DES-IND) or *num-i+ča-ha-n* (drink-THM+DES-ADJ-IND ‘wanting to drink’). Ability can be expressed by using the passive form of the verb or lexically with the verb *nain* ‘to become’ or through compounding in verbs, by using the verb *usun*. When *nain* is used with other verbs, the preceding verb takes the adnominal form and the formal noun *kutu* is used.

- (56) *arija <eigo> nain*
ari=ja <eigo> na-i-m
 that=TOP English become-NPST-IND
 ‘He can speak English.’

- (57) *duuga wassanu ičunu kutu narantan.*
duu=ga wassa-nu ik-u-nu kutu na-ran-ta-m
 body=NOM bad-ADN go-NPST-ADN FMN become-NEG-PST-IND
 ‘I was feeling bad so I couldn’t go.’

10.7 Information Structure

In this section topic and focus will be discussed. Topic is marked morphologically with the particle *ja*. In (58) the topic of the phrase is *sara* ‘plate’, which is marked with *ja*. As it can be seen in (59), *ja* can be used to express contrast focus.

- (58) *anu saraja taroogaru wae neen.*
 anu sara-ja taroo-ga-ru wa-ee nee-m
 that plate-_{TOP} Taroo-_{NOM}-_{FOC} break-SEQ COP.NEG-IND
 'That plate, Taro broke it.'
- (59) *anu saraja taruga watasiga unu saraja waaga*
 anu sara-ja taruu-ga wa-ta-siga unu sara-ja waa-ga
 that plate-_{TOP} Taroo-_{NOM} break-PST-_{CNC} this plate-_{TOP} 1.SG-_{NOM}
wae neen.
 wa-ee nee-m
 break-SEQ COP-IND
 'That plate, Taro broke it, but this plate, I broke it.'

Focus is marked morphologically with the focus-marking clitic *-ru*. There is also another focus particle, *-ga*, which is used with content questions and usually used with the dubitative *-ra*. *-ru* is used with information focus where new information is provided to the addressee, and contrast focus, where the information goes against the addressee's expectation. Focus is possible on arguments, predicates, and the whole sentence. It is unacceptable on imperatives, volitional forms and, in the case of *-ru*, with content interrogatives (where *-ga* is possible). (60) is the response to being asked 'Why are you so angry?', to which the speaker answers, marking the new information with *-ru*. As an example of contrastive focus, in (61) the speaker is being asked if he is the younger in the family, which he denies.

- (60) *uttugaru isu koočan.*
 uttu-ga-ru isu koos-ta-m
 younger.brother-_{NOM}-_{FOC} chair break-PST-IND
 'My younger brother broke the chair.'
- (61) *wan anan uttugaru baači jassa.*
 wan anan uttu-ga-ru baači ja-sa
 1.SG COP.NEG younger.brother-_{NOM}-_{FOC} younger COP-_{EXP}
 'It is my younger brother that is the younger in the family, not me.'

Sometimes when the argument is focused the predicate will also take a focus-marking morpheme as a concord mechanism as in (62). With *-ga*, used in content questions, the dubitative suffix *-ra* is used as in (63). Here the speaker is wondering about what the old inhabitants of Iheya made as food.

- (62) *taruugaru* *aččootaru.*
 $\text{taruu} \neq \text{ga} \neq \text{ru}$ akk-joo-ta-ru
 $\text{taroo} \neq \text{NOM} \neq \text{FOC}$ walk-PROG-PST-FOC
 ‘Taroo is walking.’

- (63) *nuuga* *cukutarajaa.*
 $\text{nuu} \neq \text{ga}$ $\text{cuku-ta-ra} \neq \text{jaa}$
 $\text{what} \neq \text{FOC}$ make-PST-DUB-SFP
 ‘I wonder what they made.’

11 The Complex Sentence

In this section clause-combining strategies, quotatives, and clause-chaining structures are described.

11.1 *Clause Combining Strategies*

Coordination, subordination and insubordination are described below.

11.1.1 Coordination

In coordinate sentences, two sentences are linked by a conjunctive marker. These may be affixes such as with the adversative suffix *-siga*.

- (64) *taruuja* $\langle \text{gakusei} \rangle$ *jasiga* *hanakuja* *cutomenin jassa*
 $\text{taruu} \neq \text{ja}$ $\langle \text{gakusei} \rangle$ ja-siga $\text{hanaku} \neq \text{ja}$ $\text{cutomenin ja} \neq \text{sa}$
 $\text{Taroo} \neq \text{TOP}$ student $\text{COP} \neq \text{ADVERS}$ $\text{Hanako} \neq \text{TOP}$ employee $\text{COP} \neq \text{EMP}$
 ‘Taroo is a student, but Hanako is an employee.’

11.1.2 Subordination

Subordinate clauses may be formed by marking the predicate with affixes, such as with conditional clauses (marked with the suffix *-ruwa*), causal clauses (marked with the suffix *-tu*), simultaneous clauses (marked with the suffix *-gači* or *-giči*), adnominal clauses (marked with the suffix *-nu*). Other strategies include using particles such as the combination of quotative and focus $\neq \text{te} \neq \text{ru}$ for purpose or the additive $\neq n$ with the sequential suffix *-ee* for concessive clauses.

11.2 *Quotatives*

Quotatives are marked using the conjunctive particle $\neq \text{te}$. They are used with verbs which express the meaning of speaking or thinking.

- (65) *<mottetteiijo>te* *ičatujaa* *wan jaake*
<mot-te-it-te=ii=jo>=te *i-ta-tu=ja* *wan jaa=ke*
 bring-SEQ-go-SEQ=good=EMP=QT say-PST-CSL=SFP 1.SG home=ALL
tenzan.
teng-ta-m
 bring-PST-IND
 '(He) said you can bring it home with you, so I brought it back home.'

11.3 *Insubordination*

Insubordination can be observed with causal and sequential clauses, such in example (66), where the speaker is talking about seashells. When insubordination occurs the particle *=ja* commonly appears.

- (66) *hansitaa* *suu naruwa* *meeniči teečee suu*
hansii-taa *suu na-ruwa* *meeniči teek-ee suu*
 grandmother-PL tide become-CND every.day bring-SEQ tide
miččuwa isinu waabini <gangan> waeēja.
mikk-uwa isi=nu waabi=ni <gangan> wa-ee=ja
 fill-CND rock=GEN up.on=LOC onomatopoeia crush-SEQ=SFP
 'My grandmother and others when the tide was low ... they would bring
 those up on the rocks and crush them.'

11.4 *Clause-Chaining Structure*

The sequential form is used to chain clauses. In example (67) the speaker is talking about his routine on a typical day when working in the fields.

- (67) *haruke <bentoo> tenzee <bentoo> kamee uumike*
haru=ke <bentoo> teng-ee <bentoo> kam-ee uumi=ke
 field=ALL lunch bring-SEQ lunch eat-SEQ sea=ALL
uríee ...
uri-ee
 go.down-SEQ
 '(I would) bring my lunch to the field, eat it, go down to the beach ...'

Appendix: Sample Text

In the following texts three men, whose ages range from their late 50s to their early 60s, are talking about American military surplus stores, common in Okinawa, the products sold there, and how they were used in their daily lives.

- (68) C: <urumasi> <isikawa>ni an.
 <urumasi> <isikawa>ni a-m
 Uruma.City Ishikawa=ALL exist-IND
 'There is one in Ishikawa, Uruma city.'

- (69) A: jatu uriga <kanzen>nu <haresage>toka
 ja-tu uri=ga <kanzen>nu <haresage>toka
 COP-CSL that=NOM complete=GEN surplus.store=EXM
 anana
 a-na-na
 COP-NEG-SEQ
 'That may be not a real surplus store'

- (70) A: unu fuuzi soobai hee tada <torijoseta> <hontooni>
 unu fuuzi soobai h-ee tada <tor-i+jose-ta> <hontooni>
 that way business do-SEQ just gathered really
 <haraisage> jaka <aratani> cukurarijoosi ananka
 <haraisage> ja-ka <aratani> cuku-rari-joo-si a-nan=ka
 surplus COP=Q newly make-PASS-PROG-COMP COP.NEG=Q
 umuin baa
 umu-i-nu baa
 think-NPST-ADN FMN
 'I think ... if it is not really surplus ... I don't know if they just do business like that, if it's really surplus or it is new.'

- (71) C: ari jagajaa <Mangasooko>
 ari ja=gajaa <Mangasooko>
 that COP=Q <Mangasooko>
 'Is it that one maybe? Mangasooko.'

- (72) B: <Mangasooko>ni ainjaa
 <Mangasooko>ni a-i-m=jaa
 <Mangasooko>=LOC exist-NPST-IND=SPF
 'Yes there is one in Mangasooko.'

- (73) B: *anu uttaaga* <bindamatuka> <parasuuto>jo ari
anu uttaa=ga <bindama>=tuka <parasuuto>=jo ari
 FIL those=NOM glass.jar=EXM parachute=EMP that
ganzuuhanujo
ganzuu-ha-nu=jo
 sturdy-ADJ-ADN=EMP
 'Uhm those ... stuff like glass jars, parachutes ... parachutes are sturdy.'

- (74) B: <hijoke> *sičai* <siiankaa> *sičai* *zootoo jatan* *baa*
 <hijoke> s-tai <siiankaa> s-tai *zootoo ja-ta-nu* *baa*
 sunscreen do-LIST sea.anchor do-LIST good COP-PST-ADN FMN
gassanu.
gassa-nu
 light-ADN
 'We used that as a sunscreen, as a sea-anchor, it was good. Being light.'

- (75) A: *?nkasija* *činan* *ganzuuhantekarani*
?nkasi=ja *čina=n* *ganzuu-ha-m=te=kara=ni*
 a.long.time.ago=TOP rope=ADD robust-ADJ-IND=QT=ABL=LOC
 <čooohoo> *saritasiga*
 <čooohoo> s-rari-ta-siga
 treasure do-PASS-PST-CNC
 'At home we used to treasure the rope too, since it was sturdy.'

- (76) C: *?nkasi* *dakkuki* *hee* *anu muumi*
?nkasi *dakkuki* *h-ee* *anu muumi*
 long.time.ago remove.husk do-SEQ fil rice.husk
sizuutasee
sig-uta=see
 unshell-PST2=EXP
 'A long time ago we removed the husks ... we used to remove the husks of rice grains.'

- (77) C: *uri anu* <mannaka>ke *dakisoo* *tatieekarani*
uri anu <mannaka>=ke daki+soo *tati-ee=kara=ni*
 that FIL middle=DAT bamboo+pole make.stand-SEQ=ABL=ALL
 <rakkasan> *uriheeru* <hijoke> *sutandoo.* *wattaa*
 <rakkasan> uri=hee=ru <hijoke> s-uta-m=doo *wattaa*
 parachute that=INST=FOC sunscreen do-PST2-IND=EMP 1.PL

jaa wattaa suuga
jaa wattaa suu=ga
 home 1.PL father=NOM

‘After erecting a bamboo pole in the middle my father used the parachute, used that as a protection from the sun.’

- (78) A: <*rakkasan*>*nu unu jatu činaa čikain*
 <*rakkasan*>=*nu unu ja-tu čina čika-i-n*
 parachute=GEN FIL COP-CSL rope use-NPST-IND
 <*rakkasan*>*teru itasee činaa suuja*
 <*rakkasan*>=*te=ru i-ta=see čina suu=ja*
 rakkasan=QT=FOC say-PST=EXP rope father=TOP
ganzuusante
 ganzuu-sa-m=te
 sturdy-ADJ-IND=QT

‘The parachute uhm ... We called it *rakkasan*. We used the rope. The rope ... since my father said it was sturdy’

- (79) C: *uri naman mučoodoo.*
uri nama=n muk-joo-m=doo
 that now=ADD have-PROG-IND=EMP
 ‘I still have that.’

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