

Phonological Reduction and the (Re)emergence of Attributive Forms in Yaeyama Ryukyuan

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1 Introduction

In many Japono-Ryukyuan languages, there is a distinction between the conclusive and attributive forms of verbs. This distinction was lost in the transition from Old to Modern Japanese, in a process whereby a suffix that originally marked verbs as attributive was reanalyzed as a present tense marker. In this paper, we adduce evidence from Yaeyama Ryukyuan for an ongoing reanalysis going in the opposite direction, where a present tense suffix is being reanalyzed as an attributive marker.

Section 2 describes the attributive marker in Old Japanese and its reanalysis as a present tense suffix in Modern Japanese. Section 3 provides an overview of the conclusive-attributive distinction in two Ryukyuan languages, Okinawan and Yaeyaman. Okinawan is seen to have overt conclusive and attributive markers, while Yaeyaman only has overt conclusive marking, apparently lacking any analog of the attributive marker found in Old Japanese and Okinawan. Section 4 complicates this picture, showing that Yaeyaman

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stative present verbs show a surface contrast between attributive and conclusive forms that looks like the one seen in Okinawan. This is argued to derive from phonological reduction of the present tense suffix before the conclusive marker. The resulting surface forms, however, are driving a reanalysis of the present tense marker into an attributive marker. Section 5 considers the implications of the Yaeyaman reanalysis for how attributive marking has emerged in Ryukyuan. Section 6 concludes.

2 Attributive and Conclusive Forms in Japanese

In this section we present a basic overview of the attributive/conclusive distinction found in Old Japanese and the way in which this distinction was lost in Modern Japanese.

2.1 Old Japanese

Old Japanese was the language of Western Mainland Japan as spoken around the 7th to 8th centuries.¹ A comprehensive overview of the language can be found in Vovin (2004/2008), while Frellesvig (2010) describes Old Japanese and its later historical developments up to and including Modern Japanese.

Old Japanese verbs exhibit a morphological distinction between what are commonly known as the conclusive (*syuusi*) and attributive (*rentai*) forms. The conclusive form is alternatively known as the predicate form and generally appears sentence-finally, while the attributive form is alternatively known as the adnominal form and is generally used to modify noun phrases. The attributive form also appears in a construction known as *kakari-musubi*, in which it is used in sentences that contain any of the focus particles: =*zo*=*so*, =*ka*, =*ja*, or =*namu*. It can also be used to head nominalized clauses.

The conclusive and attributive forms for exemplars from the eight verbal conjugational classes in Old Japanese are laid out in Table 1, modified from a chart in Frellesvig (2010:54).² As can be seen, all Japanese verb classes other than the quadrigate class have distinct conclusive and attributive forms.³ In all verb classes where the conclusive-attributive distinction is marked, except for the *r*-irregular class, the attributive form consists of the conclusive form

¹ “Old Japanese” refers to a particular variety of Mainland Japanese, which is attested in written records of the time. This variety served as the basis for a written standard that was used until relatively recently, which is often called Classical Japanese. Old Japanese thus refers to an actual language variety spoken at a particular time and place, while Classical Japanese refers to a written standard that was based on this variety.

² The class known as the lower monograde, which contains only one verb *keru* ‘to kick’, is omitted, since it did not appear until Early Middle Japanese (Frellesvig 2010:228).

³ However, there is evidence of a difference in quadrigate forms as well in Eastern Old Japanese (with *-o* in the attributive). See a longer discussion in the footnote in Frellesvig (2008:190).

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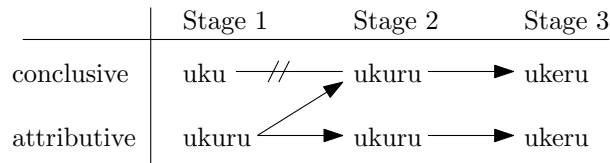
TABLE 1 Old Japanese Attributive and Conclusive Verb Forms

Conjugation Type	Conclusive	Attributive	English
Quadrigrade	kaku	kaku	“write”
Upper Monograde	(mi)	<u>miru</u>	“see”
Upper Bigrade	oku	<u>okuru</u>	“live”
Lower Bigrade	aku	<u>akuru</u>	“receive”
n-Irregular	sinu	<u>sinuru</u>	“die”
r-Irregular	ari	aru	“exist”
k-Irregular	ku	<u>kuru</u>	“come”
s-Irregular	su	<u>suru</u>	“do”

plus an additional *ru*.⁴ The conclusive form itself is formed from the verb root and a final *u*. The upper and lower bigrade verb roots end in the vowels *i* and *e* respectively; these root-final vowels are deleted in both the attributive and conclusive verb forms.

2.2 Modern Japanese

In the transition to Late Middle Japanese, the conclusive forms were replaced by the attributive forms,⁵ thought to be due to the increased usage of the *kakari-musubi* construction (Martin 1987:803), and the once-distinct conclusive and attributive markers fused into a single suffix. For the bigrade verbs, this apparently happened in two stages (Hattori 1959:344):



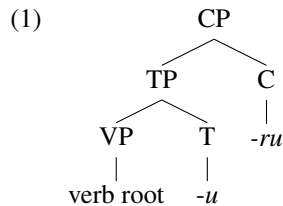
Before the collapse, the attributive verb form received additional morphological marking beyond that found on conclusive forms, via the suffix *-ru*. The *-u* attached to the verb root in both conclusive and attributive forms is treated by Nishiyama (2000) as a present tense suffix, cognate with the one found in Modern Japanese. He argues that all Old Japanese attributive verb forms contain an underlying attributive morpheme *-ru*, which ends up deleted or fused with the present tense suffix *-u* in the quadrigrade verbs, but pre-

⁴Martin (1987:805) reconstructs the stem as *a- with a *ra- formant originally, so there is potential evidence of the attachment of *-ru* as an attributive marker to the r-irregular stem as well.

⁵The n-irregular *sin-* ‘to die,’ however, regularized to the conclusive form.

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served on the surface for the remaining verbs.⁶ According to this analysis, the underlying morphosyntactic structure of attributive verb forms is as follows (Nishiyama 2000:268):



In this analysis, the “conclusive” suffix *-u* is a present tense marker, cognate with the present/non-past tense marker found in Modern Japanese (Nishiyama 2000:265). Under this view, the conclusive form in Old Japanese is marked only negatively, by the absence of the attributive suffix *-ru*.

As pointed out by Kaplan and Whitman (1995), the collapse of attributive and conclusive forms was due in effect to a reanalysis of the attributive marker *-ru* as the present tense suffix *-u*. This reanalysis was made possible by a partial homophony of the two suffixes, along with the fact that the quadri-grade verb class, to which belonged a bulk of Old Japanese verbs, lacked a conclusive-attributive distinction. When this reanalysis was complete, the attributive morpheme was lost from Japanese, and with it the system of C-marking via inflectional morphology on the verb. The history of Japanese thus presents a situation in which the attributive C marker was reanalyzed as a tense morpheme and absorbed into the tense marking system, leading to a loss of distinctive CP level morphology.⁷

⁶Nishiyama cites a different conclusive form for monograde verbs than that cited here; we ignore this class in this discussion. The disparity likely stems from the fact that Nishiyama’s analysis is targeted at Classical Japanese, which as discussed earlier is an artificial written standard, rather than a particular spoken language variety used at a particular time and place. We ignore the monograde verbs in the discussion that follows.

⁷Frellesvig (2010:53) argues that the conclusive suffix (or rather, the conclusive form) did not encode present tense in Old Japanese, since the conclusive-attributive distinction was made on various auxiliaries, some of which encoded past tense. According to Frellesvig, the collapse of the conclusive-attributive distinction described above laid the ground for a reanalysis of the resulting forms as encoding non-past tense, in opposition to past tense forms that derived from Old Japanese auxiliaries that originally themselves exhibited the conclusive-attributive contrast. This reanalysis of the conclusive-attributive verb forms as non-past tense forms occurred in Late Middle Japanese (Frellesvig 2010:332). Although this complicates the picture described above, the end result is still one in which the original attributive suffix is first lost through fusion with the partially homophonous suffix that precedes it, and the resulting suffix is then absorbed into the tense marking system, rather than the C system to which the attributive marker originally belonged.

3 Conclusive and Attributive Forms in Ryukyuan

3.1 An Overview of Ryukyuan

The Ryukyuan languages constitute the only sister language group with (Mainland) Japanese. The Ryukyuan languages are spoken from the Amami islands in the southern part of Kagoshima Prefecture to Yonaguni island in the southwest reaches of Okinawa Prefecture next to Taiwan. Uemura (2003) and Shimoji and Pellard (2010) provide overviews in English of the Ryukyuan language group. There is a great deal of diversity within Ryukyuan, with recent research typically dividing the language group into 5 or 6 mutually unintelligible languages, which are divided at the topmost level into the Northern and Southern Ryukyuan language groups. Pellard (forthcoming) adduces a variety of evidence that the Ryukyuan language group as a whole split from Mainland Japanese before the Old Japanese period. Old Japanese and Proto-Ryukyuan are thus sister languages. All varieties of Ryukyuan are highly endangered, with the youngest fluent speakers typically in their forties or fifties in the healthiest varieties, and in their eighties or older in the most endangered varieties.

Many Ryukyuan languages show a distinction between attributive and conclusive verb forms similar to that found in Old Japanese. Although the details differ from Old Japanese and between individual Ryukyuan languages, many Ryukyuan languages require the attributive form in adnominal positions, as well as in clauses including focus particles like *du* and its cognates, a pattern that is typically treated on a par with the Japanese *kakari-musubi* construction. There is a large literature on this topic, in particular by Leon Serafim and Rumiko Shinzato; see for starters Shinzato and Serafim (2013). Here, we focus on data from Okinawan and Yaeyaman. To a first approximation, it appears as though Okinawan has complementary suffixes marking conclusive and attributive forms, while Yaeyaman lacks a distinct attributive marker.

3.2 Okinawan

In Okinawan, both conclusive and attributive marking exist for all verbs. For simple present tense verbs, the conclusive forms are marked by the suffix *-n*,⁸ which follows tense markers such as the present tense suffix *-u*. Attributive forms are marked by *-ru*, paralleling what we saw for Old Japanese. The

⁸The *-n*-final form is traditionally treated on a par with the conclusive form in Old Japanese, because it is found in roughly the same set of environments, contrasts with the attributive form, and like the conclusive form seems to be blocked in certain *kakari-musubi* constructions. It seems very likely that this morpheme, variants of which are found throughout the Ryukyuan language family, is not simply a “conclusive” marker, but has particular semantic effects related to mood, modality, or evidentiality, varying across different Ryukyuan languages. The *-n* suffix surfaces as *-m* in those varieties that allow distinctive bilabial coda nasals, and is believed to be related to the final *-mu* appearing in the Old Japanese volitional/conjectural form (Uemura 2003:85).

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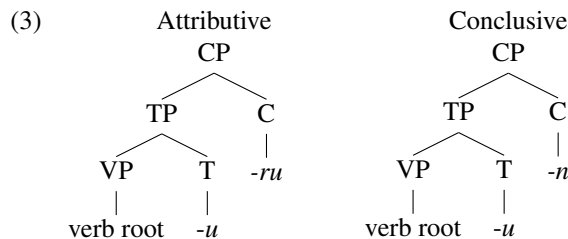
attributive suffix follows tense morphology, including the present tense suffix *-u*. Comparisons of the conclusive and attributive forms are given below for simple present tense verbs from Shuri/Naha Okinawan (the de-facto standard dialect of Okinawa Ryukyuan):

(2) Shuri/Naha Okinawan Verb Forms

	Conclusive	Attributive
“write”	katʃ-u- n	katʃ-u- ru
“row”	kuudʒ-u- n	kuudʒ-u- ru
“go”	itʃ-u- n	itʃ-u- ru
“exist” (inanimate)	a- n	a- ru
“exist” (animate)	wu- n	wu- ru

Okinawan thus exemplifies a pattern in which there are complementary markers for both conclusive and attributive forms, in contrast to Old Japanese, in which only the attributive form is given additional marking. The attributive marker appears identical to that found in Old Japanese, but seems to have been regularized to the entire verbal paradigm.

Following Nishiyama’s (2000) treatment of Old Japanese, we treat Okinawan *-ru* as spelling out a C head; although there are differences between the syntactic distribution of attributive-marked clauses in Old Japanese and Ryukyuan, we will assume that in both languages *-ru* fills the same morphosyntactic slot. The conclusive marker *-n* we also treat as filling the C slot.⁹ This view receives support from those varieties of Ryukyuan (such as Okinawan) in which conclusive *-n* and attributive *-ru* markers are in complementary distribution (Miyara 2011). This picture is illustrated in the following diagrams:



Okinawan thus presents a development that is essentially the opposite of that seen in Japanese. Whereas as in Japanese the loss of the attributive marker

⁹ Sugahara (1996) calls these morphemes in Okinawan “modal heads”, and places them in a node labeled M, while Miyara (2011) calls them mood morphemes. For our purposes, these differences are immaterial. The crucial idea is that *-n* and *-ru* occupy the same morphosyntactic slot (and are thus in complementary distribution), and that this slot directly follows the one that encodes tense.

led to a verbal paradigm lacking any suffixes that occupy the C slot, Okinawan seems to have generalized the attributive marker across the entire verbal paradigm, and also innovated a novel conclusive C suffix that stands in complementary distribution with *-ru*.

3.3 Yaeyaman

Like Okinawan, simple present tense verbs in Yaeyaman can host the conclusive suffix *-n*.¹⁰ Unlike Okinawan, however, they lack any additional marking of the attributive form. Comparisons of the conclusive and attributive forms of simple present tense verbs in Miyara Yaeyaman are given below:¹¹

(4) Miyara Yaeyaman Verb Forms

	Conclusive	Attributive
“write”	kak-u-n	kak-u
“row”	kuug-u-n	kuug-u
“go”	har-u-n	har-u
“exist” (inanimate)	a-ru-n	a-ru
“exist” (animate)	u-ru-n	u-ru

Patterns like these have often led researchers to the conclusion that Southern Ryukyuan (as exemplified here by Yaeyaman) lacks any overt attributive marking (Uemura 2003:84). Genuardi (2008:44), for example, writes: “Miyako and Yaeyama show no distinction between the Attributive and Conclusive [=predicative] outside of the nasal Conclusive form Otherwise, the Conclusive and Attributive are indistinct from each other in Miyako and Yaeyama, just as they are in Standard Japanese.” Data from our own fieldwork paints a more complex picture. In the next section we show that Yaeyaman present tense verbs with stative aspectual morphology have surface forms with Okinawan-style contrasts between a final *-ru* and *-n*.

3.4 Summary

The attributive-conclusive marking paradigms for the four languages discussed above are summarized in Table 2. These languages represent the four logical possibilities for expressing the conclusive-attributive distinction. Okinawan has a designated morpheme for both forms, while Modern Japanese fails to make the distinction at all. In between we have Old Japanese, which marks only the attributive form with additional morphology, and Yaeyaman, which marks only the conclusive form.

¹⁰ See Izuyama (2003:95-101) for a discussion of *-n* in Miyara Yaeyaman. Davis and Lau (forthcoming) call this morpheme in Miyaran an indicative mood marker.

¹¹ Yaeyaman data are from the authors’ own fieldwork notes unless noted. Transcriptions follow the conventions laid out in Davis and Lau (forthcoming).

TABLE 2 Conclusive and Attributive Marking Contrasts

Language	Conclusive	Marked?	Attributive	Marked?
Okinawan	nindʒ-u- n	+	nindʒ-u- ru	+
Yaeyaman	nib-u- n	+	nib-u	–
Old Japanese	n-u	–	n-u- ru	+
Mod. Japanese	ne-ru	–	ne-ru	–

These distinctions are based on simple present tense verb forms in the four languages. As we show in the next section, verb forms with additional aspectual morphology suggest that Yaeyaman is in the process of developing a new attributive marker in a subset of its verbal forms.

4 A Closer Look at Yaeyaman

4.1 Stative Present Verb Forms

The observations made above were made on the basis of simple present tense verb forms, consisting of the verb root and the present tense morpheme *-u*. We now turn to the stative present¹² forms of these verbs in Yaeyaman. In Miyara Yaeyaman, the stative present is formed by insertion of the suffix *-í* between the verb root and the present tense suffix *-u* (Davis and Lau forthcoming:11). The acute accent on *-í* represents an inherent accent on this morpheme, realized as the locus of a pitch peak and subsequent fall in the resulting word. This lexical accent will be seen below to play a crucial role in the phonology of the resulting conclusive verb forms.

Given the above morphological breakdown of the stative present, and also that epenthetic *r* is systematically inserted to break hiatus between two vowels in separate morphemes,¹³ we would predict the conclusive and attributive stative present forms for the regular consonant-final verb root *kak-* ‘to write’ to be as follows:

- (5) a. Predicted Conclusive: /kak-í-u-n/ → *[kakírún]
 b. Predicted Attributive: /kak-í-u/ → [kakíru]

The predicted attributive form is correct; however, the conclusive surfaces as [kakín] rather than the expected *[kakírún]. It appears that the present suffix *-u* is deleted in the conclusive, but not in the attributive. The same pattern holds for other verbs as well, as shown in Table 3. Shiraho, another distantly related variety of Yaeyaman, exhibits the same pattern, as shown in Table 4.¹⁴

¹² See Davis and Lau (forthcoming) for discussion of this form in Miyara Yaeyaman. This form could also be called the present progressive.

¹³ This process is common in Japonic languages, including in Modern Japanese.

¹⁴ Phonetically, the attributive morpheme is *-ro* when used phrase-finally in Shiraho. However,

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TABLE 3 Miyaran Stative Present Verb Forms

Attributive	Predicted Conclusive	Attested Conc.	
<i>kak-í-ru</i>	* <i>kak-í-ru-n</i>	<i>kak-í-n</i>	‘is writing’
<i>jum-í-ru</i>	* <i>jum-í-ru-n</i>	<i>jum-í-n</i>	‘is reading’
<i>uk-í-ru</i>	* <i>uk-í-ru-n</i>	<i>uk-í-n</i>	‘has gotten up’
<i>ut-í-ru</i>	* <i>ut-í-ru-n</i>	<i>ut-í-n</i>	‘has fallen’

TABLE 4 Shiraho Stative Present Verb Forms

Attributive	Predicted Conclusive	Attested Conc.	
<i>kak-é-ru</i>	* <i>kak-é-ru-n</i>	<i>kak-é-n</i>	‘is writing’
<i>jum-é-ru</i>	* <i>jum-é-ru-n</i>	<i>jum-é-n</i>	‘is reading’
<i>ug-á-ru</i>	* <i>ug-á-ru-n</i>	<i>ug-á-n</i>	‘has gotten up’
<i>ut-á-ru</i>	* <i>ut-á-ru-n</i>	<i>ut-á-n</i>	‘has fallen’

4.2 Phonological Analysis

Given that *-ru* marks present tense in the attributive stative forms seen above, its absence in the predicative form with final *-n* must result from deletion of the underlying present tense suffix. We call this the *phonological analysis*:

- (6) Phonological Analysis: The stative present conclusive verb, whose surface form is [V-í-n], is derived from underlying /V-í-u-n/, from which the present tense marker *-u* has been deleted. The final *-ru* in the stative present attributive results from epenthesis of *r* before the present tense marker *-u*.

In this analysis, an underlying vowel sequence /iul/ is avoided by epenthesis of *r* in the attributive and by deletion of *u* in the conclusive. This raises the question of why the repair process should differ for the two forms.

We argue that this difference results from two related features of syllable accent in Yaeyaman, in combination with a need to eliminate vowel hiatus. The underlying vowel sequence /iul/ is eliminated in both conclusive and attributive forms, a fact that we attribute to the pressure of a NOHIATUS constraint:

- (7) NOHIATUS: No vowels may be adjacent.

As mentioned above, the stative suffix bears a lexical accent; there is a phonological pressure for this accent to be faithfully realized in surface forms.¹⁵ In

-ru is used in adnominal and pre-clitic positions.

¹⁵ See Davis and Lau (forthcoming) for evidence for the existence of this accent in Miyara Yaeyaman. The existence of the accent in Shiraho Yaeyaman is based on currently unpublished data collected by Lau.

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addition, there is a strong tendency (undescribed, as far as we are aware) in Yaeyaman for heavy syllables to host a pitch peak, phonetically identical to the pitch peak associated with lexical pitch accents.¹⁶ These two pressures (the faithful encoding of underlying lexical accents and the surface accentualization of heavy syllables) are enforced by the following constraints:

- (8) NOSHIFT: The location of a stress does not shift. (Alderete 1999)
- (9) WSP: Heavy syllables are stressed. (Prince 1983)

The conclusive suffix *-n* creates a coda, making the syllable it attaches to heavy. Given the requirement that heavy syllables are stressed, this triggers a prominence on the preceding present tense suffix *-u*. However, this leads to a clash of adjacent accents (**kakírún*), which is militated against by **CLASH*.

- (10) **CLASH*: No stressed/accented syllables are adjacent. (Prince 1983)

The accentual clash in the conclusive form is resolved by deletion of the present tense suffix *-u*, giving a surface form that satisfies in a single accented syllable both the preservation of the lexical accent on *í* and the requirement that the heavy syllable formed by attachment of *-n* receive a prominence.

As illustrated by the tableaux in Table 5, the above four constraints need not be ranked with respect to one another, but must all outrank MAX and DEP. In order to account for the epenthesis of *r* in the attributive form, MAX must outrank DEP. This underlying preference for epenthesis over deletion is overridden in the conclusive form, due to the accentual pressures described above. The tableaux in Table 5 are based on a consonantal verb root in Miyaran. The same ranking can also account for vocalic verb roots, as well as for the stative present forms in Shiraho, but we leave out the relevant tableaux and discussion for reasons of space.

4.3 Grammatical Reanalysis and Flux

The deletion process described above results in surface forms in which *-n* sits in apparent opposition to *-ru*. This opens the way for the following reanalysis:

- (11) Attributive (Re)Analysis: The present stative form of verbs consists of the verb root and the marker *-í*, / V-*í*/. The attributive is marked by *-ru*, while the indicative predicative form is marked with *-n*. The two markers are in complementary distribution.

This (re-)analysis leaves mysterious why there is no overt attributive marking in the simple present verb forms. It is also unclear where the present tense verb semantics would come from in the absence of an underlying present

¹⁶This generalization is also based on observations from the authors' own fieldwork; we put aside discussion of further details and evidence for reasons of space.

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TABLE 5 Tableaux for Attributive and Conclusive Present Verb Forms in Miyara

Input: /kak-í-u/	NOHIATUS	*CLASH	NOSHIFT	WSP	MAX	DEP
a. kakíu	*!					
b. kakíru						*
c. kakí					*!	
d. kaku					*!	
Input: /kak-í-u-n/						
a. kakíun	*!			*!		
b. kakírun				*!		*
c. kakírún		*!				*
d. kakirún			*!			*
e. kakín					*	
f. kakún			*!		*	

tense suffix *-u*. Despite these obstacles to full reanalysis, there is evidence from past tense verb forms in both Miyaran and Shiraho that such a reanalysis may be taking place. The following examples illustrate conclusive and attributive past tense stative verbs in Miyaran:

- (12) a. mizī num-í-da
 water drink-STA-PST
 ‘(Someone) was drinking water.’
 b. mizī num-í-da(-ru) pītu¹⁷
 water drink-STA-PST(-ATT) person
 ‘A person who was drinking water.’

As seen in (12a), the conclusive marker *-n* is not found with the past tense suffix *-da* (see Davis and Lau forthcoming for discussion of this fact). In attributive position, however, there is an optional marker *-ru* that may be attached after the past tense suffix. Given the past tense semantics of the resulting form, this marker cannot be analyzed as a present tense suffix. Instead it seems to be an attributive marker, suggesting that the grammatical reanalysis sketched above may be occurring in Miyaran. The marker is not, however, mandatory. This area of the grammar, then, appears to be in a state of flux.

¹⁷ In predicate position, however, *-ru* is not permitted: mizī(=du) num-í-da(*-ru).

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Past tense forms in Shiraho seem to be in a later stage of reanalysis than Miyaran, as illustrated by the following examples:

- (13) a. mizi num-é-ta-n
 water drink-STA-PST-IND
 ‘(Someone) was drinking water.’
- b. mizi(=du) num-é-ta-ro
 water(=FOC) drink-STA-PST-ATT
 ‘(Someone) was drinking water.’
- c. mizi num-é-ta-ru¹⁸ pitu
 water drink-STA-PST(-ATT) person
 ‘A person who was drinking water.’

The Shiraho form appears to be at a later stage of reanalysis than Miyaran, as both conclusive and attributive past tense forms *must* be followed by an additional ending (if not *-n* or *-ru*, then a clitic). We suggest that in Shiraho the reanalysis we proposed for Miyaran has been completed, so that in past tense forms the marker *-ru* has been fully reanalyzed as an attributive marker, and that this reanalysis has furthermore paved the way for complementary marking with the conclusive *-n* on past tense verbs (13a), which is not allowed in Miyaran (12a).¹⁹

In summary, while the simple present form does not have any attributive marking, the phonological deletion of the present tense marker *-u* in the stative present conclusive form, along with *r* epenthesis in the attributive, leads to a surface contrast between a conclusive form ending in *-n* and an attributive one ending in *-ru*.²⁰ The present tense marker *-ru* is then reanalyzed as an attributive morpheme and past tense forms subsequently may (in Miyaran) or must (in Shiraho) host an attributive marker. Yaeyaman languages show a transition period in which the attributive marker is becoming more productive, but is still blocked in simple present forms.

¹⁸ *-ru* is alternatively pronounced *-nu*. At present, it is unclear whether *-ru* and *-nu* are in free variation. At the very least, however, *-nu* is not permitted when the attributive is in predicate position (as in the *kakari-musubi* construction).

¹⁹ An alternative analysis would be that Shiraho exemplifies a more conservative system, in which attributive and conclusive marking were robustly distinguished on past tense verb forms, and that this distinction is being lost in Miyaran. It is beyond the scope of this paper to consider the relative merits of this alternative account, but we think it unlikely that the conclusive would drop off of past tense suffixes completely, leaving an optional attributive suffix. We instead think that the restriction of *-n* to present tense forms in Miyaran reflects a fact about the historical semantic content of *-n*, which has subsequently been bleached in other Ryukyuan varieties.

²⁰ An analogous pattern holds for the resultative present verb forms; see Davis and Lau (forthcoming) for data and discussion.

5 Comparison to Northern Ryukyuan

Hattori (1959) argues that the simple present in Northern Ryukyuan is derived from the *renyou* (continuative) form (created from the root combined with an *-i* formant) in combination with the existential **wor-*. This form originally had the same meaning as the stative present forms discussed earlier, but eventually came to replace the simple present form and lose the original aspectual meaning.

The evidence for the derivation of Northern Ryukyuan simple present forms from stative present forms comes from the phonological process of palatalization in both coronal and velar stops *k*, *g*, *t*, *d* before front vowels *i* and *e*. Northern Ryukyuan verbs cognate with Japanese verbs ending in these consonants show palatalization in the simple present form. Shinzato and Serafim (2013:7-8) explain that by the 16th century, the forms involving the attached existential *jur* (< **-i* + **wor-*) had already begun to replace the simple present, creating a contrast between the conclusive and attributive forms that did not previously exist for quadrigrade verbs.

Genuardi (2008) points out that there is no good evidence that this process occurred in Southern Ryukyuan, due to the lack of palatalization in the relevant forms (notably, roots ending in *-k* and *-t*).

(14) Present Conclusive Forms

Language	'to write'	'to stand'
Okinawan	katf-u-n	tatf-u-n
Miyaran	kak-u-n	tats-i-n

The Yaeyaman stative present forms described in the previous section derive from the same stative construction from which the Northern Ryukyuan simple present forms derived. This construction involves the combination of the *renyou* form of the verb, ending in *-i*, with the lexically accented existential verb *úr-*. This construction, which is still active in the varieties of Yaeyaman discussed in this paper, served as the historical source of the stative present, by reduction of *V-i úr-u* to *V-í-ru*. Unlike Northern Ryukyuan, both the reduced and unreduced stative present forms in Yaeyaman are still used with a stative meaning.²¹ We suggest that Yaeyaman shows partial reanalysis of the *-ru* ending, which is blocked by the lack of attributive marking on the older simple present form. In Northern Ryukyuan, the replacement of the simple present by the stative present has eliminated this obstacle to full reanalysis of the present tense marker as an attributive marker.

²¹ See Davis and Lau (forthcoming) for discussion of the unreduced stative present construction and its relation to the stative present form described in the previous section, including reasons why this reduction process should be considered a diachronic change, and not due to synchronic phonological reduction.

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Given that in Northern Ryukyuan the existential verbs themselves show an opposition between *-n* and *-ru*, as seen for Okinawan in (2), one possible source of attributive versus conclusive marking in Northern Ryukyuan verbs is that the simple present forms inherited the opposition encoded on the existential verb when the simple present was replaced by the stative present, which was built using an existential verb. But the cognate existential verbs in the Yaeyaman varieties considered here do *not* show an opposition between *-n* and *-ru*, as seen for Miyara Yaeyaman in (4). This is thus not a possible source for the partial opposition between *-n* and *-ru* seen in Yaeyaman. The phonological reduction of the present tense suffix in conclusive stative forms is thus an alternative path by which the opposition between *-n* and *-ru* in Ryukyuan has been and is being accomplished.

6 Conclusion

The attributive marker *-ru* seen in Old Japanese, Okinawan, and Yaeyaman are not cognates, despite being strikingly similar on the surface. The Yaeyaman data adduced in this paper provide evidence for a grammaticalization path in which the tense suffix *-u*, found throughout Japonic-Ryukyuan, is reanalyzed as an attributive marker *-ru*. This reanalysis is the opposite of what happened in the transition from Old Japanese to Late Middle Japanese, in which the old attributive suffix *-ru* was reanalyzed as the present tense suffix *-u*. Given the phonological similarity and morphosyntactic adjacency of the attributive *-ru* and the present *-u* in Japonic-Ryukyuan, it is not implausible that reanalysis in both directions could have independently occurred in different Japonic-Ryukyuan languages.

The reanalysis described in this paper was triggered by the existence of the conclusive morpheme *-n*. The existence of this morpheme provides overt evidence of C-marking in the verbal inflection system, and without it there would be no attributive-conclusive distinction in the varieties of Yaeyaman discussed here. This suggests that the development of inflectional C-marking in Ryukyuan was spurred in large part by the early grammaticalization of the conclusive marker *-n*. It may thus have been the development of explicit conclusive marking that allowed Ryukyuan to preserve and/or recreate explicit attributive verbal morphology like that seen in Old Japanese. We leave further investigation of this idea to future research.

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