ON THE ORIGINS OF ATTRIBUTIVE AND CONCLUSIVE VERB FORMS IN THE RYUKYUAN LANGUAGES

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ABSTRACT

The islands of the Ryukyu archipelago, now comprising the Japanese prefectures of Okinawa and part of Kagoshima, were originally a separate kingdom before being annexed by Japan. The language(s) (or dialects) of these islands are commonly regarded as the only confirmed sister language(s) to modern Standard Japanese and its dialects. Scholars have long compared Ryukyuan and Japanese for clues to the prehistories of both languages, and in search of a single Proto-Ryukyuan/Japanese language. The earliest recorded ancestor of modern Standard Japanese dates back to roughly the 8th century A.D., whereas most Ryukyuan language groups have never been written down. In the face of scant historical records and no other confirmed relatives, the early histories of the various Japanese and Ryukyuan dialects remain shrouded in mystery. Two of the most looming questions are when the two language groups split, and whether or not Ryukyuan split off from the protolanguage as a whole, or if various language subgroups broke off at different times. To this day, various degrees of mutual intelligibility make it difficult to postulate whether what is spoken in the Ryukyuans should be called "dialects" of Ryukyuan or separate "languages" in a Ryukyuan family.

This paper examines a small part of this puzzle in an attempt to sort out the relationships between the Ryukyuan languages to each other and to Standard Japanese. Middle Japanese includes a complicated series of verb forms that correspond to a variety of syntactic functions. One of these verb forms, the Conclusive, is used for sentence-final indicative verbs, while another, the Attributive, is used either as a nominalized verb, or to modify a noun in relative clause constructions. The distinction between the Conclusive and Attributive verb morphology, although long lost in Standard Japanese,

has been retained in many Ryukyuan dialects. Furthermore, the Ryukyuan data for the Conclusive and Attributive forms is quite complex; some dialects show more than one suffix for each function while others retain distinct but redundant forms. This paper analyzes the Conclusive and the Attributive verb forms, as well as other related key verb forms, by comparing their morphology in various Ryukyuan dialects. A geographic (and long-assumed linguistic) divide exists between the islands in the northern part of the Ryukyu archipelago and the islands in the south, as well as further divides within these two groups. This paper examines the Conclusive and Attributive within each of these subgroups, and then draws a conclusion about the likelihood that these subgroups are related to each other.

This paper largely agrees with previous analyses that Attributive and Conclusive verb morphology in Northern Ryukyu dialects featured a stage of development involving a compound of the Continuative form and the existential verb *wori*. However, close comparison suggests that the Southern Island dialects feature an older, plain vowel morpheme in the Attributive and Conclusive morphology, most likely a /-u/, which predates the Northern Island Continuative-*wori* compound. The /-u/ suffix found in the Southern Islands closely resembles the /-u/ Conclusive-Attributive suffix found in Standard Japanese, suggesting that both the Southern Islands and Japan have retained this older form, while the Northern Islands, located in the middle of these two, have diverged.

BIOGRAPHICAL SKETCH

Marisa Ann Genuardi attended elementary and high school in suburban Philadelphia before moving to scenic Ithaca, NY, to pursue an undergratuate education at Cornell University. She graduated from Cornell in 2004 with a major in Linguistics and a concentration in East Asian Studies. After spending a year in the real world, she returned to Cornell to pursue a Master's degree in Asian Studies. Between 2003 and 2007, she spent approximately two years living in Japan, both as an exchange student and as an English teacher. Marisa is currently pursuing a Ph.D. in Linguistics at the City University of New York Graduate Center.

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TABLE OF CONTENTS

Biographical Sketch	iii
Acknowledgements	iv
I. Introduction:The Ryukyu Islands and Japan	1
II. Traditional Middle Japanese Verb Analysis	6
III. Previous Analyses	13
IV. Southern Dialects	
A. Morphology	18
B. Miyako and Yaeyama	21
C. Yonaguni	38
D. Southern Islands Conclusion	43
V. Northern Dialects	46
VI. Conclusion	53
Bibliography	55

I: Introduction: The Ryukyu Islands and Japan

The Ryukyuan archipelago stretches out south of the Japanese island of Kyushu through the Pacific Ocean towards Taiwan, covering a total distance of 1000 kilometers. Once comprising an independent kingdom with strong diplomatic ties to China, these islands were annexed by Japan in the nineteenth century. Today, the Ryukyu Islands make up the entirety of the Japanese prefecture of Okinawa, as well as part of the prefecture of Kagoshima. The language (or group of languages) spoken on these islands is considered the only confirmed sister language to Modern Standard Japanese and its dialects. Scholars have long compared Ryukyuan and Japanese for clues to the prehistories of both languages, and in search of a single Proto-Ryukyuan/Japanese language.

Although in modern popular usage the term "Ryukyu" is synonymous with Okinawa, the Okinawa archipelago makes up only one of many island groupings in the region. Traditional geography divides the Ryukyu Islands into two groups: the Northern Islands and Southern Islands. These two groups are further divided into five smaller archipelagos: the Amami and Okinawa island groups in the North and the Miyako, Yaeyama, and Yonaguni groups in the South. Linguistic scholarship generally follows these geographical groupings, such that the five different island groups make for tentative language sub-groups within the putative Ryukyuan language family, although the line between dialect and language amongst the five archipelagos can be blurry. Leon Serafim describes a common analysis of the Japanese language family, claiming that this family "probably consists of five languages" (82). Mainland Japanese, constituting a single dialect chain of mutual intelligibility, is one of these languages, with the other four languages

The Ryukyuan Island Chain¹

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

 1 Map from pl.wikipedia.org/wiki/Wyspy_Riukiu. Label for Yonaguni added by me.

of the Japanese language family all found in the Ryukyus. The dialects found in Amami and Okinawa form a single dialect chain, making Northern Ryukyuan the second language in the family. The group is rounded out by the mutually unintelligible languages found in Miyako, Yaeyama, and Yonaguni. (Serafim 82).

As can be seen in Serafim's tentative groupings, the Northern-Southern division is also useful as a linguistic divide, although the languages of the three Southern regions seem to be less related than those of the Northern Amami-Okinawa language. In particular, whereas the languages of Miyako and Yaeyama seem closely related, the language spoken on Yonaguni varies greatly from the other two. Yonaguni is also the most geographically isolated of the Ryukyu Islands; it is much closer to Taiwan than to Japan proper, or even to the Okinawan prefectural capital in Naha. Even for scholars who use the Northern-Southern division as the major division of the Ryukyuan languages (as opposed to giving a division between each archipelago or amongst certain archipelagos, like Serafim), the language of Yonaguni is thus sometimes considered a third group in and of itself.

As has probably become apparent by this point, the terminology relating to the classification of the Ryukyuan "language" is somewhat convoluted, since there is no completely accepted analysis of where dialect ends and separate language begins amongst the different archipelagos. This issue is somewhat sidestepped in the Japanese literature, since the term *Ryuukyuu-go* ("Ryukyu language(s)"), as with all Japanese nouns, does not express grammatical number. The term *Ryuukyuu-hōgen*, or "Ryukyuan dialect(s)" is often found in Japanese scholarship, but it is important to note that this term can have two different meanings. Very often, especially in

earlier literature, the term is not used in regard to various language subgroups within the Ryukyuan language family, but to refer to the Ryukyuan language family itself as a dialect of Standard Japanese. Most non-Japanese scholars and many recent Japanese scholars reject the use of this terminology, noting that the mutual unintelligibility between languages spoken in the Ryukyu chain and on the other Japanese islands secures the status of the Ryukyuan languages as sister languages to Japanese rather than dialects (Uemura, 311-14). Much of the recent Japanese scholarship uses the term *Ryuukyuu-go* for the language groups taken as a whole, and *Ryuukyu-hōgen* ("Ryukyu dialect(s)") of *Ryuukyuu-sho-hōgen* ("various Ryukyu dialects") to describe what is spoken in the different archipelagos. For the sake of simplicity, we shall refer to entire Ryukyuan language family as the Ryukyuan language, and the individual island languages as dialects or sub-groups of that language, although the fact that these language sub-groups all descended from a single Proto-Ryukyuan has long been assumed but never confirmed.

The main island in the Okinawa island chain (also called Okinawa Proper) is the largest island in the entire Ryukyu archipelago. Okinawa Proper contains both the remains of the Ryukyuan Kingdom capital of Shuri and the modern prefectural capital of Naha. The dialect of Shuri has historically been a prestige dialect in the Ryukyu Islands, and is the only one of the Ryukyu languages to have been written down prior to the 20th century. Even today, the languages of the Ryukyus are rarely written. Most written records of these languages occur in scholarly transcriptions, although some popular guide books to the "Okinawan dialect" also exist. Recent interest in preserving local language and culture has also led local citizens to write in their native dialects, and to organize classes in an attempt to preserve these languages. While

modern linguistic scholarship tends to use IPA or, short of that, the Roman alphabet, to record data on the Ryukyuan languages, the more popular expressions mentioned above usually use a system based on the Standard Japanese *hiragana* or *katakana* syllabaries. Despite the recent interest in reviving local culture, the various local Ryukyuan dialects remain extremely endangered. Public schooling is conducted in Standard Japanese, and most speakers today are either bilingual in Standard Japanese and their traditional local language, or they cannot speak the local language at all.

Scholastic interest since the first half of the 20th century has led to the recording of a great deal of data on these endangered languages, although Japanese scholarship of that period tends to examine the Ryukyuan languages as a way of understanding the origins of early forms of Japanese. Under the influence of this bias, those earlier scholars (and still some today) tended to reconstruct Proto-Ryukyuan forms that conform with the earliest recorded version of the Japanese language. Despite the potential dangers of this bias, comparison of the Ryukyuan dialects with Old and Middle Japanese remains a useful process, especially since written records provide ample data for the latter. The question remains open as to how soon before the earliest records of Old Japanese (which date to the eighth century AD) a potential Proto-Ryukyuan language broke of from Proto-Ryukyuan-Japanese, or even if today's many Ryukyuan languages branch off from a single source.

One feature retained in many Ryukyuan dialects, including the prestige dialect of Shuri, but lost in Standard Japanese since the 16th century is the distinction between the Conclusive and Attributive verb forms. Furthermore, the Ryukyuan data for the Conclusive and Attributive forms is quite complex; some dialects show more than one suffix for each function while others retain

Attributive verb forms, as well as other related key verb forms, in the various Ryukyuan dialects and attempts some insight into their origins. A detailed analysis of these verb forms reveals that the Northern and Southern language groups have diverging histories, and that conclusions about the language history of each group cannot be sweepingly applied to the history of the other, as has often been done in the past.

In most Ryukyuan dialect verb paradigms, scholars tend to list at least two forms of either Conclusive or Attributive, if not both. Fortunately, the patternings of these multiple forms fall into two main groups following the common linguistic division between the Northern Islands (Amami and Okinawa) and the Southern Islands (Miyako, Yaeyama, and Yonaguni). In the Northern Islands, dialects tend to feature two versions of each Conclusive and Attributive, with a few exceptions. For any given Northern dialect, these various forms remain distinct in form, and are tied into *kakari-musubi*, the triggering of certain verb forms by emphatic particles. For example, in the Northern dialect of Wadomari², we find two distinct Conclusive forms and two distinct Attributive forms, the second of which is used in *kakari-musubi* constructions:

	SJ	Conclusive A	Conclusive B	Attributive A	Attributive B	English
(1)	kaku	hacju'N	hacjumu	hacjunu	hacjuru	"write"
(2)	toru	tu'ju'N	tu'jumu	tu'junu	tu′juru	"take"

In the Southern Islands, scholars often classify dialects so that they appear to feature two versions of the Conclusive and one Attributive.

However, at least in terms of morphological shape, there is often no

6

² Data from Hirayama 1986 (839).

discernable difference between one of the Conclusives and the Attributive.

For example, in Ishigaki, /-u/ is classified as both a Conclusive and a

Attributive suffix, despite the fact that this ending creates the same verb shape regardless of the word's intended grammatical use³:

	SJ	Conc./Attr.	Nasal Conc.	English
(3)	kaku	kaku	kakun	"write"
(4)	iku	iku	ikun	"go"

The second, morphologically contrastive Conclusive forms found in these dialects usually feature a nasal element, such as /m/, /n/, or the placeless nasal /N/. In order to clarify terminology and explain the background influences on Japanese historical linguists, an overview of the traditional Japanese verb analysis is warranted before continuing the analysis of Ryukyuan language sub-groups.

7

³ Data from Uchima (509-11)

II: Traditional Middle Japanese Verb Analysis

The field of Japanese historical linguistics has relied heavily on the traditional analysis of Old and Middle Japanese, although this influence has begun to wane slightly in recent scholarship. Much Ryukyuan language scholarship has focused on the historical relationship between Ryukyuan and Japanese, with a particular interest in establishing a single Proto-language. Thus, the earliest well-documented version of the Japanese language, which dates back to the eighth century, has largely influenced the study of Ryukyuan. The traditional Early Middle Japanese verb paradigms are summarized in Table 1.

This analysis includes verbs of nine conjugation types (several of which contain only one irregular verb), which are then conjugated across six different grammatical categories. The resulting verb form (depending on its grammatical purpose) either stands alone or exists as a new root to which particles and auxiliary verbs are affixed. For example, the Quadrigrade verb <code>kak-"to</code> write," conjugated under the Irrealis category, becomes <code>kaka-</code>. To this root, an Irrealis suffix such as <code>-mu</code> (Intention/Conjecture) may then be added to create <code>kakamu</code> "I intend to write" or "He will perhaps write it." The suffix <code>-mu</code> itself is an auxiliary verb and thus may also conjugate across the various grammatical categories. For example, the <code>-mu</code> of <code>kakamu</code> becomes <code>-me</code> in the Realis category: <code>kakameba</code> "Since I intend to write it." The <code>-ba</code> in this construction is a particle rather than an auxiliary verb and does not conjugate. Although they do conjugate, auxiliary verb paradigms are often defective and/or include homophonous entries for different grammatical categories.

Each conjugation type is classified according to the type and number of theme vowels that attach to a given verb stem upon conjugation. The

Quadrigrade conjugation type, for example, features four different theme vowels: the /a/ in Irrealis *kaka-*, the /i/ in Continuative *kaki-*, the /u/ in Conclusive and Attributive *kaku(-)*, and the /e/ in the Irrealis and Imperative *kake(-)*. The Quadrigrade type is by far the largest category of verbs in Middle Japanese, and is often used for "standard" conjugation examples. Since the stems of these verbs end in a consonant, they are often called "consonant verbs." For example, the verb "to write," depending on the grammatical category against which it is conjugated, may appear as *kaka-*, *kaki-*, *kaku(-)*, or *kake(-)*, but its ultimate stem is the consonant-final *kak-*. (The N, R, K, and S-Irregular conjugation types are also included in the consonant verb category).

In contrast, the Monograde and Bigrade verb stems end in vowels, so that they are often referred to as "vowel verbs." Taken together, these vowel verbs form the largest conjugation type after the Quadrigrade verbs, but still remain vastly outnumbered by the latter. Monograde verbs feature one theme vowel, whereas the Bigrade verbs feature two. Verbs in these two conjugation types are called either "Upper" or "Lower" depending on the main theme vowel, with /i/ for the Upper groups and /e/ for the Lower groups. This traditional analysis of the vowel verbs has a few problems. The Lower Monograde type includes only one verb, *ke*- "to kick," which was originally a Bigrade in Old Japanese before being reanalyzed to resemble the Monograde type. The Bigrade verbs behave very differently from the Monograde verbs. Some of these analytical irregularities have been influenced by the Japanese syllabic (or moraic) writing system, which can only express sequences CV and

Traditional Early Middle (Heian) Japanese Verb Chart

Conjugation Type	<u>Verb</u>	<u>Irrealis</u>	Continuative	Conclusive	Attributive	<u>Realis</u>	Imperative	English
Quadrigrade	kak-	kaka-	kaki-	kaku	kaku(-)	kake-	kake	"to write"
Upper Monograde	mi-	mi-	mi-	miru	miru(-)	mire-	miyo	"to see"
Lower Monograde	ke-	ke-	ke-	keru	keru(-)	kere-	keyo	"to kick"
Upper Bigrade	i-	iki-	iki-	iku	ikuru(-)	ikure-	ikiyo	"to live"
Lower Bigrade	u-	uke-	uke-	uku	ukuru(-)	ukure-	ukeyo	"to receive"
N-Irregular	sin-	sina-	sini-	sinu	sinuru(-)	sinure-	sine	"to die"
R-Irregular	ar-	ara-	ari-	ari	aru(-)	are-	are	"to exist"
K-Irregular	k-	ko-	ki-	ku	kuru(-)	kure-	ko(yo)	"to come"
S-Irregular	S-	se-	si-	su	su(-)	sure-	seyo	"to do"

V, in accordance with the Japanese language itself, which does not allow consonant clusters or word-final consonants⁴. The Bigrade conjugation type no longer exists in Modern Standard Japanese, having merged into the Monograde type.

The remaining conjugation types are irregular and contain only a few (albeit frequently-occurring) verbs each. The N-Irregular group includes only the verb *sin-* "to die" and the related verb *in-* "to depart." The R-Irregular group similarly contains scant examples, but does include the important verbs *ar-* "to exist" and *wor-* "to exist (animate)." These two groups contain only slight deviations from the Quadrigrade verbs, and the N-Irregular type in particular appears to be an amalgamation of the Quadrigrade and Bigrade types. The remaining two conjugation types are slightly more irregular and contain only one verb each: the K-Irregular *k-* (SJ *kuru*) "to come" and the S-Irregular verb *s-* (SJ *suru*) "to do." The verb *suru* in particular occurs with great frequency, since it is used as a light verb in constructions with Chinese loanwords. All four irregular conjugation types are grouped with the consonant verbs.

The six traditional grammatical categories include the Irrealis,

Continuative, Conclusive, Attributive, Realis, and Imperative⁵. Although
these categories are often analyzed separately, some of them are
homophonous in certain conjugation types, and, with the exception of NIrregular, no conjugation type features a distinct morphological form for each

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⁴ Japanese (and the writing system) does allow for geminate consonants (usually represented in the literature as Q) and a moraic nasal N. The syllabic writing system also affects the naming conventions found in the Old Japanese verb analysis. For example, the conjugation types given in English as N, R, K, and S-Irregular are expressed in Japanese as "Na, Ra, Ka, and Sa-Irregular," regardless of whether or not an /a/ sound is featured in their conjugations. ⁵ The Japanese terms: Mizen-kei (Irrealis), Ren'you-kei (Continuative), Shuushi-kei (Conclusive), Ren'tai-kei (Attributive), Izen-kei (Realis), and Meirei-kei (Imperative)

grammatical category. The grammatical categories themselves reflect a mix of independent grammatical functions—including modality and nominalization—and association with particular groups of auxiliary verbs and particles. The Conclusive form of a given verb, for example, is an independent morpheme used to end sentences in the indicative mood, while the Imperative form does the same for the imperative mood. The tense of the plain Conclusive verb is usually considered non-past, as the form remains today in Modern Standard Japanese. Tense and aspect are indicated through the use of auxiliary verbs.

The Attributive form is associated with nominalization and is usually used to modify a noun in a way that would be translated in English as a relative clause construction. For example, *kaku* ("to write," Attributive) plus *hito* "person" becomes *kakuhito*, "(a/the) person who writes." The Attributive is also used with a select number of particles and auxiliary verbs, mostly associated with its nominalization and noun-modification properties. Perhaps the most important of the Attributive particles is the emphatic particle *so* or *zo* (later just *zo*), which triggers a phenomenon traditionally called *kakari-musubi*. Under this phenomenon, the emphatic particle may appear anywhere in the sentence (not necessarily as a verb suffix) and still trigger the use of the grammatical form with which it is associated. Thus, the emphatic *so*/*zo* particle may appear after a noun, such as the subject, topic or object, but the verb will still inflect with an Attributive suffix, not a Conclusive suffix.

It is important to note that the Attributive and Conclusive forms of the traditional Middle Japanese paradigm are homophonous for every conjugation type except for the Bigrades and some Irregulars. In Modern Standard Japanese the Conclusive and the Attributive forms, where such a

distinction existed, have merged in the direction of the Attributive shape. The resulting form is used to express both the sentence-final indicative mood and noun-modification. The Modern Japanese Attributive-Conclusive form may not stand alone as a nominalized verb; it must be accompanied by a nominalizing particle such as –no. The merger of the two forms was largely influenced by the loss of the so/zo kakari-musubi phenomenon described above. Kakari-musubi plays an important role in Ryukyuan verb morphology, since some Ryukyuan languages maintain three distinct verb forms for the Conclusive, Attributive, and kakari-musubi.

The Continuative form of a given verb stands alone as the clause-final element in a sequence of clauses before the sentence-final Conclusive verb. It also appears with a variety of auxiliary verbs, including those that express past tense, perfect aspect, and certain honorific and humble forms. It has been suggested that the Continuative is the oldest verb form, and that the other grammatical categories arose from the combination of the Continuative with auxiliary verbs, including (perhaps most importantly), the R-Irregular verb *ar*-"to exist." These combinations were then reanalyzed into the various grammatical category verb roots. This idea is particularly important in the study of Ryukyuan verb morphology; scholars have long accepted that the modern verb forms in most Ryukyuan languages were derived from a combination of the Continuative with the other R-Irregular verb *wor*- "to exist (animate)⁶."

The remaining two grammatical categories always appear with their select group of auxiliary verbs or particles. The Realis category, which is largely homophonous with the Imperative, is most often used with the

⁶ See the next section for a more detailed overview of previous studies.

particle *ba* in order to create a Provisional clause, with the particle *do* in concessive clauses, or in *kakari-musubi* with the emphatic particle *koso*. The large host of auxiliary verbs associated with the Irrealis category includes those used to express Causation, Negation, Intention, Conjecture, Negative Conjecture, and the Conditional. The Irrealis is also associated with a single auxiliary verb which expresses Passive, Honorific, Spontaneous, and Potential meanings.

Many earlier scholars based their analyses of Ryukyuan on the underlying concept that it was derived from Middle Japanese, or from a single Japanese-Ryukyuan Proto-Language that resembled Middle Japanese. They thus accordingly emphasized the traditional analysis of Middle Japanese in their studies. Later Ryukyuan language scholars began using some terms found in the (textbook) analysis of Modern Japanese, including the replacement of the "Realis" category with "Subjunctive" or "Conditional." Only the most recent scholars have begun to emphasize grammatical forms unique and important to the Ryukyuan languages. Atsuko Izuyama, for example, criticizes the use of the Conclusive label in her analysis of the Miyako dialects. She notes that the traditional framework associated with the Conclusive label "invites error" since it includes a narrow view of nonpast tense, while ignoring modal elements often found in Miyako sentence-final verbs (Izuyama 2003A, 68). Despite such changes, the traditional analysis of Early Middle Japanese remains the underlying grammatical perspective of most linguists working in this area of study.

III: Previous Analyses

One of the first modern scholars to examine the Ryukyuan language was the British-born Basil Hall Chamberlain, who taught at Tokyo Imperial University from the late 1800s into early 20th century. Chamberlain was the first to bring up the idea of a Continuative (which he called a Gerund) and wori compound verb, although he did not provide a systematic analysis of the phenomenon. He ascribed this compound wori (which he describes as wung, taken from the Shuri pronunciation of the verb) only to the Perfect form, although he also suggested that *wori* had influenced the Imperative form as well (Chamberlain 87, 91). He admitted a lack of concrete explanations for the nasal Conclusive suffix, although he did note that "we incline to regard" the suffix -mu as a likely origin (Chamberlain, 85). Chamberlain based his analysis of the Ryukyuan language entirely on the prestige dialect of Shuri from Okinawa Proper. Of Miyako and the other Southern Islands, he noted "their speech is said to diverge as markedly from Luchuan⁷ as Luchuan does from Japanese," but he did not explore these dialects in his study (Chamberlain, 3).

In a 1936 paper, Japanese scholar Seiwa Owan expanded on Chamberlain's ideas. He tried to derive the nasal element in the Conclusive forms of the verbs ari and wori from a process through which the Attributive forms aru and woru became used for the Conclusive, and after which the /ru/ segment in these verbs merged with $/\eta/$. Although \bar{O} wan's argument is not as convincing as that of later scholars, he did make a point of bringing in data

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⁷ "Luchuan" is an old spelling of Ryukyuan in English, based on the Chinese pronunciation of the name. This spelling is still sometimes used by scholars who wish to distance the language and culture from the term "Ryukyu," which is a romanization of the Japanese word for the islands.

from the Southern Islands in order to explore the historical possibilities of the entire Ryukyuan language system.

These previous works were further refined in the 1950s by Shirō, Hattori, who derived the nasal and r-based Conclusive forms separately. The r-Conclusive he derived directly from a combination of the Continuative form and *wori*, whereas the nasal Conclusive he determined to be a combination of the Continuative form and *woramu*. This *woramu* also comes from *wor*-through its Irrealis form *wora*- and the Intentional/Conjectural auxiliary verb *-mu*. Hattori suggests that at one point an Intentional/Conjectural-based semantic distinction existed between the r-Conclusive and the nasal-Conclusive, but that this distinction has been largely lost in the modern dialects (Hattori 1959). In a later paper, Hattori revised his theory to include data from the Southern Islands.

Most scholars since Hattori have followed his lead in incorporating both an /r/-based and an /m/-based form of *wori* in their reconstructions of the various Ryukyuan Attributive and Conclusive forms. Many such scholars are also somewhat enthusiastic in both reconstructing uniform change across verb forms, and in tracing the disparate dialects of various islands back into a single original source. Mitsunari Nakama, for example, ultimately derives the nasal and r-based Conclusive forms of the various Southern dialects from *kakiwormo and *kakiwori, with the Attributive forms deriving from *kakiworu in the following fashion (324-328):

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*kakiwormo → kakjəmo → kakjumo → kakum(o) → kakfum (Karimata) → kafuŋ (Nishihara)

kakim(o) → kakim (Hirara) → katsïm (Bora)

kakjum(o) → kakuŋ (Ōhama)
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*kakiwori → kakjəri → kakjuri → kakuri → kafuri → kafuri → kafu (Karimata)

→ kakiri → kakiri → kakiri → kakir (Hirara)

→ kakjuri → kakuri → kaku (Ōhama)

*kakiworu → kakjəru → kakjuru → kakuru → kafuri → kafuri → kafu (Karimata)

kakiru → kakiri → kakiri → kakiri → kakir (Hirara)

kakjuru → kakuru → kaku (Ōhama)
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While this approach seems plausible for the nasal Conclusive forms, it remains suspect that modern forms such as *kaku* (Yaeyama's Ōhama) and *kakï* (Miyako's Hirara) should have such complicated derivations, especially given the fact that Miyako's Conclusive and Attributive forms are often identical to both each other and the Continuative. The *wor*- based derivation for these verbs seems largely based on a desire to make the historical progress of the Southern dialects match that of the Northern dialects.

Chokujin Uchima, acknowledging the general differences between Northern and Southern dialects, examines Amami/Okinawa and Miyako/Yaeyama verb forms separately and traces two different histories for the two groups. According to his analysis, the Northern r-Conclusive forms derive from *kakiwori (177), whereas the Southern plain vowel Conclusive forms derive directly from *kaki (187). His derivation of the nasal Conclusive in the various Northern dialects is somewhat convoluted, but ultimately derives from *kakiworimu through an intermediate stage of *kakiuimu before branching off at least four more times (182). For the Southern dialects, he poses a relatively simple derivation from *kakimu (187). Uchima's Northern Attributive traces back to *kakiworu (183), whereas the Southern Attributive derives from *kaki in the same fashion as the plain-vowel Conclusive, with

which it is often homophonous in modern Southern dialects (190). Although Uchima's complete derivations are somewhat convoluted, he does take the important step of separating the Northern and Southern dialects in his reconstructions. Instead of attempting to derive the verb forms in both dialect groups through a Northern-inspired *-wori* compound, he traces two different paths for the evolution of verb morphology in these two regions.

With the Northern Conclusive and Attributive as derived forms of the Continuative, Uchima then goes on to give the following basic proto-forms for the Ryukyuan verbs (192):

	Volitional	Conditional	Imperative	Continuative	Prohibitive
Northern	*kaka	*kake	*kake	*kaki	*kaku
Southern	*kaka	*kake	*kake	*kaki	

This reconstruction not only contains redundant forms (Conditional, Imperative, and perhaps the Prohibitive), but also looks suspiciously like an Middle Japanese Quadrigrade consonant verb.

In a 1983 doctoral dissertation, Maner Thorpe reconstructs a Proto-Ryukyuan language, using the comparative method to create sound change laws and thus speculate at the original shape of Ryukyuan verb morphology. Below are his reconstructions for the Attributive, Infinitive (Continuative), and "Volitional 2" category, from which is ultimately derived the nasal Conclusive (154):

Attributive	Infinitive	"Volitional 2"	English
toro	tori	toriwomu	"take"
okero	oke	okewomu	"rise"
miro	mi	miwomu	"see"
sero	si	siwomu	"do"

ko(ro)	ki	kiwomu	"come"	
wo(ro)	wori	womu	"be"	

Under Thorpe's analysis, *wori* appears only in the Volitional. However, the forms given above are ultimate proto-forms, and Thorpe also reconstructs intermediate stages for various dialects that do involve a *wori*-derived imperfect evolving into the modern Conclusive and Attributive forms. His analysis, like Uchima's, uses the Continuative as an important base form from which later dialect forms arise. He ultimately suggests a Proto-Ryukyuan-Japanese present progressive of the form /*kakiwö(ri)/ from which two branches diverged: one that led to the *wori*-based forms found in the Northern Islands, and one that went from /kakwö/ to /kaku/, giving rise to the forms seen in the Southern Islands (Thorpe 254-255).

IV: Southern Dialects

A: Morphology

The previous analyses for the Northern Island language group are rather thorough, and their derivations seem rather straightforward. We thus focus our attention on the less-studied Southern Island language group. The various dialects in the Southern Islands tend to have two separate Conclusive forms. One of these forms contains a nasal element, while the other, unlike the Northern dialects, features a plain vowel suffix (usually /-u/ or / -ï/) that contains no trace of an original /r/. A look at various verb paradigms for Miyako and Yaeyama dialects reveals that the plain vowel Conclusive form and the Attributive form are identical in form for all dialects in which two Conclusive forms are given. For the most part, this similarity persists consistently throughout each paradigm, despite other morphological irregularities and regardless of conjugation. The most noticeable exception is Ishigaki, in which the plain vowel Conclusive is available only for consonant verbs and the irregular verbs *suru* "to do" and *kuru* "to come," leaving out vowel verbs and irregulars aru "to be," and woru "to be (animate)." Some of the traditionally irregular verbs also fail to complete the paradigm in Hateruma: both Conclusive forms exist for woru, but not for aru, and suru and *kuru* show slightly different forms for the plain vowel Conclusive and the Attributive. Yonaguni diverges greatly from the Miyako and Yaeyama groups, and shall be discussed later.

Putting aside the exceptions for now, this data shows that speakers in Miyako and Yaeyama have a single verb form that is used as both a Conclusive and an Attributive, a property which they share with speakers of Standard Japanese. This raises the question of whether or not the Ryukyuan

form results from the influence of its Standard Japanese counterpart. Particularly striking is the /-u/ ending found in Yaeyama, which appears to be identical to the Standard Japanese Conclusive-Attributive suffix. However, the Northern Islands for the most part do not exhibit a plain /-u/ suffix in any version of the Conclusive or Attributive forms. Most of these dialects make a clear distinction between the Conclusive and Attributive forms, and those that do have a combined Conclusive-Attributive form do not use the /-u/ morpheme. It is difficult to believe that a Standard Japanese phenomenon would infiltrate the Southern Islands from the Japanese mainland without touching upon the Northern Islands as well. It is more likely that the plain vowel Conclusive suffix results from an early development rather than a recent borrowing. The nature of this development is subject to debate.

Most scholars agree on the origins of the nasal element, subscribing to some form of a theory in which the nasal suffixes found in the Conclusive throughout the Ryukyu chain result from a proto-Japanese/Ryukyuan morpheme /*-amu/ or /*-womu/. These two morphemes themselves derive from combining the ancestors of modern *aru* and *woru* with the volitional morpheme /-mu/ (Hattori 1977, 96). Some scholars choose different shapes for the original "stative verb+/-mu/" form, often incorporating an /r/in the stative verb, but most agree that the modern nasal Conclusive stems back to a present progressive with the attached volitional morpheme⁸. Something resembling the form /*kakiwomu/ underwent various phonological changes in each of the dialects, resulting in the modern forms *kakim* (Miyako), *kakuN* (Ishigaki), *hakuN* (Hateruma) and *kaguN* (Yonaguni). The nasal Conclusive

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⁸ Uchima, for example, reconstructs *kakiworimu for the Northern Dialects and *kakimu for the Southern Dialects as the origin of the modern nasal Conclusive for kaku "to write" in these dialects (182,187).

phenomenon does not pervade Standard Japanese, suggesting that this innovation occurred after Japanese and Ryukyuan broke off from a single proto-language. Examples of nasal elements in the Conclusive are found in both Northern and Southern language groups, suggesting that the innovation occurred before any further historical split in the Ryukyuan languages. However, the nasal Conclusive may have been innovated at a later date and spread throughout the language groups, or could have been independently innovated in different regions.

The path of development of the plain vowel Conclusive/Attributive form in the Southern Islands, however, remains unclear. The form has no clear counterpart in the Northern Islands. As noted in Part III above, Nakama suggests that the plain vowel form ultimately derives from a long chain of events that begins with a suffix /*-wori/ (such that consonant verbs would have reconstructed forms similar to *kakiwori). From this starting point, the /-ï/ ending of Miyako and the /-u/ending of Yaeyama derive separately (324). Uchima takes a simpler route, deriving the both the /-i/ and /-u/ endings from *kaki (187). Thorpe traces the /- i/ and/-u/ Conclusive endings back to a Proto-Ryukyuan form *kakiwo, where /*-wo/ is a reconstructed earlier form of woru (254). Thorpe then compares *kakiwo to a Proto-Japanese/Ryukyuan Conclusive form restored as *kakiwö (255). If Thorpe is correct, the /-ï / and /-u/ Conclusive-Attributive suffixes are direct descendants of the earliest Conclusive morpheme in Proto-Japanese/Ryukyuan. The plain vowel Conclusive need not have come to the Southern Islands via the Northern Islands as a later development; rather, this plain vowel form would be the older form, which was later innovated by the Northern Dialects into a different form.

The *kakiwori theory, found in work like Nakama's and Thorpe's, seems to be influenced by data from the Northern Dialects, in which such a reconstruction is more likely. The data from the Southern Islands, in which the Conclusive-Attributive verb form ends a plain vowel with no stem change, hardly supports it. The Southern Island vowel verbs provide the only possible grounds for suspecting an original /*-wori/, since most show stems that alternate between containing an r and containing no r. However, the innovation of an /r/ in the vowel verbs can be considered a later innovation, as a similar process occurred in the transition of vowel verbs from Old to Modern Japanese. In fact, the mixed vowel verb paradigms in dialects like Ishigaki, featuring both/r/ and /r/-less verb shapes, support the idea that the an older /r/-less form was supplanted by a later innovation. By and large, especially when considering the highly regular consonant verbs, the argument for an original Conclusive-Attributive morpheme /*-wori/ is not supported by the data for the Southern Islands, and can only be argued by bringing in data from the Northern Islands.

B: Miyako and Yaeyama

Perhaps the best place to begin an analysis of the Southern Island dialects is the Miyako archipelago. In the Miyako dialect of Hirara, not only are the plain vowel Conclusive and Attributive forms identical to each other, but they are also identical to the Continuative⁹:

	SJC/A ¹⁰	Cont.	Conc./Attr.	Imperative	English
(5)	kaku	kakï	kakï	kaki	"write"

⁹ Data from Uchima (477)

¹⁰ SJC/A= Standard Japanese Conclusive-Attributive

(6)	iku	ikï	ikï	iki	"go"
(7)	osu	usï	usï	u∫i	"push"
(8)	tatsu	tatsï	tatsï	tat∫i	"stand"
(9)	kiru	kïsï	kïsï	kï∫i	"cut"
(10)	kiru	kïsï	kïsï	kï∫i	"wear"
(11)	keru	kiï	kiï	kiri	"kick"
(12)	toru	tuï	tuï	turi	"take"
(13)	suru	ssï	ssï	ssu	"do"

This triple use of the /-ï/ suffix in Miyako's Hirara gets to the heart of the mystery of Japanese language family verb history. Did the Continuative, Attributive, and Conclusive forms start out with a single original suffix and then split, or did the three forms begin separately and then merge in Miyako? Three possibilities present themselves:

- 1) The /-ï/ morpheme represents an earlier vowel that acted as the original suffix for the Continuative, Attributive, and Conclusive functions of the verb.
- 2) The /-ï/ morpheme is the original Proto-Miyako suffix (and by extension, possible Proto-Ryukyuan/Proto-Japanese suffix) used to express the Continuative, Attributive, and Conclusive grammatical functions. The /- ï/ later split into two separate morphemes (usually /i/ and /u/) in other dialects.
- 3) The /-ï/ morpheme represents two (or even three) distinct suffixes that have merged in Miyako, the most likely candidates being /-i/, /-u/, and/or some form of *wori*, such as Thorpe's /*-wo/.

In order to fully analyze this problem, it is important to understand the nature of the vowel /-i/ in question¹¹. In his entry for Miyako in the volume *Nihon Rettou no Gengo*, Karimata describes this vowel as "unrounded, with the edge of the tongue approaching the alveolar ridge in a manner similar to the articulation of the fricatives /z/ and /s/. At the same time, when exhalation is strong and the area between the tip and the center of the tongue raised, one can hear a fricative sound like a /z/ together with an /i/-like sound (1997a, 390)." According to Karimata, this latter phenomenon seems to manifest itself most markedly when the /i/ is in an environment between two unvoiced consonants, resulting in examples such as the following: pitu [pstu] (SJ hito, "person") and kisi [kssi] (SJ kuru, "to come"). Karimata also notes that this sibilantization is relatively weak or non-existent word-finally (1997a, 390).

In her analysis of Miyako, Atsuko Izuyama disagrees with Karimata's analysis of this vowel, maintaining that the sibilant consonants found accompanying the /ɨ/-like sound should be treated as a syllabic consonant /Z/, a phoneme separate and distinct from the /ï/ sound found elsewhere (Izuyama 2003A, 39). What seems to be going on here is a narrowing of the high central vowel /ï/ that produces sibilance in medial position. In order to investigate the nature of this process, let us examine some data from Izuyama

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 $^{^{11}}$ Some scholars use/i/or /I/to transcribe this vowel. Karimata uses a special symbol /i/to describe this sound in Miyako while using /i/for the corresponding vowel in Yaeyama, although most other scholars use the same symbol for this sound in both subgroups. For simplicity's sake, I have used /i/ for this vowel throughout this thesis.

 $^{^{12}}$ My translation. The original: 「唇の丸めをともなわず、舌縁が上の歯茎に近づき、摩擦音の z や s を調音するときのような挟めをつくっている。そうして、同時に、舌尖から中舌にかけてもちあがっていて、呼気が強いと、iの音色とともに、z のような摩擦音が聞こえてくる。」

showing the shapes of morpheme boundaries that arise when Miyako nouns are combined with the topicalizing particle /ja/ (41):

	Word-final mora	Shape with -ja	Example	Original Word	English
(14)) -bï	-bïza	kabïza	kabï	"paper"
(15)) -gï	-gïza	mugïza	mugï	"barley"
(16)) -kï	-kïza	kakïza	kakï	"stonewall"
(17)) -sï	-ssa	missa	misï	"white rice"
(18)) -tsï	-ttsa	nnuttsa	nnutsï	"life"
(19)) -dzï	-ttsa	tuttsa	tudzï	"wife"
(20)) -Z (ï)	-zza	mazza	maZ (maï) 13	"rice"
(21))		pizza	piZ (piï)	"needle"
(22))		tuzza	tuZ (tuï)	"bird"

This phenomenon seems to be associated with the palatal /j/ and diphthongs in which /ï/is the second element. Three tentative rules below:

Note that the gemination of consonants found in examples (17)-(19) above relates to a separate phenomenon as seen in the data below, from the same Izuyama article (41):

(23) -m -mma numma num "flea"

 $^{^{13}}$ Here, Izuyama uses her separate phoneme /Z/ where other scholars would use a /i/, so I added in parenthesis the same forms with /i/instead of /Z/ for reference. It is important to note that the final sound (be it /Z/ or /i/) in these words corresponds to Modern Japanese /i/.

 $^{^{14}}$ Although most scholars transcribe the Continuative-Conclusive-Attributive Miyako s-stem consonant verbs as ending in /sï/, Karimata usually transcribes them as /s/, suggesting that the /ï/ is also dropped word-finally after a fricative or an affricate. Interestingly, in Modern Japanese, high vowels are often devoiced between unvoiced consonants, and a similar (though not identical) devoicing process may be going on here.

(24)	-n	-nna	inna	in	"dog"
(25)	- W	-vva	navya	nav	"snake"

It is thus ambiguous as to whether the /-zza/ sequence in example 7-9 above results from an original /Z/ ending or /ï/ending, since both starting points can be explained by the rules above.

As earlier scholars make no note of this sibilance, it seems likely that what Karimata and Izuyama note is a relatively recent phonological phenomenon. The rules noted above could thus be considered a minor sidenote in the analysis of Miyako verb morphology. However, there does seem to be some sort of interaction between sibilance and the verb suffix /ï/ in the Ishigaki (Yaeyama) verb paradigm, and the above analysis will prove helpful in the analysis of these forms below. For the current discussion of Miyako, however, it is perhaps best simply to classify the /ï/ sound as some sort of unrounded high central vowel and set aside the sibilant phenomenon as a relatively recent development.

Theory 1: A Single Original Continuative-Conclusive- Attributive suffix

Since the Continuative, Conclusive, and Attributive verb endings in Miyako are completely homophonous, it seems odd for a sychronic analysis to separate them into three distinct categories, especially since this categorical system was created to reflect the separate language of Middle Japanese. It is perhaps even unnecessary to separate these three categories in a diachronic analysis—there is no internal reason to suppose that these Miyako suffixes were ever separate morphemes that converged. It is only upon comparing Miyako to other dialects that such a distinction becomes possible and even useful for diachronic analysis. For example, while the origin of the Miyako

Conclusive-Attributive /-i/ remains unclear, it makes sense to reconstruct the Continuative /-i/ as/*-i/ (in particular, over /*-u/) since the Continuative is associated with /-i/ in other Ryukyuan languages and in Middle and Modern Japanese . Looking at the Miyako data itself, it is clear that /i/ has shifted to /i/, most likely at the same time as /e/ shifted to /i/. For example, the Standard Japanese verb stem kir- "to cut" corresponds to the Miyako kis-, whereas SJ ker- "to kick" corresponds to the Miyako kir-. A quick reexamination of Izuyama's noun data above shows further evidence of a /i/ > /i/ shift¹⁵:

	SJ	Hirara	English
(26)	kami	kabï	"paper"
(27)	mugi	mugï	"barley"
(28)	kaki	kakï	"stone wall"
(29)	inochi	nnutsï	"life"
(30)	mai	maZ (maï)	"rice"
(31)	hori	piZ (piï)	"needle"
(32)	tori	tuZ (tuï)	"bird"

The /e/ > /i/ shift is evident in the Miyako Imperative /-i/ suffix, which corresponds to /-e/ in Standard (and Middle) Japanese.

¹⁵ This shift apparently did not occur when the /i/was adjacent to a nasal, as in this data from Karimata (1997a, 390):

SJ Hirara English mimi mim "ear" inu in "dog"

This phenomenon is perhaps related to the correspondence of the sequence /in/ and /nn/ in Izuyama's example for the noun "life" above.

Correspondences between /e/ and /i/ in Standard Japanese and Hirara elsewhere in the vocabulary support this shift¹⁶:

	SJ	Hirara	English
(33)	hatake	pari	"field"
(34)	hone	puni	"bone"
(35)	ame	ami	"rain"
(36)	ke	ki:	"hair"
(37)	me	mi:	"eye"

The above data confirms the existence of two changes, one in which /e/ went to /i/ and /i/ went to /ï/. Given these shifts and given the fact that the shape of the Continuative suffix is /-i/ in Middle Japanese and in many other Ryukyuan dialects, it seems safe to reconstruct an /*-i/suffix in the Continuative for Hirara.

Attributive endings, it is tempting to establish an /*-i/ as the ultimate source of the Hirara Conclusive-Attributive suffix as well as the Conclusive. It would then also be tempting to establish /*-i/ as the original, basic non-past verb suffix in the Japanese/Ryukyuan proto-language. There is some evidence to support both of these ideas. The scholars who derive the modern Conclusive-Attributive suffixes from a *wori* compound do so by combining *wori* with the Continuative (/-i/-suffixed) form. Furthermore, the Middle Japanese stative verbs *ari* and *wori* (described in the traditional analysis as irregular consonant stems) both feature an /-i/suffix in their Conclusive forms. If the modern Ryukyuan Conclusive-Attributive verb forms have evolved from very early compounds using these stative verbs (in either Japanese or Ryukyuan or both),

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¹⁶ Data from Karimata (1997a, 389-391).

then it would make sense that the stative verbs themselves have not changed on this point and retain the Continuative shape in the Conclusive¹⁷. Hattori also points out Standard Japanese forms such as *kakimono* "(a piece of) writing," which seem to use an /-i/ suffixed verb *kaki* in an Attributive function to describe the noun *mono* "object." (Hattori 1977, 98). Under this theory, then, the Hirara /-i/ suffix reflects the original /*-i/ suffix used for Continuative- Conclusive-Attributive verb functions in some earlier form of a Japanese-Ryukyuan mother language. The other descendants of this mother language would then have evolved separate suffixes in the Conclusive-Attributive form(s), most likely through Continuative-*wori* compounding.

Theory 2: An Original /-ï/

The high-central position of the /ī/ vowel in and of itself makes it equally likely that this vowel came from an original /*i/ or an original /*u/¹⁸. Is it possible that the original Continuative-Conclusive-Attributive suffix mentioned above was not /*-i/, but /*-ï/, as it remains in modern Hirara? This vowel could then have split into the /-i/ and /-u/ suffixes in languages where such a distinction exists, without need for an intermediate stage involving a compound verb (although the motivation for such a split would need to be investigated). This theory is similar to Thorpe's theory mentioned in section III above, in which he traces the /- ï/ and/-u/ Conclusive endings found in Miyako and Yaeyama back to a Proto-Ryukyuan form *kakiwo, where /*-wo/ is a reconstructed earlier form of *wori* (Thorpe, 254). Thorpe

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¹⁷ However, these two verbs do show a /-u/ in the Attributive in Old Japanese.

 $^{^{18}}$ Keeping in mind that what is normally transcribed as /u/ in Standard Japanese is a compressed high back vowel with minimal rounding, and the /i/ here is usually described as some sort of unrounded high central vowel, it is not unlikely that an /i/ reflects an earlier /u/ or vice versa.

then compares *kakiwo to a Proto-Japanese/Ryukyuan Conclusive form restored as *kakiwö. Instead of that /*-wo/ or /*-wö/, this theory postulates the /- ï/ itself as the original suffix.

As interesting as this idea is, it seems unlikely. Amongst all the subgroups of the Ryukyuan language(s) as well as Standard Japanese, the /ï/vowel is found only in some dialects in Miyako and Yaeyama. This means that the split of /- ï/ into two separate morphemes /-i/ and /-u/ would have occurred in the North (as well as in Standard Japanese), and in the extreme southwestern island of Yonaguni, while managing to avoid various islands of Miyako and Yaeyama in between.

Theory 3: Multiple Original Suffixes

Of the two theories mentioned so far, Theory 1 seems preferable over Theory 2, but is a single original /*-i/suffix for the Continuative-Conclusive-Attributive more likely than multiple original suffixes? Most dialects outside of Miyako do not show any evidence of a simple /-i/ suffix in the Conclusive or Attributive, with most of the Southern Islands featuring a /-u/ in the plain vowel Conclusive and the Attributive. The Yaeyama dialects often use the /-u/ ending in Conclusive and Attributive, contrasting with a /-ï/ or /-i/ in the Continuative. Yonaguni uses /-u/ in the Attributive, contrasting with an /-i/ in the Continuative and a nasal Conclusive (of the shape /-uN/). In fact, the Miyako dialects alone of all of the Ryukyuan languages show a consistent use of /-ï / in their Conclusive or Attributive form.

To shed more light on the matter, let us turn away from Miyako to the dialects of Yaeyama. Some Yaeyama dialects do show the /- ï/ morpheme in part of their Conclusive and Attributive paradigms. The cases of /- ï/

Conclusive-Attributive in Yaeyama pose an interesting alternation, which involves the connection between sibilant sounds and the /ï/ vowel mentioned above. For example, in this data from Yaeyama's Ishigaki¹⁹:

	SJ	Cont.	Conc./Attr.	Nasal Conc.	English
(38)	kaku	kakï	kaku	kakun	"write"
(39)	iku	ikï	iku	ikun	"go"
(40)	sinu	sïnï	sïnu	sïnun	"die"
(41)	jomu	jumï	jumu	jumun	"read"
(42)	tobu	tubï	tubu	tubun	"fly"
(43)	toru	turï	turu	turun	"take"
(44)	keru	kirï	kiru	kirun	"kick"
(45)	osu	usï	usï	usïn	"push"
(46)	kiru	kïsï	kïsï	kïsïn	"cut"/"wear"
(47)	niru	ne:sï	ne:sï	ne:sïn	"boil"
(48)	tatsu	tatsï	tatsï	tatsïn	"stand"
(49)	iu	idzï	idzï	idzïn	"say"
(50)	suru	sï:	sï:	sïn	"do"

The Yaeyama data shows an alternation between /u/ and /ï/ in the Conclusive-Attributive verb form, with /ï/ occurring exclusively after /s/. It makes sense to formulate an historical rule for Ishigaki in which:

Data from the Yaeyama island of \bar{O} hama supports an original distinction between /i/ and /u/²⁰

¹⁹ Data from Uchima (509-11)

²⁰ Data from Uchima (514)

	SJ	Cont.	Conc./Attr.	Nasal Conc.	English
(51)	kaku	kaki	kaku	kakun	"write"
(52)	sinu	sïnï	sinu	sïnun	"die"
(53)	jomu	jumi	jumu	jumun	"read"
(54)	tobu	tubi	tubu	tubun	"fly"
(55)	toru	turi	turu	turun	"take"
(56)	keru	kiri	kiru	kirun	"kick"
(57)	osu	u∫i	usu	usun	"push"
(58)	kiru	ki∫i	kisu	kisun	"cut"/"wear"
(59)	niru	ne:∫i	ne:su	ne:sun	"boil"
(60)	tatsu	tat∫i	tatsu	tatsun	"stand"
(61)	suru	∫i	su:	sun	"do"

This data shows a sharp distinction between the use of /-i/ in the Continuative and a /-u/ in the Conclusive-Attributive. The lack in Ōhama of both a Continuative /-i/ and of an Ishigaki-like suffix alternation in the Conclusive-Attributive supports the idea that the division between the Continuative and Conclusive-Attributive suffixes is original, and the overlapping of these two suffixes in Ishigaki (and Miyako) is a later development.

Examples elsewhere in Ishigaki vocabulary support these ideas²¹:

	SJ	Ishigaki	English
(62)	hito	pïtu	"person"
(63)	hige	pïni	"beard"
(64)	hitotsu	pïti:zï	"one" (thing)

²¹ Data from Karimata (1997b, 405).

(65)	chi	tsï:	"blood"
(66)	hi	pi:	"fire"
(67)	tori	turï	"bird"
(68)	su	sï:	"nest"
(69)	mai	mai	"rice"

This change of /u/ to /ï/ is a separate phenomenon from the merger of /i/ to /ï/that affected the Continuative suffix mentioned above. The appearance of /ï/ where Standard Japanese and other Ryukyuan dialects exhibit an /i/ is found elsewhere in Ishigaki vocabulary as well, reinforcing the theory that the Continuative /- ï/ derives from /* -i/. This data also reveals a correspondence of /u/ and / ï / after sibilants in examples (64) and (68) above. Additionally, noun example (69) suggests that /i/ has not gone to /ï/ in diphthongs, a theory backed up by the Continuative suffix of Ishigaki Hagyo verbs²²:

	SJ	Cont.	Conc./Attr.	Nasal Conc.	English
(70)	kau	kai	kau	kaun	"buy"
(71)	kuu	hoi	ho:	ho:n	"eat"
(72)	omou	umui	umo:	umo:n	"think"

The Ha-gyō verbs thus represent the older shape of the Continuative suffix, whereas this suffix has changed from /i/ to /ï/ in the other consonant verbs. A separate change has caused /u/ to merge with /ï/ after sibilant consonants, causing the alternation between the older /-u/suffix and the /-ï/ suffixes found in the Ishigaki Conclusive-Attributive.

omou, but its negative form is omowanai, with /-nai/ being the modern negative suffix.

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²² Data from Uchima (510). In the traditional analysis of Old Japanese, Ha-gyō verbs are Quadrigrade consonant verbs for which the stem consonant is /h/. Most of these verbs dropped the original /h/ from these stems, though it still appears in Modern Japanese as a /w/ in the modern equivalent of the Irrealis, that is, the Conclusive of the verb "to think" is

As a side note, the nasal Conclusive in Ishigaki shows the nasal element attached directly to what appears to be the Conclusive-Attributive form, and not the Continuative form, as $/\ddot{\imath}/$ appears in the nasal Conclusive only in dialects where it also appears in the Conclusive-Attributive. If the nasal Conclusive is based on the plain vowel Conclusive-Attributive, then this compound form probably did not become lexicalized (semantically indistinct from the plain vowel Conclusive) until *after* the $u > \ddot{\imath}$ post-sibilant merger. Furthermore, it casts doubt on the idea that the auxiliary verb -mu must be attached to the Irrealis form, including a Continuative + *wora-* compound form. The story of verb endings in Ishigaki thus goes like this:

- The Continuative verb suffix starts out as /*-i/. A single
 Conclusive-Attributive suffix starts out as /*-u/.
- /*-i/ merges with /-ï/, except in diphthongs and long vowels.
 (This merger does not occur in Ōhama).
- 3. /u/merges with $/\ddot{i}/after$ sibilants
- 4. A Conjectural/Intentional verb form develops combining the Attributive-Conclusive form with suffix /m/(or /mu/).
- (5.) The Conjectural/Intentional verb form mentioned in (4) becomes semantically indistinct from the plain vowel Conclusive.

Returning to Miyako, we can speculate a similar change to that in Ishigaki. As mentioned above, the Continuative verb ending /*-i/ merged with /- $\ddot{\imath}$ / in accordance with a general sound change (just as in Ishigaki steps (1) and (2) above). Did the /u/ > / $\ddot{\imath}$ / merger found in Ishigaki occur in Miyako as well? In his work on Hirara, Nakama notes a sound change in which /u/ goes to / $\ddot{\imath}$ / after sibilants²³:

²³ Data from Nakama, 209.

	SJ	Miyako	English
(73)	tsume	tsïmi	"nail, claw"
(74)	tsudzuku	tsïdzïfu	"continue"
(75)	mittsu	mi:tsï	"three (things)"
(76)	medzurasi	midzïrasïkan	"rare"

If the same $/u/ > / \ddot{\imath} /$ post-sibilant merger occurred in Hirara as in Ishigaki, then it possible that the same process that affected a subset of Ishigaki verb suffixes went a step further in Hirara. That is, Hirara, like Ishigaki, originally contained a /-u/ suffix in the Conclusive-Attributive. Under the $/u/ > /-\ddot{\imath} /$ post-sibilant merger , the Conclusive-Attributive suffix /-u/ merged with $/-\ddot{\imath} /$ in sibilant-final consonant verbs such as us- "push," tats- "stand," $k\ddot{\imath}s-$ "cut," and ss- "do." This change resulted in a Conclusive-Attributive suffix variation between /-u/ and $/-\ddot{\imath} /$ that was similar to the one that remains in Ishigaki. However, unlike in Ishigaki, speakers merged the rest of the Conclusive-Attributive /-u/ suffixes with $/-\ddot{\imath} /$ as well. Such a merger might be implausible, if the group of sibilant-stem verbs triggering the analogy did not contain the oft-used $ss\ddot{\imath}$ "do," used in light verb constructions. The pre-existing $/-\ddot{\imath} /$ suffix in the Continuative may have also influenced this process.

There does seem to be a tendency in Hirara to level the three categories of Attributive, Conclusive and Continuative. Data from the Ha-gyō verbs seems to show leveling occurring in the opposite direction, with the /-i/ (or original /*-i/) of the Continuative merging with the Conclusive-Attributive $/-u/^{24}$:

²⁴ Data from Uchima (478).

	Cont.	Cont.	Conc/Attr	Conc/Attr	Nasal	Imperative	English	
	(SJ)	(H)	(SJ)	(H)	Conc. (H)	(H)	English	
(77)	warai	baro:	warau	baro:	baro:m	barai	"laugh"	
(78)	kai	ko:	kau	ko:	ko:m	kai	"buy"	
(79)	kui	fo:	kuu	fo:	fo:m	fai	"eat"	
(80)	omoi	umu:	omou	umu:	umu:m	umui	"think"	

The historical merger of /o/>/u/ in Miyako²⁵ makes these /-o:/ endings extremely suspect. An original /-ï/(or /-*i/) suffix shared by the Continuative, Conclusive, and Attributive would result in a series of changes such as follows²⁶:

whereas an original /-u/ suffix in the Conclusive-Attributive would give:

To speculate a change of /-aï / ---> /-o:/ over a change of /-au/ to /-o:/ without any strong evidence would be a rather tenuous claim²⁷. This evidence points to an original /-u/ over /-ï/ in the Conclusive-Attributive endings of these verbs. The resulting /-au/ diphthong later changed into /-o:/, and the Continuative Ha-gyō verb forms changed by analogy to match the Conclusive-Attributive. Although it remains unclear why the h-based

²⁵ For example, SJ *otir-* "fall" vs. Miyako *utir-*; SJ *os-* "push" vs. M *us-*; SJ *tob-* "fly" vs. M *tub-* (Uchima 477-8). /o/ and /e/ are rarely found in any Ryukyuan dialect, although they do sometimes crop up in the long forms /o:/ and /e:/. These long vowels usually indicate the presence of an earlier diphthong.

²⁶ Hirara, unlike Ishigaki, seems to allow /ï/ in diphthongs, so it is most likely that the Continuative suffix in these verbs did merge /*-i/ with /-ï/ at some point.

²⁷ In fact, the diphthong /-aï/ is readily available in Miyako, as it is a vital part of the past tense morpheme²⁷: *kakitaï* "wrote," *jumitaï* "read," *utitaï* "fell." However, this /-taï/ is cognate to the Old Japanese /-tari/. The presence of this original /r/ could have prevented the merger of /-aï/ to /-o:/ in this case. Noun examples such as Izuyama's above-mentioned mai maZ (maï) rice

seem to confirm the modern occurrence of the $/a\ddot{\imath}/diphthong$ (or, under Izuyama's analysis, that $/a\ddot{\imath}/diphthong$ (or, under Izuyama's analysis).

consonant verb suffix merger would go towards the Conclusive-Attributive rather than to the Continuative, the fact remains that evidence for an original /-u/ in these verb suffixes is much stronger than evidence for an original /-ï/.

The nasal form in Hirara also has an /-ï / where most other Ryukyuan dialects (Northern and Southern) show a /u/, e.g., the Conclusive form of the verb "to write": kakim (Hirara), kakuN (Ishigaki), kaguN (Yonaguni), kakjuN (Amami)²8. Since the Miyako chain stands between the Northern Islands and the remaining Southern Islands, it is unlikely that the languages to the North and to the South innovated new, similar forms while Miyako alone retained the older form. It also remains rather unlikely that Miyako retained an ancient Conclusive-Attributive form like kaki while islands both to its north and south innovated forms like kakiwori or kakiwo, or split the morpheme /-ï/ into two separate vowels. It is much more likely that an historical changes similar to the one speculated above derived a /-ï/ ending from a /-u/ suffix.

A summary of changes in Hirara:

- (1) The Continuative suffix starts out as /*-i/, while the Conclusive-Attributive starts out as /*-u/.
- (2) /*i/ shifts to /i/ throughout Hirara, most likely at the same time that /*e/ shifts to /i/
- (3) /*u/ merges with /-i/ after sibilants
- (4) /au/ merges with /o:/
- (5) The Conclusive-Attributive suffix /*-u/ changes to /-ï /by analogy with the s-based consonant verbs affected by change (3) above. This

²⁸ Miyako data from Uchima (477); Ishigaki and Yonaguni data from Hirayama 1988 (728, 798); Amami data from Hirayama 1986 (914)

- process is perhaps also influenced by analogy with the Continuative.

 This process excludes the h-based consonant verbs.
- (6) The h-based consonant verb suffix levels towards the Conclusive-Attributive, based on analogy with the homophonous forms in the other consonant verbs.

The above analysis assumes a close historical relationship between Miyako and Yaeyama. The Kabira dialect, found on the northern part of Ishigaki Island (and thus physically closer to the Miyako chain than other regions in Yaeyama), shows remarkable similarity to Hirara²⁹:

	SJ	Cont.	Conc./Attr.	Nasal Conc.	English
(81)	kaku	kakï	kakï	kakïn	"write"
(82)	iku	parïn	parï	parï	"go"
(83)	toru	turï	turï	turïn	"take"
(84)	keru	kirï	kirï	kirïn	"kick"
(85)	osu	fusï	fusï	fusïn	"push"
(86)	kiru	kïsï	kïsï	kïsïn	"cut"
(87)	kiru	ki:	ki:	ki:run	"wear"
(88)	tatu	tatsï	tatsï	tatsïn	"stand"
(89)	suru	sï	sï	sïn	"do"
(90)	warau	ba:ro:	ba:rau/ba:ro:	ba:ro:n	"laugh"
		ba:rai			
(91)	kau	kau	kau	kaun	"buy"
		kai			

²⁹ Data from Uchima (518)

Kabira does show some differences with Hirara. As in Standard Japanese, the Kabira verb ki- "wear" is a vowel verb in contrast to kir- "cut," which is a consonant verb. Hirara has evolved a homophonous verb form for both meanings. However, the consonant verb suffixes in Kabira largely match those in Hirara, suggesting that some dialects in Miyako and Yaeyama have interacted with each other during their evolutions, and that the classification of certain dialects as belonging to "Miyako" or "Yaeyama" is largely geographical. The h-based consonant verbs show a particularly interesting pattern that seems to confirm the Ha-gyo changes in Hirara theorized above. The data in Miyako and Yaeyama points to two original suffixes: an /*-i/ in the Continuative and a /-u/ in the Conclusive-Attributive.

C: Yonaguni

Yonaguni, the westernmost island in the Ryukyus, is only 111 kilometers from Taiwan, as opposed to 509 kilometers from Okinawa proper and over 2000 kilometers from Tokyo, making it the most physically isolated island in the Ryukyu chain (Izuyama 2003B, 99). While Miyako and Yaeyama seem related, Yonaguni exhibits several features that distinguish it from its neighboring Southern Island language groups. The two differences most pertinent to the current discussion are the lack of the vowel /ï/, reinforcing the idea that /ï/ is an innovation that spread out from Hirara, and the exclusive use of the nasal Conclusive form for all Conclusive functions. The /-u/ suffix exists for the Attributive function only. This simplification of the verb paradigm exists in Yonaguni alone amongst all of the major Ryukyuan dialect groups³⁰:

³⁰ Data from Hirayama (1988, 798)

SJ	Cont.	Conc.	Attr.	Imperative	English
kaku	kat'i	kaguN	kagu	kagi	"write"
oyogu	'udi	'uguN	'ugu	'uŋi	"swim"
tobu	tubi	tubuN	tubu	tubi	"fly"
jomu	dumi	dumuN	dumu	dumi	"read"
matsu	mat'i	mat'uN	mat'u	mat'i	"wait"
tatsu	tat'i	tat'uN	tat'u	tat'i	"stand"
iu	'Ndi	'NduN	'Ndu	'Ndi	"say"
kiru	c'i	c'uN	c'u	c'i'i	"cut/wear"
osu	'ut'usi	'ut'uN	'ut'u	'ut'(u')i	"push"
korosu	kurusi	kuruN	kuru	kur(u')i	"kill"
kau	ka'i	kuN	kuru	ka'i	"buy"
kuu	ha'i	huN	hu	ha'i	"eat"
omou	'um(u')i	'umuN	'umu	'umu'i	"think"
warau	bara'i	baruN	baru	bara'i	"laugh"
toru	tu'i	tu(r)uN	tu(r)u	tu'i	"take"
	kaku oyogu tobu jomu matsu tatsu iu kiru osu korosu kau kuu omou warau	kaku kat'i oyogu 'udi tobu tubi jomu dumi matsu mat'i tatsu tat'i iu 'Ndi kiru c'i osu 'ut'usi korosu kurusi kau ka'i kuu ha'i omou 'um(u')i warau bara'i	kaku kat'i kaguN oyogu 'udi 'uguN tobu tubi tubuN jomu dumi dumuN matsu mat'i mat'uN tatsu tat'i tat'uN iu 'Ndi 'NduN kiru c'i c'uN osu 'ut'usi 'ut'uN korosu kurusi kuruN kau ka'i kuN kuu ha'i huN omou 'um(u')i 'umuN warau bara'i baruN	kaku kat'i kaguN kagu oyogu 'udi 'uguN 'ugu tobu tubi tubuN tubu jomu dumi dumuN dumu matsu mat'i mat'uN mat'u tatsu tat'i tat'uN tat'u iu 'Ndi 'NduN 'Ndu kiru c'i c'uN c'u osu 'ut'usi 'ut'uN 'ut'u korosu kurusi kuruN kuru kau ka'i kuN kuru kuu ha'i huN hu omou 'um(u')i 'umuN 'umu warau bara'i baruN baru	kaku kat'i kaguN kagu kagi oyogu 'udi 'uguN 'ugu 'uni tobu tubi tubuN tubu tubi jomu dumi dumuN dumu dumi matsu mat'i mat'uN mat'u mat'i tatsu tat'i tat'uN tat'u tat'i iu 'Ndi 'NduN 'Ndu 'Ndi kiru c'i c'uN c'u c'i'i osu 'ut'usi 'ut'uN 'ut'u 'ut'(u')i korosu kurusi kuruN kuru kur(u')i kau ka'i kuN kuru ka'i kuu ha'i huN hu ha'i omou 'um(u')i 'umuN 'umu 'umu'i warau bara'i baruN baru bara'i

This data is taken from Hirayama, though various sources report slightly different data for Yonaguni. Hirayama reports a single Conclusive suffix /-uN/ and a single Attributive suffix /-u/ for Yonaguni (Hirayama 1988, 798), while Uchima lists a second Conclusive form with the suffix /-i/, which appears to be identical to the Continuative (528). If Uchima's data is correct, Yonaguni is the only Southern Dialect which exhibits an indistinct Conclusive-Continuative form instead of an indistinct Conclusive-Attributive (like most of Yaeyama) or indistinct Conclusive-Infinitive-Attributive form (like Hirara and related dialects in Miyako). However, examples of the /-i/ Conclusive ending

appear in neither Hirayama, nor in the *Zenkoku Hougen Shiryou*³¹, the latter of which contains language data in context, as opposed to the isolated forms and sentences in Hirayama and Uchima. Izuyama also seems to agree with Hirayama, making no mention of an /-i/ Conclusive suffix in her analysis of the language (Izuyama 2003B, 115). Uchima's /-i/ suffix may be referring to a seemingly unrelated Inquisitive form mentioned in the *Nihon Rettou no Gengo* (which also makes no mention of an /-i/ Conclusive suffix). This Inquisitive construction involves attaching an /-i/ suffix to the Attributive form in order to make questions that expect an affirmative answer (Takahashi, 416). We shall thus dismiss the /-i/ Conclusive suffix from the analysis of Yonaguni. In another discrepancy between sources, Hirayama records complex glottalization patterns in his Yonaguni verb data, but neither Uchima nor Izuyama seem to take any note of this glottalization (Uchima, 529; Izuyama 2003B).

Yonaguni, unlike almost every other language subgroup in the Ryukyuan chain, did not adopt two Conclusive forms, instead ending up with the Conclusive function exclusively indicated by a nasal form, while the Attributive is marked with a /-u/ suffix. Since this /-u/ suffix usually represents both the Conclusive and Attributive functions in most of the Southern Islands, it seems likely that an earlier form of Yonaguni also contained a /-u/ suffix that did not distinguish between the Conclusive and Attributive. At some point, Yonaguni adopted the nasal Conclusive, creating a morphological distinction between the Conclusive and Attributive grammatical functions. While the /-u/ suffix ceased to be used with sentence-final verbs, it remained in use with Attributive functions.

³¹ See Hirayama 1988, pp. 796-824 and *Zenkoku* pp. 333-357.

However, it remains unclear as to whether the nasal Conclusive had already lost its semantic distinction with the plain vowel Conclusive by the time it reached Yonaguni. Yaeyama and Miyako retain both a nasal and a plain-vowel Conclusive, suggesting that the semantic distinction between the two lasted long enough for both forms to become firmly entrenched in the language. In fact, Izuyama suggests that the semantic distinction is still extant in Miyako. Noting that the nasal Conclusive is often used with the emphatic particle *do* (SJ *yo* or *zo*), she theorizes that the nasal conclusive is used exclusively for sentences in which the speaker expresses a judgment of some sort to a hearer (Izuyama 2003A, 62). Her examples for use of the nasal Conclusive include the following³²:

(107) A person who can make the judgment about the weather based on the conditions of the clouds or the lake:

atsa: kazji nu hukIm do:
tomorrow wind *subject part*. blow *emphatic particle*"Tomorrow the wind will blow."

(108) A person who raises Night-Blooming Cactus and knows all about them:

kunu pana: kju: ga ju: sakIm do:

this flower today *possessive part*. night bloom *emphatic particle*"This flower will bloom tonight."

According to Izuyama, the nasal Conclusive in Miyako still reflects the original Conjectural meaning of the auxiliary verb –*mu*, although whether the nasal Conclusive forms still reflect a productive process (adding an /-m/ to the Continuative-Conclusive-Attributive verb form) is unclear. What is clear,

³² This data is cited directly from Izuyama's paper on Miyako, pages 61-62, with my translation of the Japanese into English.

however, is that the existence of a distinction between the Conclusive and Attributive functions in Miyako and Yaeyama is based on this process. Miyako and Yaeyama show no distinction between the Attributive and Conclusive outside of the nasal Conclusive form. The nasal Conclusive itself is the result of a morphological process (either historical or contemporaneous) that created a semantic distinction for verbs in sentence-final position. Otherwise, the Conclusive and Attributive are indistinct from each other in Miyako and Yaeyama, just as they are in Standard Japanese.

Yonaguni, on the other hand, has lost the /-u/ suffix Conclusive completely, suggesting that it has lost all the semantic distinction between the nasal Conclusive and the plain-vowel Conclusive. Yonaguni has thus developed morphologically distinct forms for the Conclusive and Attributive, based on the grammatical functions of these two categories. It is possible to speculate that the nasal Conclusive never even had semantic significance in Yonaguni, and that Yonaguni instead borrowed the shape of the nasal Conclusive, but not its semantic properties, directly from Yaeyama or Miyako in order to distinguish the Conclusive from the Attributive. However, Yonaguni, like Yaeyama and Miyako, had no motivation to make a distinction between the Conclusive and Attributive without the semantic distinction provided by the nasal morpheme.

Whether or not the Yonaguni nasal Conclusive was ever semantically salient, it seems clear that it was in fact adopted from a similar form in Yaeyama and/or Miyako rather than imported directly from the Northern Islands (or developed independently). Not only is a borrowing from the Northern Islands geographically unlikely, but in addition the Yonaguni nasal Conclusive morpheme resembles the Yaeyama and Miyako nasal Conclusive

more closely than their Northern counterparts. In Yonaguni and the other Southern Islands, the nasal element of the nasal Conclusive seems to attach directly to the plain vowel Conclusive (in the case of Yaeyama and Miyako, the Conclusive-Attributive), rather than to the Continuative via a form of *wori* such as *womu* or *woramu*. In some Northern Island dialects, however, there is evidence for the latter pattern, such as this data from Amami's Tokonoshima³³:

	SJ	Conclusive	Nasal Conc./Attr.	Attributive	English
(109)	kaku	kakju'i	kakjuN	kakjuru	"write"
(110)	toru	turu'i	turuN	tururuN	"take"
(111)	warau	'waroru'i	'waroruN	'waroruru	"laugh"
(112)	ukeru	ʻukïru′i	ukïruN	ukïruru	"receive"
(113)	suru	sju'i	sjuN	sjuEru	"do"

The Northern Island dialects are discussed in detail later in this paper, but the /j/ phoneme found in the Tokonoshima Conclusive and Attributive forms supports the theory of an original Continuative-*wori* compound for these verbs. Yaeyama and Miyako show no such evidence, and Yonaguni even shows evidence to the contrary.

In Yonaguni, the shape of the verb stems before the nasal Conclusive and the Attributive is completely different from the Continuative stem. The nasal Conclusive and Attributive verb stems tend to resemble the stem found in the Imperative (originally suffixed with /e/, which then changed to /i/, as is common throughout the Ryukyus). The Continuative verb stem, however, shows a different shape from the other verb stems, including the Imperative, with which it shares an identical /-i/ suffix in the modern form. The

³³ Data from Hirayama 1986 (p. 911)

difference in the Continuative and the Imperative verb stems despite their currently identical suffixes suggests that whatever historical process caused the change in the Continuative stems completed itself before /e/ merged with /i/ in the Imperative. If the Continuative verb stem shape change in front of the /-i/suffix occurred before the Imperative suffix change, it must be an old change indeed, and if the nasal Conclusive and Attributive resulted from a Continuative/wori compound, they would most likely reflect the Continuative stem shape rather than the Imperative stem shape.

D: Southern Islands Conclusion

Under the third theory outlined above, the single plain-vowel Conclusive-Attributive suffix existed when Ryukyuan split off from Proto-Ryukyuan-Japanese (and perhaps existed in the earliest stage of the Ryukyuan-Japanese parent language). This Conclusive-Attributive suffix (most likely /-u/) differed from the Continuative suffix (most likely /-i/). The Ryukyuan branch then innovated the nasal Conclusive which either developed soon after the split with Japanese and thus penetrated all of the Ryukyuan subgroups at an early stage, or worked its way South after innovation in the North at a later date. Most dialects continued to use the nasal Conclusive in addition to the original plain vowel form, whose usefulness was kept alive by its double function as an Attributive. Yonaguni, however, ceased to use the /-u/ form as a Conclusive, but retained its Attributive function³⁴. The retention of both the nasal and plain vowel Conclusives in Miyako and Yaeyama results from a semantic distinction that lasted longer than it did in Yonaguni and still exists

³⁴ Since they display non-nasal Conclusive-Attributive forms that differ from the Southern Island /*-u/ ending, the Northern Islands must have either innovated another ending at some point in this sequence, or started out with a different morpheme.

to a certain extent. A brief summary of the history of the Conclusive and Attributive forms of the Southern Islands is as follows, according to this theory:

- 1. A single morpheme exists, representing both Conclusive and Attributive functions, of the shape /*-u/.
- 2. The nasal Conclusive form appears. It coexists with the /-u/ suffix Conclusive form in the Southern Dialects, as the two verb forms are semantically distinct.
- 3. Various sound changes occur in Miyako dialects, resulting in a single morpheme /- ï/ that represents Continuative, Conclusive, and Attributive.
- 4. The semantic distinction between the nasal and the /-u/ Conclusive forms disappears in Yonaguni, triggering the loss of /-u/ as a Conclusive, but retaining it for the Attributive. Or, Yonaguni adopts the shape of nasal Conclusive in order to distinguish the Conclusive and Attributive, but does not adopt the semantic distinction between the nasal and /-u/ Conclusives found in Miyako and Yaeyama.

V: Northern Dialects

The Northern Islands, consisting of the Amami and Okinawa groups, pattern differently from the Southern Islands. Some of these dialects do have an indistinct Conclusive-Attributive form, but they exhibit the nasal morpheme instead of the plain-vowel suffix. Also, use of a special verb ending for *kakari-musubi*, the phenomenon in which final emphatic particles trigger a change in the verb form, pervades the Northern Islands in a manner found neither in the South (where such forms do not exist) nor in Standard Japanese (where the such forms, which used to be salient, patterned differently).

The Southern Island data pointed to a theory in which the nasal Conclusive form was a later development that supplemented (and in the case of Yonaguni, supplanted) the original plain vowel Conclusive form. This plain vowel Conclusive was speculated to reflect an earlier proto-language form. If this is true, then the /*-u/ suffix Conclusive has been completely supplanted in most of the Northern Dialects. The plain vowel form is completely absent in Amami, although it remains in the Attributive of some Okinawa dialects. In the Sesokojima dialect, for example, a /-u/ Attributive suffix stands beside an single Conclusive-Attributive nasal suffix³⁵:

	SJ	Cont.	Nasal Conc./Attr.	Attributive	du-musubi	English
(114) kaku	haki	hakun	haku	hakuru	"write"
(115) tatsu	tatti	tattun	tattu	tatturu	"stand"
(116) tobu	tubi	tubun	tubu	tuburu	"fly"
(117) toru	tui	tuin	turu	tuiru	"take"
(118) warau	wara:i	wara:in	wara:ru	wara:iru	"laugh"

³⁵ Data from Uchima (357-61)

(119)) kuu	ke:	ke:n	ke:	ke:ru	"eat"
(120)) iu	?i:	?ju:n	?ju:	?ju:ru	"say"
(121) miru	mi:	mi:n	miru	mi:ru	"see"

If the /-u/ morpheme is in fact older, then Sesokojima must have gone through a process similar to that in Yonaguni, in which the nasal Conclusive replaced the vowel Conclusive, forming distinct nasal Conclusive and /-u/ Attributive forms. Unlike Yonaguni, however, at some point in Sesokojima, an indistinct Conclusive-Attributive form arose based on the nasal morpheme rather than the vowel morpheme. It is possible that Sesokojima and similar dialects adopted the semantic use of the Conjectural -mu morpheme in both the Conclusive and Attributive, whereas Miyako and Yaeyama dialects found semantic use for this morpheme only sentence-finally. In this case, in the North the nasal element would have developed simultaneously in the Conclusive and Attributive verb uses, but for some reason this nasal element supplanted an earlier plain vowel in the Conclusive, but not in the Attributive.

In Sesokojima and other Northern dialects, this double use of the nasal for both Conclusive and Attributive purposes is somewhat curious. In Standard Japanese, the merger of Conclusive and Attributive forms took place due to the loss of *kakari-musubi*. Sesokojima, like most Northern Ryukyuan dialects, maintains a *kakari-musubi* form distinct from the Attributive, suggesting that the merger of the nasal Conclusive-Attributive is unrelated to the Standard Japanese phenomenon. In fact, the /-ru/ sequence found in the Sesokojima (and most other Northern dialect) *kakari-musubi* appears to be the result of influence from Shuri, in which the *kakari-musubi* looks identical to the Middle Japanese *kakari-musubi* construction. Note that where distinctions were made in Middle Japanese between the Conclusive and the Attributive,

they were usually done so with the addition of a /-ru/ sequence to the Conclusive form:

Conjugation Type	Conclusive	Attributive	English
Quadrigrade	kaku	kaku(-)	"to write"
Upper Monograde	miru	miru(-)	"to see"
Lower Monograde	keru	keru(-)	"to kick"
Upper Bigrade	iku	ikuru(-)	"to live"
Lower Bigrade	uku	ukuru(-)	"to receive"
N-Irregular	sinu	sinuru(-)	"to die"
R-Irregular	ari	aru(-)	"to exist"
K-Irregular	ku	kuru(-)	"to come"
S-Irregular	su	su(-)	"to do"

The Northern Islands kept closer contact with both mainland Japanese, and with Shuri, the only dialect of the Ryukyuans with historical written records. Shuri, like Middle Japanese, uses a /-ru/ morpheme for both the Attributive and *kakari-musubi* functions. It is not difficult to suggest a path in which the /-ru/ Attributive-*kakari-musubi* form entered Shuri from Japan, especially through some sort of educated literary influence, and then spread out to the other Northern Islands from there. However, since the use of /-ru/ was literary and/or prestige based on Shuri, it was adopted in other dialects as a special, *kakari-musubi* form separate from the local Attributive morpheme. Most of the other dialects retained Attributive or Conclusive-Attributive forms distinct from this *kakari-musubi* form.

So the motivation for the merger of the Attributive and the Conclusive morphemes towards the nasal Conclusive in Sesokojima remains somewhat of

a mystery. However, comparison of Sesokojima with Okinawa's Izenamura implies that Sesokojima originally had the Attributive /-unu/ suffix as well³⁶:

	SJ	Cont.	Conc.	Attributive	du-musubi	English
(122)	kaku	katfi	kaʧun	kaʧunu	katfuru	"write'
(123)	tatsu	taʧi	taʧun	taʧunu	taʧuru	"stand"
(124)	kuu	kani	kanun	kanunu	kanuru	"eat"
(125)	nemuru	nu:i	nu:in	nu:inu	nu:iru	"sleep"
(126)	toru	tui	tuin	tuinu	tuiru	"take"
(127)	warau	warai	warain	warainu	warairu	"laugh"
(128)	niru	ni:	ni:n	ni:nu	ni:ru	"boil"
(129)	miru	ni:	nu:n	nu:nu	nu:ru	"see"
(130)	iu	?i:	?ju:n	?ju:nu	?ju:ru	"say"

This /-unu/ suffix was unrelated the /-un/ Conclusive suffix, which derived separately from the auxiliary verb -mu. The Attributive /-unu/ then lost the final /u/, most likely in analogy with the nasal Conclusive. If so, it remains a mystery why Sesokojima kept the older /-u/ form of the Attributive as well as the newer /-unu/ form. It seems clear that the /-u/ Attributive is older. Note for example, the Sesokojima for *toru* "take" ³⁷:

	SJ	Cont.	Nasal Conc./Attr.	Attributive	du-musubi	English	
(131)	toru	tui	tuin	turu	tuiru	"take"	
The /-ru/ in the kakari-musubi form has been applied directly to the							
Continuative, whereas the <i>turu</i> of the Attributive seems to guard a more							
primitive underived form. Note the loss of the /r/ before /i/, found so often							

³⁶ Data from Uchima (pp. 372-4)

³⁷ Data from Uchima (pp. 357-61)

in the Ryukyus, and that the /r/ has been guarded in the Attributive as a result of the plain /-u/ morpheme.

While it is doubtful that the Conclusive /-uN/, /-un/ and /-umu/ come from the same source as the Attributive /-unu/, these three Conclusive forms do appear to be related to each other. For example, it seems likely that the two Conclusive forms in Wadomari³⁸:

	SJ	Conclusive A	Conclusive B	Attributive A	Attributive B	English
(132)	kaku	hacju'N	hacjumu	hacjunu	hacjuru	"write"
(133)	toru	tu'ju'N	tu'jumu	tu'junu	tu'juru	"take"
(134)	tobu	tub(j)(i')N	tub(j)(i)mu	tub(j)(i)nu	tub(j)uru	"fly"
(135)	warau	'waro'ju'N	'waro'jumu	'waro'junu	'waro'juru	"laugh"
(136)	ukeru	ʻuki'ju'N	ʻuki′jumu	ʻuki'unu	ʻuki'uru	"receive"
(137)	suru	sju'N	sjuEmu	sjuEnu	sjuEru	"do"
descend from a similar source; Hirayama even lists them under a single						
Concl	usive he	eading rather t	than split ther	n into two. W	hile the South	ern
Island nasal Conclusives offer no clear evidence of an intermediary (such as						
wori) between the verb stem and the auxiliary verb -mu, most of the Northern						
Island stems are palatalized before the Conclusive and Attributive endings,						
supporting a form derived from compounding with /*-womu/ or						
/*-woramu/. An alternation between /-umu/ and /-u'N/ in Wadomari						
based on an original /*womu/ morpheme is certainly plausible. The						
Conclusive endings found in <i>kakjuN</i> of Tokunoshima, <i>kat∫un</i> of Izenajima,						
hakun of Sesokojima, and jumuN of Shuri can all be traced back to /*-womu/						
as well.						

³⁸ Data from Hirayama 1986 (839).

While many Northern dialects feature only a nasal Conclusive, some, like Tokunoshima, do seem to have a Conclusive form derived directly from *wori*³⁹:

	SJ	Conclusive	Conc./Attr.	Attributive	English
(138)	kaku	kakju'i	kakjuN	kakjuru	"write"
(139)	toru	turu'i	turuN	tururuN	"take"
(140)	warau	'waroru'i	'waroruN	'waroruru	"laugh"
(141)	ukeru	ʻukïru'i	ukïruN	ukïruru	"receive"
(142)	suru	sju'i	sjuN	sjuEru	"do"

The Conclusive in Tokunoshima could be derived from a /*-wo/ morpheme like the one put forth by Thorpe to explain the Southern Island data. However, the most plausible ancestor for /-u'i/ remains /*-wori/. While /*-wori/ did not particularly fit the Southern Island data, it well suits the Tokunoshima /-u'i/ ending, as it matches the loss of /r/ between /u/ and /i/ found in many other Ryukyuan language subgroups. While /*-wori/ as the ancestor of the plain vowels in the Southern Islands still seems like a stretch, a original morpheme /*-wori/ semantically distinct from /*-womu/ explains both the shape of the morpheme /-u'i/ and the reason why the two Conclusive forms remained distinct in Tokunoshima and similar dialects.

The last major (but relatively simple) puzzle in the Northern Islands data is the origin of /-unu/ as an Attributive morpheme. Uchima presents a reconstructed morpheme /*-woru/, which makes sense since some Northern dialects (including Shuri) still retain an /r/ in place of the /n/40. The history

³⁹ Data from Hirayama 1986 (p. 911)

⁴⁰ Uchima (183)

of the /-unu/ morpheme according to this theory would be something like this:

The /*-woru/ Attributive morpheme here also supports the theory of /*-wori/ as a Conclusive morpheme in Tokunoshima. As mentioned earlier, most of the Northern dialects, whether or not they have innovated the /-unu/ Attributive, use the /-uru/ suffix with the emphatic particle *du*, (equivalent of the Standard Japanese *zo*), which triggers use of the Attributive *kakari-musubi*. Instead of supposing that this /-uru/ came to the Ryukyus from Standard Japanese via Shuri, it is possible this morpheme derives from the intermediate step in this process from /-woru/ to /-unu/. It is possible that the dialects retained /-uru/ in this specific emphatic function while the /-unu/ form took hold in all other Attributive functions. It is important to note that Shuri retained the /-uru/ morpheme for all uses of the Attributive, including *kakari-musubi*, so the prestige use of /-uru/ in the *kakari-musubi* form could have influenced the use of this suffix in other Northern dialects.

VI: Conclusion

The Northern Island language groups show evidence of the existential verb *wori* in the history of their verb morphology, an idea that largely conforms to earlier research. Was wori ever active in the Southern Islands? Derivation from any form of *wori* that includes an /r/ seems impossible for the Southern language groups; no sign of it remains in the modern day suffixes. Thorpe's hypothetical form /*-wo/ certainly seems a plausible ancestor for /-u/, but is any form of wori even necessary to explain the modern data? Taking the data at face value, the simplest origin of the Southern Conclusive-Attributive seems to be a plain /-u/. None of the verb stem shapes in the Southern Islands are distorted in a way that would reflect the presence of an approximant like /w/, whereas such evidence usually appears in the North. Thorpe's path of /-wö/ to /-u/ hinges on the idea that this transformation occurred entirely within the suffix itself, without any influence on the adjacent phonemes in the verb stem. Furthermore, the nasal Conclusive forms found in the Southern Islands seem to be the result of /-mu/ attached directly to the /-u/ Conclusive-Attributive form, with no evidence of an intermediary based on *wori*. While a stage of development using a *wori* compound is not completely out of the question for the Southern Islands, postulating such a development seems unnecessary and probably would not have been attempted if not for the influence of the Northern Island data.

The Conclusive-Attributive suffixes in the various Southern Islands language groups seem to derive directly from /*-u/, and in many of these dialects, this /-u/ remains present in the modern verb paradigm. When innovating the nasal Conclusive, these dialects simply attached the nasal

conjectural morpheme directly to the Conclusive-Attributive form—a phenomenon rather unique to the Southern Ryukyu language groups. The Northern Island Conclusive, Attributive, and nasal Conclusive forms, on the other hand, show evidence of intermediate stages involving *wori*, as has long been speculated in the literature. The /-u/ based Conclusive-Attributive seems much older than the *wori* compounds, with the Northern Island forms derived later. In dialects like Sesokojima, the /-u/ morpheme stands alongside the derived forms, retaining a separate stem shape and supporting the idea that the /-u/ form is in fact older. It is also possible to imagine a scenario in which the Northern and Southern Ryukyuan languages broke off from two separate Japanese dialects, one of which used a *wori* compound and one of which did not. However, dialects such as Sesokojima suggest that the wori compound was not a primitive form in the dialect that first arrived in the Northern Islands, but rather a phenomenon that spread throughout these islands and replaced something that had been there already. If the Northern and Southern Ryukyuan language groups did in fact break off from two different Japanese dialects, the evidence for it will have to come from features of each dialect other than the Conclusive-Attributive suffix.

Interestingly, the /-u/ suffix found in the Southern Islands closely resembles the /-u/ Conclusive-Attributive suffix found in Standard Japanese, suggesting that both the Southern Islands and Japan have retained this older form, while the Northern Islands, located in the middle of these two, have diverged. The question remains as to what exactly the /-u/ Conclusive-Attributive suffix is—a simple suffix or an auxiliary verb attached to the stem. Serafim suggests that this /u/ itself may be an auxiliary verb with a meaning similar to *wori*, derived from a form **ur*- (perhaps originally *wur*-) (Serafim 98).

The origin of the /-u/ suffix remains a mystery, certainly one that dates back far into the history of the Japanese and Ryukyuan languages. One thing seems fairly certain—that this suffix found in the Southern Islands and mainland Japan is very old indeed, proven by its existence on both the main islands of Japan, and on the three most far-flung island groups in the Ryukyuan chain.

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