

Why it is important to study the Ryukyuan languages

— The example of Ōgami Ryukyuan —

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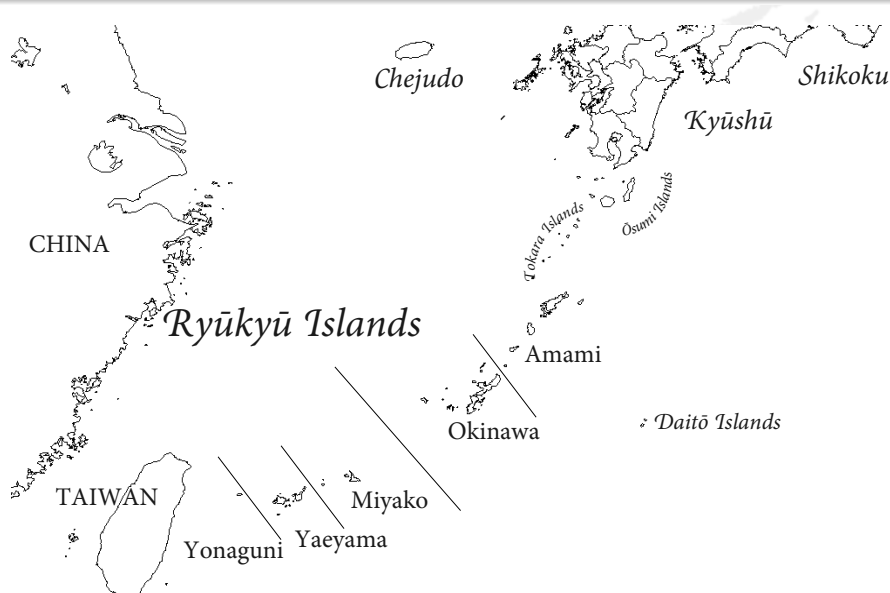
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 - Vowels
 - Consonants
 - Syllables
- 3 Classification
- 4 Reconstruction
 - Vowels
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 - Lexicon & morphology
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The Ryukyuan language family

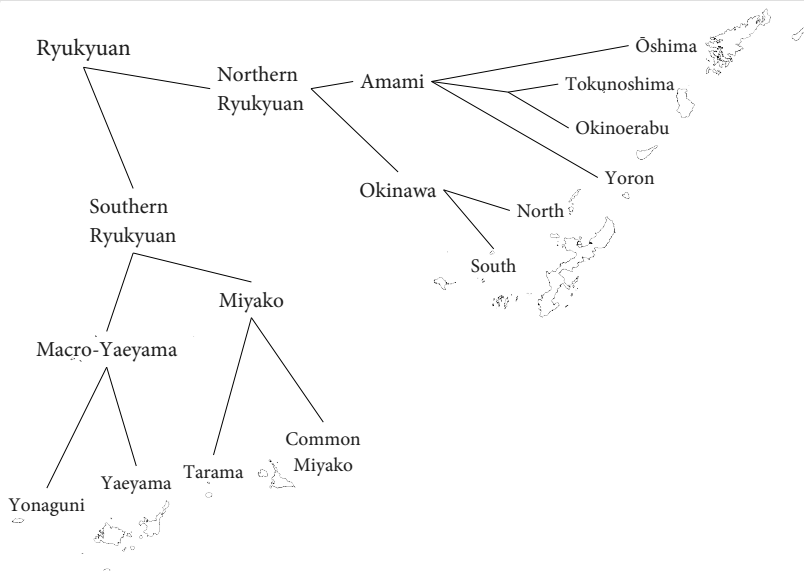
Ryukyuan = a group of 5 languages (at least) spoken in the Ryūkyū 琉球 islands

- North: Amami, Okinawan
- South (Sakishima 先島): Miyako, Yaeyama, Yonaguni

What is Ryukyuan?



The Ryukyuan language family



The Ryukyuan languages today

All Ryukyuan languages are highly endangered:

- no children acquiring Ryukyuan as their first language
- all speakers are bilingual in Japanese
- the younger generations are Japanese monolinguals
- the youngest fluent speakers usually are in their 60s
- still no serious conservation or revitalization program

Ryukyuan linguistics today

- lack of reference grammars (except Miyako Ryukyuan)
- few good dictionaries
- few accurately transcribed texts published
- most studies are based on limited data elicited through translation of Japanese and not on natural speech
- descriptions of phonetics are impressionistic
- framework of Japanese traditional grammar and phonology
 - researchers expect to find the same features and categories as in Japanese

Why study Ryukyuan?

- The Ryukyuan languages exhibit some typologically uncommon features
- They also can make important contributions to the historical study of the Japanese language

Ōgami Ryukyuan

A dialect of Miyako Ryukyuan, spoken on the
Ōgami island 大神島 (± 30 inhabitants)

Ōgami Ryukyuan

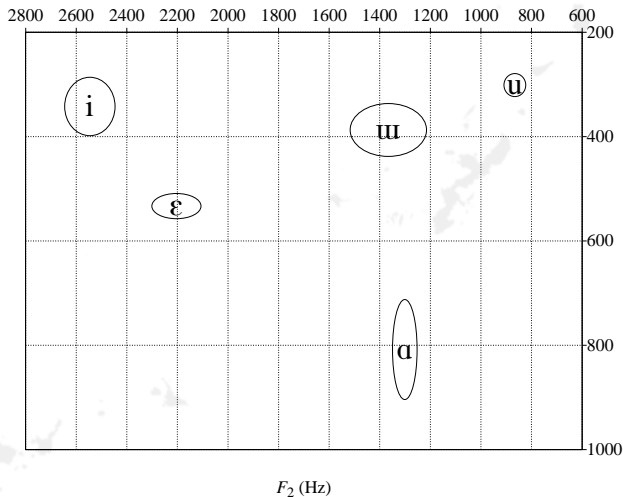
- highly endangered dialect
- important religious taboos that can impede fieldwork
- ‘aberrant’ dialect that overturns many of our preconceptions of what a Japonic language looks like
- data based on my own fieldwork

Vowels

Ōgami: uncommon 5-vowel system

| | Front | Back |
|------|-------|------|
| High | i | ɯ u |
| Mid | ɛ | |
| Open | | ɑ |

Vowels (female speaker)



Vowels

/u/: high back unrounded,
pronounced with the lips spread

≠ Japanese high back vowel



Consonants

Ōgami: 9 consonants

| | Bilabial | Labiodental | Alveolar | Velar |
|-------------|----------|-------------|----------|-------|
| Stop | p | | t | k |
| Nasal | m | | n | |
| Tap | | | ɾ | |
| Fricative | | f | s | |
| Approximant | | ʋ | | |

Consonants

- ☞ Only dialect with no voicing distinction
- ☞ Smallest consonant inventory

Syllabic consonants

Any sonorant except /r/ can be syllabic

| | | |
|-------|--------|----------|
| /mta/ | [m̥ta] | ‘earth’ |
| /nta/ | [n̥ta] | ‘where?’ |
| /vta/ | [v̥ta] | ‘thick’ |
| /mm/ | [m̥:] | ‘yam’ |
| /vv/ | [v̥:] | ‘sell’ |

Syllabic consonants

Voiceless fricatives can also be syllabic

| | | |
|---------|---------|------------|
| /sta/ | [ʃta] | ‘below’ |
| /pstu/ | [pʃtu] | ‘person’ |
| /ftai/ | [fʃtai] | ‘forehead’ |
| /pssma/ | [pʃːma] | ‘daytime’ |

Syllabic consonants

Whole words can be constituted of
voiceless consonants only

Vowel-less, voiceless words

| | |
|--------|--|
| /ss/ | ‘dust, nest, scrub’ |
| /kss/ | ‘breast, milk, fish hook, come, to fish’ |
| /pss/ | ‘day, vulva’ |
| /ff/ | ‘comb, bite, fall (rain), close’ |
| /kff/ | ‘make’ |
| /fks/ | ‘build, mouth’ |
| /ksks/ | ‘month, listen, poke, arrive, Earth’ |
| /sks/ | ‘cut’ |
| /psks/ | ‘pull’ |

Syllabic consonants

Previous researchers (Kajiku 1977, Ōno et al. 1998):
syllabic voiceless fricatives have in fact a devoiced vowel /ɯ/ or /u/ as their nucleus

| | | | |
|----------|---|----------|------------|
| [f̥tai] | > | [f̥ɯtai] | ‘forehead’ |
| [p̥ʂ:ma] | > | [p̥ɯ:ma] | ‘daytime’ |
| [k̥f̥:] | > | [k̥ɯf̥ɯ] | ‘make’ |
| [k̥ʂ:] | > | [k̥ɯ] | ‘breast’ |

Syllabic consonants

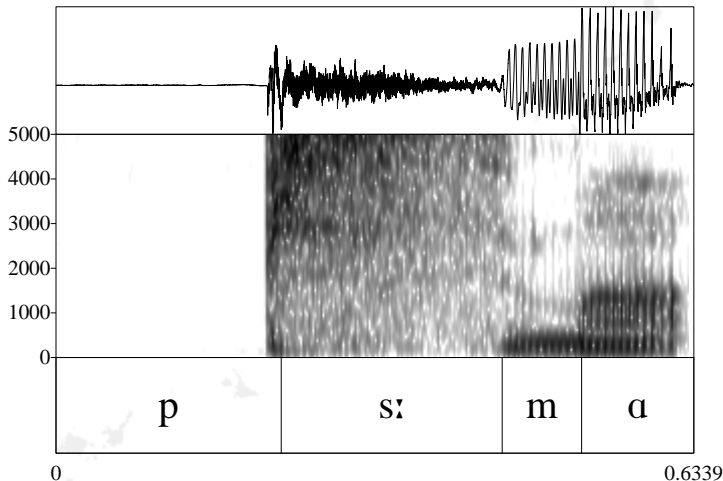
This view can be refuted on the basis of:

- acoustical
- phonological
- morphophonological evidence

No acoustic trace of a vowel

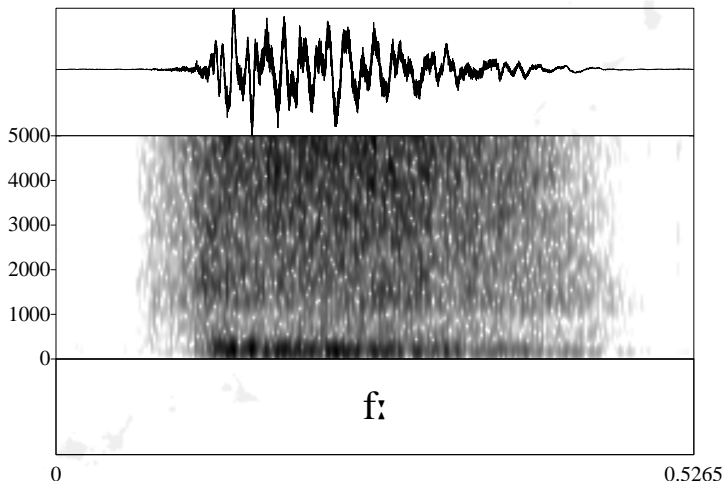
No acoustic trace of a vowel

/pssma/ 'daytime'



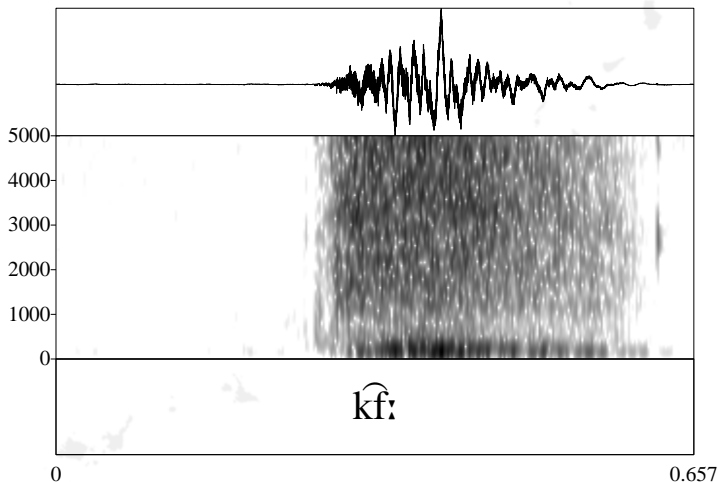
No acoustic trace of a vowel

/ff/ 'comb'



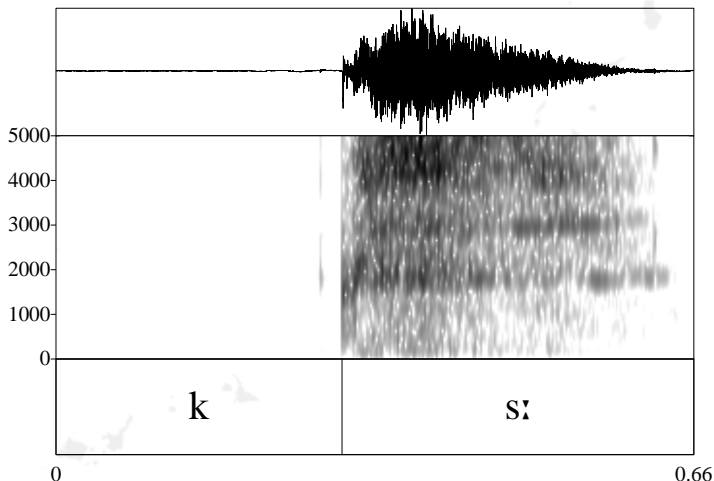
No acoustic trace of a vowel

/kff/ 'make'



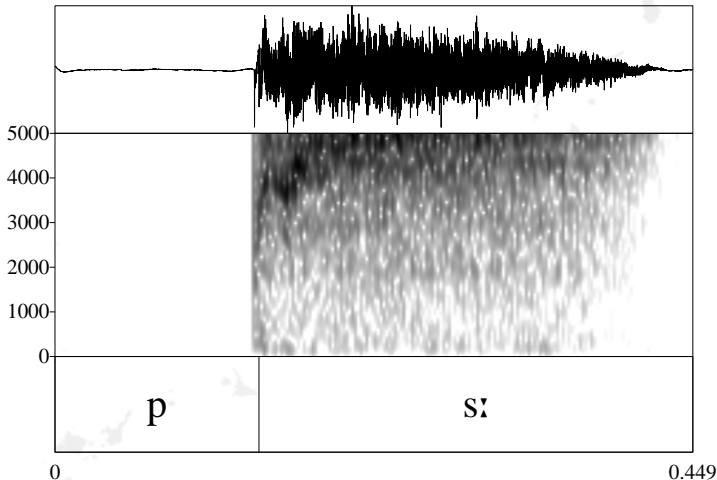
No acoustic trace of a vowel

/kss/ 'breast'



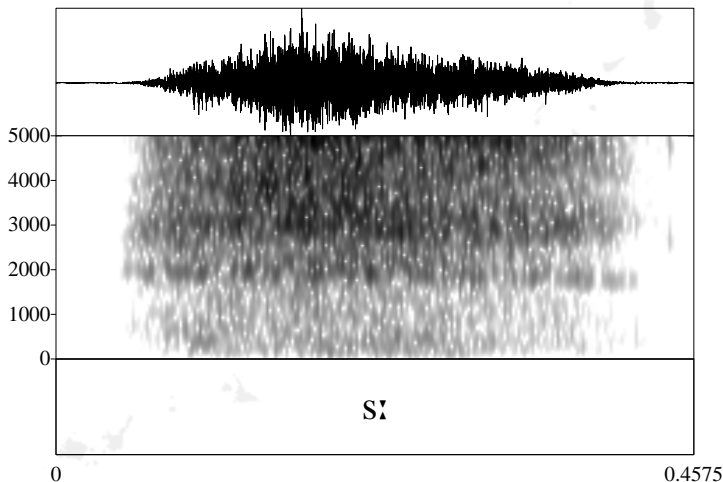
No acoustic trace of a vowel

/pss/ 'day'



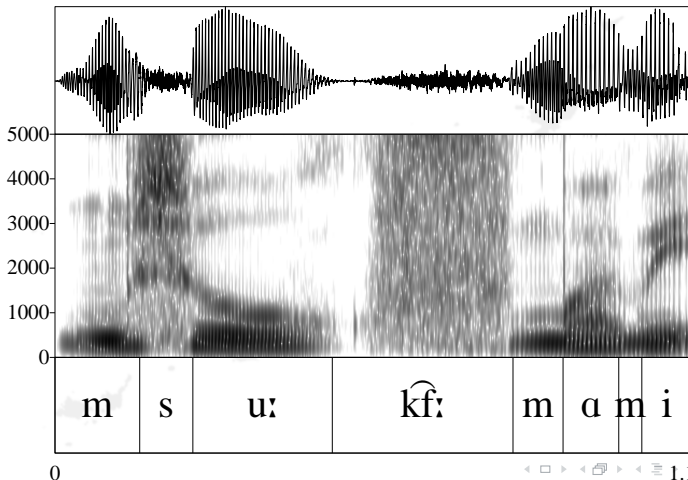
No acoustic trace of a vowel

/ss/ 'dust'



No acoustic trace of a vowel

/msuu kff mami/ ‘the beans from which we make *miso*’

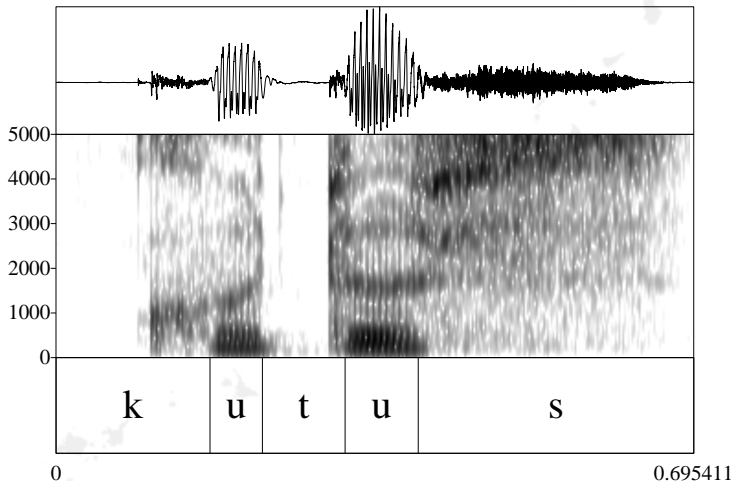


ansi=tu tauf=fu=pa kff
this.way=FOC tofu=ACC=TOP make
“This is how we make tofu”

No vowel devoicing

No vowel devoicing

/kutus/ 'this year'



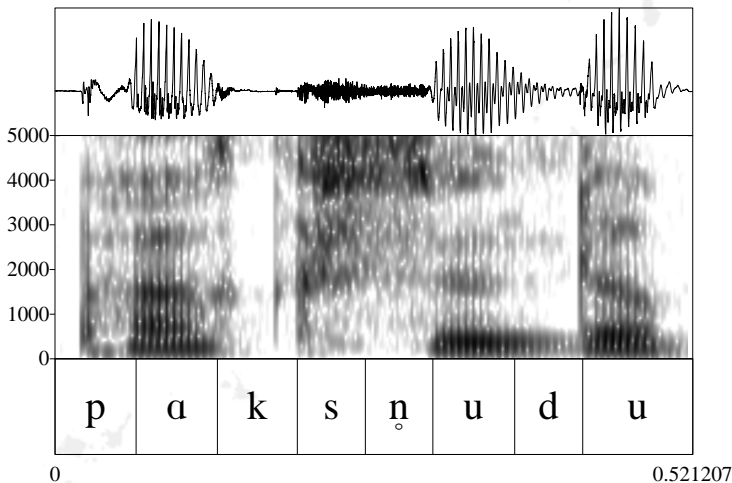
No vowel even in environments
that should block vowel devoicing

/as=na/ 'do not!'



No vowel anywhere

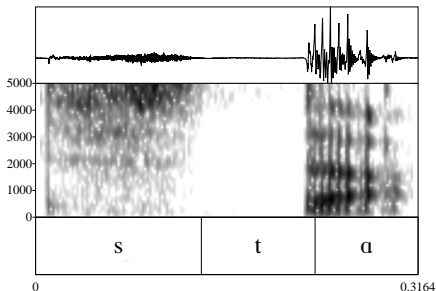
/paks=nu=tu/ ‘bee=NOM=FOC’



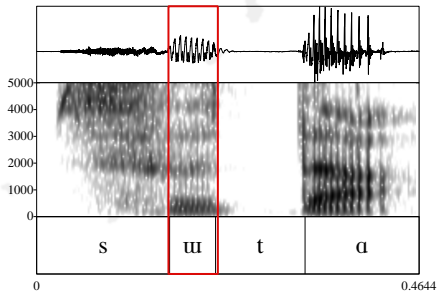
Existence of minimal pairs

syllabic fricative vs fricative + high vowel

Minimal pairs



/sta/
'below'



/suta/
'tongue'

Minimal pairs

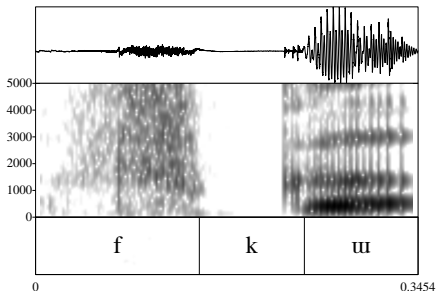


/sta/
'below'

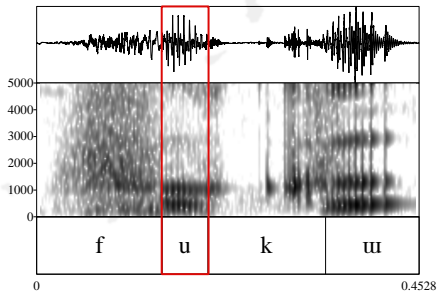


/suta/
'tongue'

Minimal pairs



/fkw/
'mouth'



/fukw/
'lapel'

Minimal pairs



/fkɯ/



/fukɯ/

Syllabic fricatives pattern like consonants and not like vowels in the morphology

Morphophonology

| Gloss | Bare stem | Accusative form |
|----------|-----------|-----------------|
| ‘water’ | mikuu | mikuuu |
| ‘person’ | pstu | pstuu |
| ‘sea’ | im | immu |
| ‘dog’ | in | innu |
| ‘smoke’ | kif | kiffu |
| ‘stone’ | is | issu |

Morphophonology

Lengthening in reduplicated adjectives

‘fresh’ pukuru > pukuru:pukuru

‘high’ taka > taka:taka

‘heavy’ iv > iv:iv

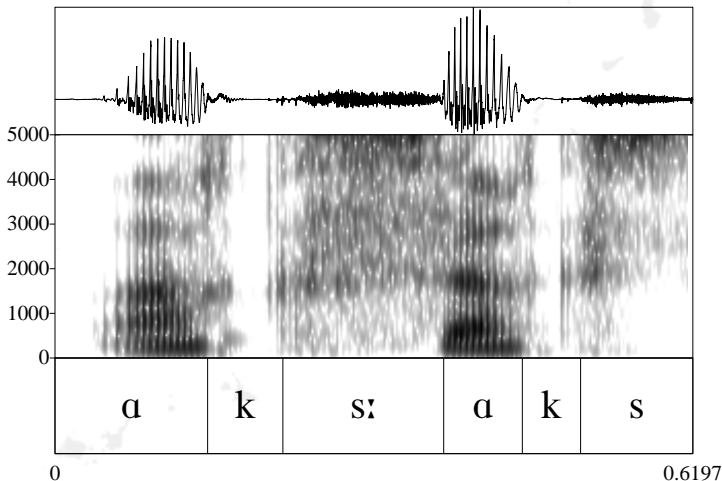
‘thin’ pis > pis:pis (*pisu:pis)

‘hot’ aks > aks:-aks (*aksu:aks)

‘warm’ nuf > nuf:-nuf (*nufu:nuf ~ nufv:nuf)

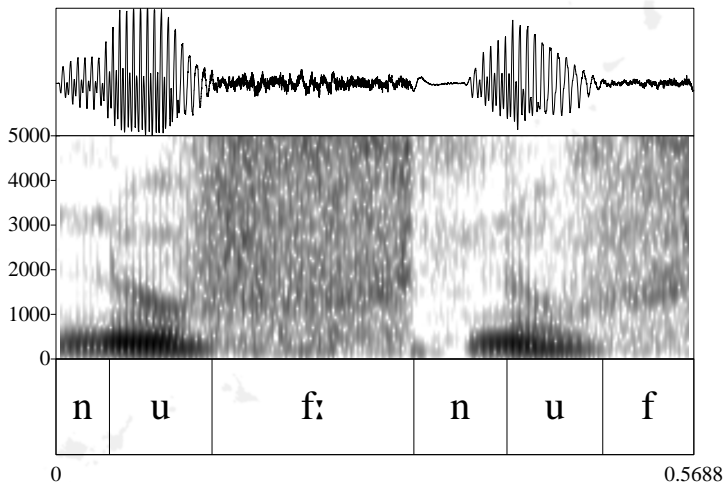
Morphophonology

/akss-aks/ 'hot'



Morphophonology

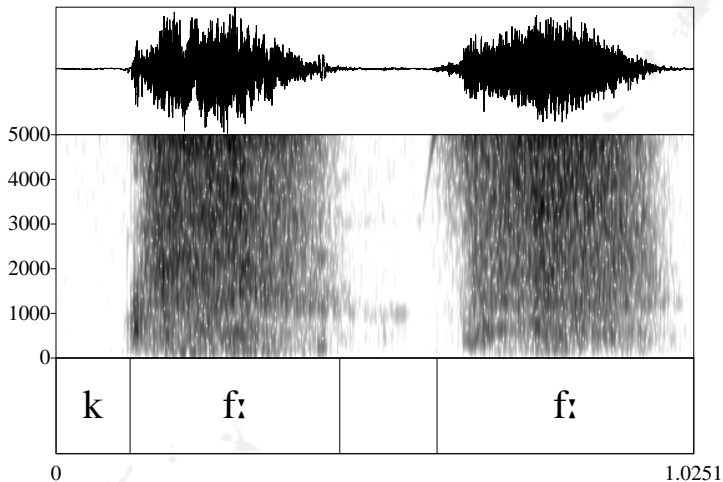
/nuff-nuf/ 'warm'



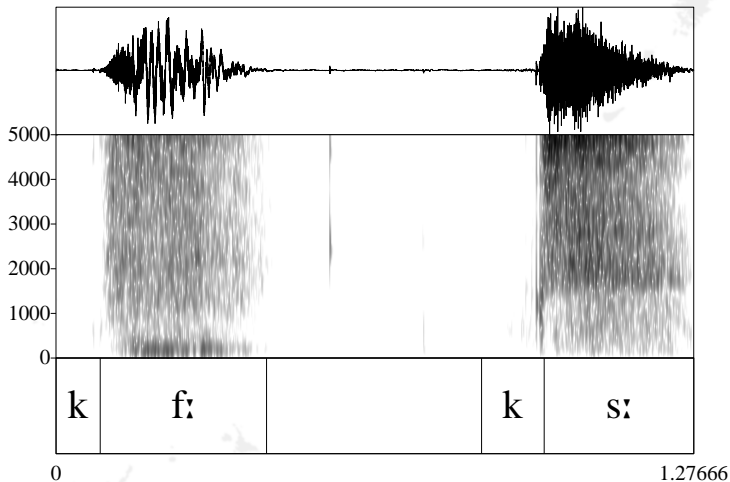
Vowel-less, voiceless words

Sequences of voiceless words
are possible

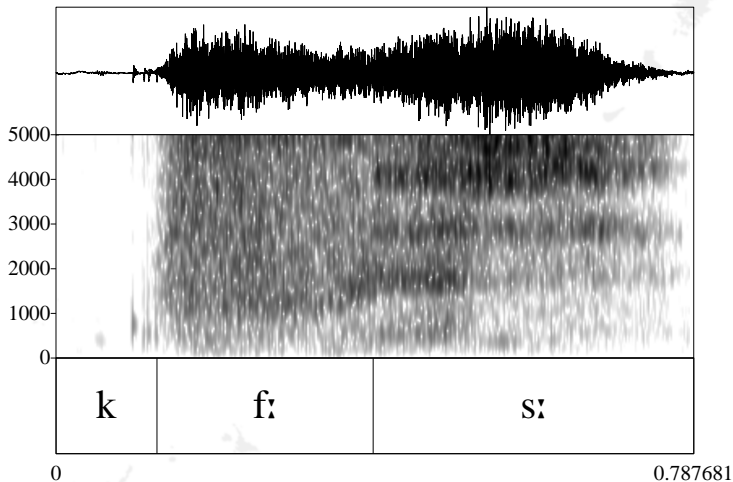
/kff ff/ 'the combs that I make'



/kff kss/ ‘the fish hooks that I make’



/kff ss/ ‘the nest that [the bird] makes’



Syllabic consonants

Voiceless fricatives can be syllabic (and moraic)

☞ but **not** /ɾ/!

➤ violation of the ‘universal’ hierarchy of syllable peaks and of mora sonority (Zec 2007)

Hierarchy of syllable peaks

Vowels ≫ ***!** Liquids ≫ Nasals ≫ Obstruents

Syllabic consonants

Languages that allow words to be constituted of voiceless consonants only are very rare:

- Nuxálk/Bella coola (Salishan, Canada; Bagemihl 1991):
[xɬp'χ^wɬɬpɬ:sk^{wh}ts'] 'Then he had had in his possession a bunchberry plant'
- Tashlhiyt Berber (Afro-Asiatic, Morocco; Ridouane 2008):
[tsskʃftstt tftxtstt] 'you dried it and rolled it'

Importance of phonetics for the reconstruction

“reef” is often transcribed as [p̚i̯ɕi]

➤ PR *p̚eɕe

☞ data from other Ryukyuan languages suggest *p̚i̯ɕi instead (cf. Shuri *hw̥i̯ɕi*)

☞ in my analysis, “reef” is /p̚ɕɕi/ [p̚ɕ̚ɕi]

➤ PR *p̚i̯ɕe

Classification

Ryukyuan is generally considered to be a sister branch of Japanese

- ☞ several people have expressed doubts since no serious evidence has been presented
- the burden of proof lies with the proponents of a single Proto-Ryukyuan language

Classification

Shared innovations in Ryukyuan (not in Japanese):

- *teda for “sun”
- “intestines” > “belly” for *wata
- *penar- for “decrease”
- incorporated stative auxiliary in verb forms
- adversative marker *suga ~ *soga
- instrumental marker *se
- “what?” pronoun *nawo ~ *nowo
- plural markers *kja and *ta
- reflexive pronoun *duu
- “strength” *taja

Classification

Japanese innovations (absent from Ryukyuan):

- *i > u in the initial of “scale”
- *otoko for “man”
- *kami for “hair (of the head)”
- *tabe for “eat” (< honorific)

| | “sun” | “decrease” | “belly” | “scale” | “man” | “hair” | “eat” | |
|-----------|---------|------------|---------|---------|---------|----------|--------------|-------|
| Hachijō | oçisama | tʃittoɲi | naruu | hara | kokedza | onokogo | tsubuurinoke | kamuu |
| Tokyo | çi | heruu | hara | uroko | otoko | kaminoke | taberuu | |
| Kyoto | hi: | heru | hara | uroko | otoko | kami | taberu | |
| Kagoshima | oçisa: | het | hara | uroko | otoko | kannoke | tamot | |

| | | | | | | | |
|----------|--------|-----------|-------|-----------|----------|-------------|--------|
| Naze | tīda | xīnarjuŋ | wata | ʔikki | jiŋga | kamatsiŋki | kamjuŋ |
| Wadomari | tida | çiŋajuŋ | wata: | ʔi:tfi | jiŋga: | haradzi | kamiŋ |
| China | tida | çiŋajuŋ | wata: | ʔi:ki | jiŋga: | haradzi | kamjuŋ |
| Kametsu | tida | ɸunarui | wata | ʔikkī | jiŋga | karadzi | kamiŋ |
| Yoron | tida | pinajuŋ | wata | i:ki | huiga | hurazinuʃi: | ku:juŋ |
| Iejima | tida | pina:juŋ | wata: | ʔitei: | jikiga | harazi | kʔeŋ |
| Sesoko | tida | çiŋaiŋ | wata: | ʔiri:ki | jiki:ga | hara:dzi | ke:ŋ |
| Nakijin | tʰida: | pʰina:ruŋ | wata: | ʔiritzʔi: | jikʔiga: | hara:dzi | kʔeŋ |
| Shuri | ti:da | ɸinajuŋ | wata | ʔiritci | wikiga | karazi: | kanuŋ |
| Ōgami | tita | pinar- | pata | iuki | pikitung | karakuu | fau |
| Hirara | tida | pinai | bata | iŋki | bikidum | karadzi | fo: |
| Ikema | tida | pinai | bata | i:ki | bikiduŋ | aka | fau |
| Nagahama | tida | pinaŋ | bata | iŋki | bikidum | karadzi | fau |
| Tarama | tida | pinaŋ | bata | iŋki | bikidum | aka | fu: |
| Ishigaki | tida | pinaruŋ | bada | ʔiragi | bigiduŋ | aka | ɸo:ŋ |
| Hatoma | tida | pinaruŋ | bata | ʔiraki | bikidumu | gamadzi | ffuŋ |
| Taketomi | tida | pinaruŋ | bata | ʔiru | bi:dō: | hamadzi | ho:ŋ |
| Hateruma | çina | pinaruŋ | bata | ʔirigi | bidumu | amadzi | hoŋ |
| Yonaguni | tidar | çiŋnaruŋ | bata | ʔittu | biŋga | karar | fuŋ |

Phylogeny of Ryukyuan

- Ryukyuan is a valid subgroup, a sister branch to Japanese

Reconstruction

The Ryukyuan languages are
crucial for the reconstruction of
Proto-Japonic

The place of Ryukyuan within Japanese historical linguistics

- The Ryukyuan languages are often thought to be simply Japanese dialects derived from Old or Middle Japanese
- A closer look at the Ryukyuan data and a strict application of the comparative method reveal a different picture
- The Ryukyuan languages preserve many archaic features, and features that had already disappeared in OJ

Vowels

The Ryukyuan languages preserve some vowel distinctions *older* than OJ (Hattori 1978–1979, Thorpe 1983, Pellard 2008)

☞ Previous studies have often not given many clear examples, and most of them come from Northern Ryukyuan

Vowels

Miyako Ryukyuan:

- PJ *i, *ui and *u tend to undergo syncope, assimilation or fricativization
- PJ *e, *əi and *o raise to /i/ and /u/

Vowels

| OJ | < | PJ | > | Ōgami |
|---------------------|---|-----|---|---------------|
| i ₁ | < | *i | > | s, ʷ, m, n, ∅ |
| i ₂ | < | *ui | > | ʷ |
| i ₂ | < | *əi | > | i |
| i ₁ | < | *e | > | i |
| u | < | *u | > | u, v, m, n, ∅ |
| u (o ₁) | < | *o | > | u |
| o ₂ | < | *ə | > | u |

Kōrui and otsurui

Miyako Ryukyuan: PJ $*\text{əi} \neq *ui$
 OJ: $> i_2$

| | OJ | Ōgami | Proto-Miyako | PJ |
|--------|---|-------|--------------|----------|
| “moon” | <i>tuki₂ ~ tuku-</i> | ksks | $*tsɨk_1$ | $*tukui$ |
| “god” | <i>kami₂ ~ kamu-</i> | kam | $*kam$ | $*kamui$ |
| “rise” | <i>oki₂ ~ oko₂₋</i> | uki | $*uki$ | $*əkəi$ |
| “tree” | <i>ki₂ ~ ko₂₋</i> | kii | $*kii$ | $*kəi$ |

Midvowels

Miyako Ryukyuan: PJ *i ≠ *e
OJ: > *i*₁

| | OJ | Ōgami | PM | PJ |
|-------------|----------------------------------|-------|----------|--------|
| “seashell” | <i>mi</i> ₁ <i>na</i> | mmna | *mna | *mina |
| “day(time)” | <i>pi</i> ₁ <i>ru</i> | pssma | *pɪɾɪ-ma | *piru |
| “put in” | <i>ire</i> | uɾi | *ɪɾi | *ire |
| “water” | <i>mi</i> ₁ <i>du</i> | miku | *midzɪ | *meNtu |
| “garlic” | <i>pi</i> ₁ <i>ru</i> | piu | *piɾɪ | *peru |
| “color” | <i>iro</i> ₂ | iru | *iru | *erə |

Midvowels

Miyako Ryukyuan: PJ *u ≠ *o
OJ: > u (o₁)

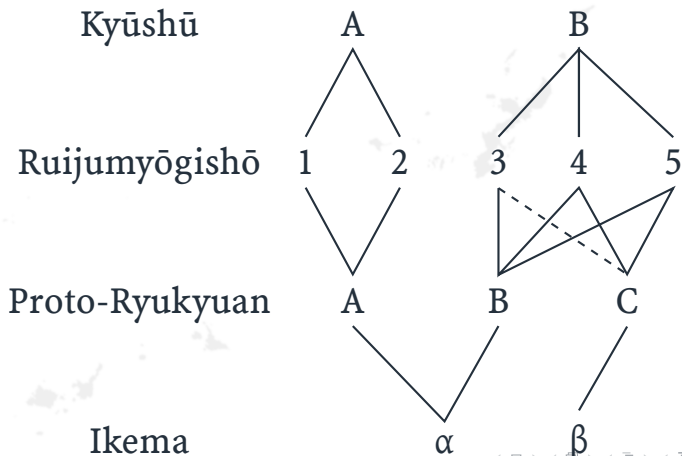
| | OJ | Ōgami | PM | PJ |
|------------|-------------------------|-------|---------------------|-------------------|
| “mortar” | <i>usu</i> | us | *us ₁ | *usu |
| “sell” | <i>ur-i</i> | uv | *vv | *ur-i |
| “to face” | <i>mukap-</i> | nkai | *nkai | *mukap- |
| “medicine” | <i>kusuri</i> | ffuu | *fusur ₁ | *kusori |
| “melon” | <i>uri</i> | uu | *ur ₁ | *ori ¹ |
| “wheat” | <i>mugi₁</i> | muku | *mug ₁ | *moNki |

¹ see Middle Korean “woy

Ryukyuan has two different reflexes for some Japanese tone categories

Tone

☞ Disyllabic nouns (Hattori 1958, Matsumori 1998, 2001, Hayashi et al. 2009):



| | Myōgishō | Ōita Kag. | Ikema | Tarama |
|-----|----------|--|----------------|--------|
| 2.4 | 平上 | $\left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} \text{HL} \\ \text{LH} \end{array}$ | α HH-LL | LH-HL |
| | | | β HH-HH | HH-LL |
| 2.5 | 平東 | | α HH-LL | LH-HL |
| | | | β HH-HH | HH-LL |

No clear conditioning environment

- We must reconstruct more categories
- ☞ Dialect mixing could be a possible explanation, but there is no real evidence for this

Lexicon & morphology

Ryukyuan also preserves some
archaic words and morphological
markers

Pronouns

na is both a first and second pronoun in OJ

- (1) a. 奈 何 名 能良佐禰
na *ga* *NA* *no₂r-as-ane*
you NOM name name-HON-DES
 “I wish you tell me *your* name!” (MYS v: 800)
- b. 名 兄 乃 君
na *SE* *no₂* *KI₁MI₁*
I beloved COP lord
 “*My* beloved lord” (MYS XVI: 3885)

Pronouns

☞ Whitman (1999) proposed that it was originally a reflexive pronoun

Pronouns

This hypothesis is supported by Miyako (Ōgami) Ryukyuan:

kanu pstaā **naa**-ta ik-a-tɛɛn=ti aʉr-i=u
 DIST person.TOP **LOG**-PL go-IRR-ACOM=QT say-CVB=IPF
 “They_i are saying **they_i** won’t go” (Pellard 2009)

Pronouns

EOJ has a form *wano*₁ 和奴, unknown in WOJ, for the first person pronoun

☞ *wano can be reconstructed for PR

| | |
|----------|--------------------------|
| EOJ | <i>wano</i> ₁ |
| Kametsu | waŋ |
| Iejima | waŋ |
| Yonaha | banu |
| Ishigaki | banu |
| Yonaguni | banu (plur.) |

➤ PJ *wano

Focus marker

WOJ has a focus marker $so_2 \sim zo_2$

☞ Ryukyuan and EOJ: $t \sim d$, not z

| | |
|-----|--------|
| WOJ | so_2 |
|-----|--------|

| | |
|-----|--------|
| EOJ | to_2 |
|-----|--------|

| | |
|---------|----|
| Kametsu | du |
|---------|----|

| | |
|--------|----|
| Iejima | du |
|--------|----|

| | |
|-------|----|
| Ōgami | tu |
|-------|----|

| | |
|----------|----|
| Ishigaki | du |
|----------|----|

| | |
|----------|----|
| Yonaguni | du |
|----------|----|

➤ PJ $^{*}(N)tə$

One

Vowel alternation in the root of the numeral one:

| OJ | <i>pi₁to₂</i> | <i>pi₁to₂-tu</i> |
|----------|-------------------------------------|--|
| Hachijō | hito | te-tsu |
| Naze | tɕʰu | tʰi:-tsi |
| Kametsu | tɕʰu | tʰi:-tsi |
| Iejima | tɕʰu | tʰi:-tɕi |
| Shuri | tɕu | ti:-tsi |
| Ōgami | pstu | psti:-ks |
| Ishigaki | pɪtu | pɪti:-dzɪ |

➤ PJ *pitə ~ *pite-tu

Head

| | |
|----------|-----------|
| Hachijō | tsuubuuri |
| Serikaku | tɕuburu |
| Iejima | siburu |
| Ishigaki | tsɪburn |

Cf. also MJ *tumuri* ~ *tuburi*, an uncommon word for “head”

Head

☞ Kojiki:

- Susanowo kills the serpent *Yamata no Orochi* by cutting its 8 heads
- he finds a sword called *tumu-gari no tati* in the monster's tail

➤ this mysterious name could be interpreted as “the head-cutting sword”, with the root *tumu* “head”

The search for cognates with Korean

Vovin (2009):

- any item compared to Korean has to be reconstructible for Proto-Japonic in order for the comparison to be valid
- this means that it must be attested in Ryukyuan
- items not attested in Ryukyuan should be regarded as borrowings from Korean

➤ the Ryukyuan data becomes crucial

The search for cognates with Korean

A closer look at the Ryukyuan data enables us to rescue some comparisons rejected by Vovin (2009)

The search for cognates with Korean

“morning” OJ *asa* :: MK *achom*

☞ Miyako:

- *asa-munu* “breakfast”
- *asa-tida* “morning sun”

The search for cognates with Korean

“origin, base” OJ *mo₂to₂* :: MK *mith*

☞ Miyako:

- *mutu* “origin”
- *mutu-ni*: “main root”
- *ja:-mutu* “main lineage”

The search for cognates with Korean

“pot, hearth” OJ *kama* :: MK *kama*

☞ Ōgami:

- *ukama* “hearth”
- *pakama* “rice cooking pot”

The search for cognates with Korean

“darkness” OJ *yami*₂ :: MK *cyemul-*

☞ Ōgami: *ffa-jam* “id.”

The search for cognates with Korean

“algae, seaweed” OJ *mo* ~ *me*₂ :: MK *mol*

☞ Miyako *mu*: “id.”

The search for cognates with Korean

“body” OJ *mu-* ~ *mi*₂ :: MK *mwom*

☞ Ōgami *miu* < PM **mɪɪ* “flesh”

The search for cognates with Korean

“mountain” OJ *mure* :: MK *mwoyh* /
mwolwo, Paekche *mure* 武禮

☞ ? Ōgami *mmi*

The search for cognates with Korean

“leek” J *nira* :: MK *myel*

☞ Ōgami *miua* < PM **m̥ar̥na*

The search for cognates with Korean

“crowd, gathering” OJ *mure* :: MK *mwul*

☞ Ōgami *-nummi* “plural suffix”

The search for cognates with Korean

“all” J *tada* :: MK *ta*

☞ Ōgami *-ta* “plural suffix”

The search for cognates with Korean

👉 I do not argue for or against the validity of the above comparisons with Korean, but they cannot be rejected on the sole basis that there is no Ryukyuan cognate

Conclusions

- The Ryukyuan languages exhibit some very interesting features for both linguistic typology and Japanese historical linguistics
- We still need more data, and more accurate data
- This can only be done through fieldwork
- Unfortunately all Ryukyuan languages are slowly disappearing

The description of the different Ryukyuan languages is a very urgent task

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