

The Historical Source of the Bigrade (Nidan) Transitivity Alternations in Japanese

二段活用に現れる自・他交替 の通時起源について

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The linguistic periods of Japanese

Old Japanese (OJ)

700 – 800

上代語

奈良

Early Middle Japanese (EMJ)

800 – 1200

中古語

平安

Late Middle Japanese (LMJ)

1200 – 1600

中世語

鎌倉、室町

Modern Japanese (NJ)

1600 –

近代語

江戸、明治、大正、昭和、平成

現代語

Oxford Corpus of Old Japanese オックスフォード上代日本語コーパス

Comprises all poetic texts from the Old
Japanese period

上代日本語の韻文前文のテキスト

approximately 90,000 words

約 9 万語

website: <http://vsarpj.orinst.ox.ac.uk/corpus/>

Transitivity alternations in Old Japanese

Simple

-s- Trans. 他

-r- Intr. 自

tir-

‘scatter (i)’ 散ル

*tira***s**-

‘scatter (t)’ 散

*watas***s**-

‘make go cross’ 渡

*nas***s**-

‘make’ 成

*watar***r**-

‘go across’ 渡

*nar***r**-

‘become’ 成

Quadrigrade ~ Bigrade Alternation

四段～二段活用の交替

Quadrigrade 四段

Intr 自

tat-

‘rise, set out’

Trans 他

yak- 燃

‘burn’

Bigrade 二段

Trans 他

tate-

‘raise’

Intr 自

yake- 燃

‘burn’

Quadrigrade ~ Bigrade Alternation

四段～二段活用の交替

Quadrigrade 四段

Intr 自動

tat-

‘rise, set out’

Bigrade 二段

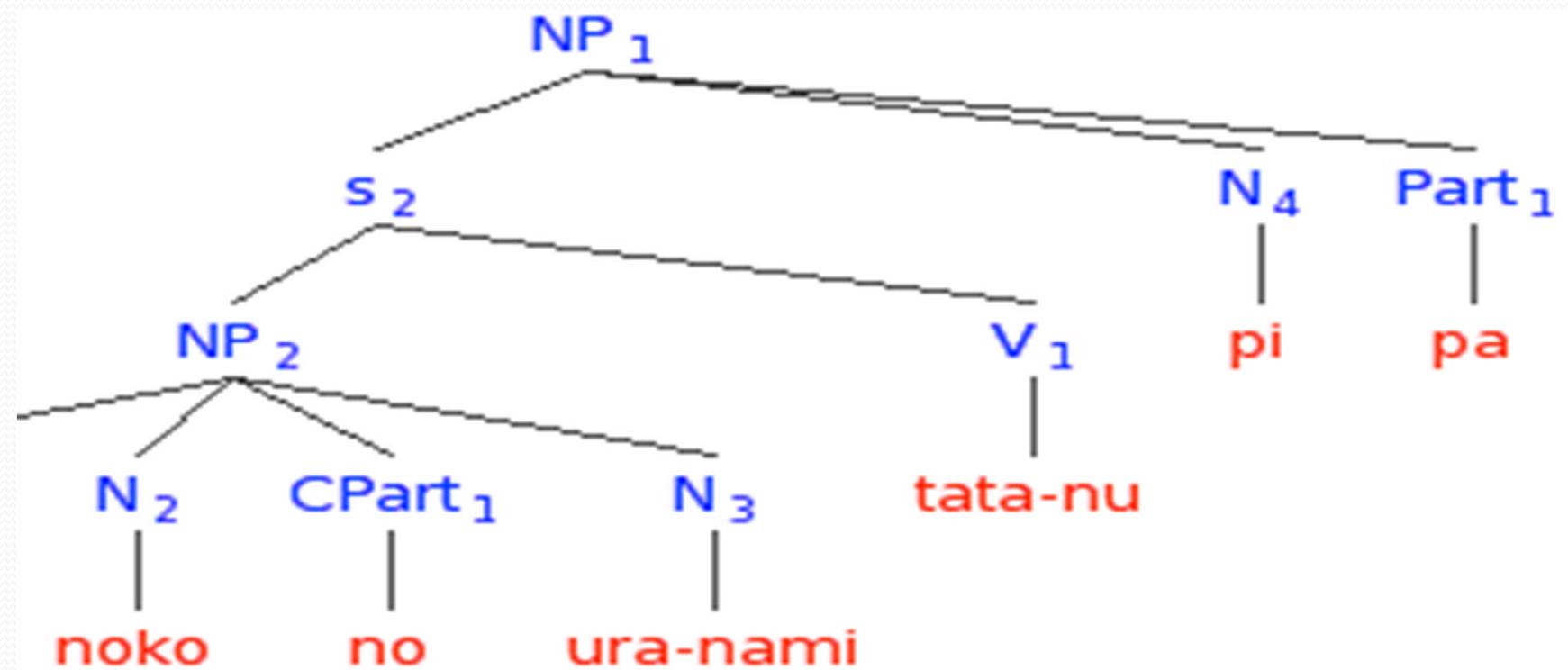
Trans 他動

tate-

‘raise’

tat- ‘rise, set out’

能許 乃	宇良 奈美	多多奴	日 者
<i>noko no</i>	<i>ura nami</i>	<i>tata-nu</i>	<i>pi pa</i>
能許 の 浦 波		立たぬ	日 は
Noko GEN bay wave		rise-NEG	day TOP
‘a day where the waves are not rising in the Noko Bay’			
(MYS 15.3670)			



tate- 'raise (trans.)'

世 人 能

yo no pito no

世の 人 の

world GEN people GEN raise word

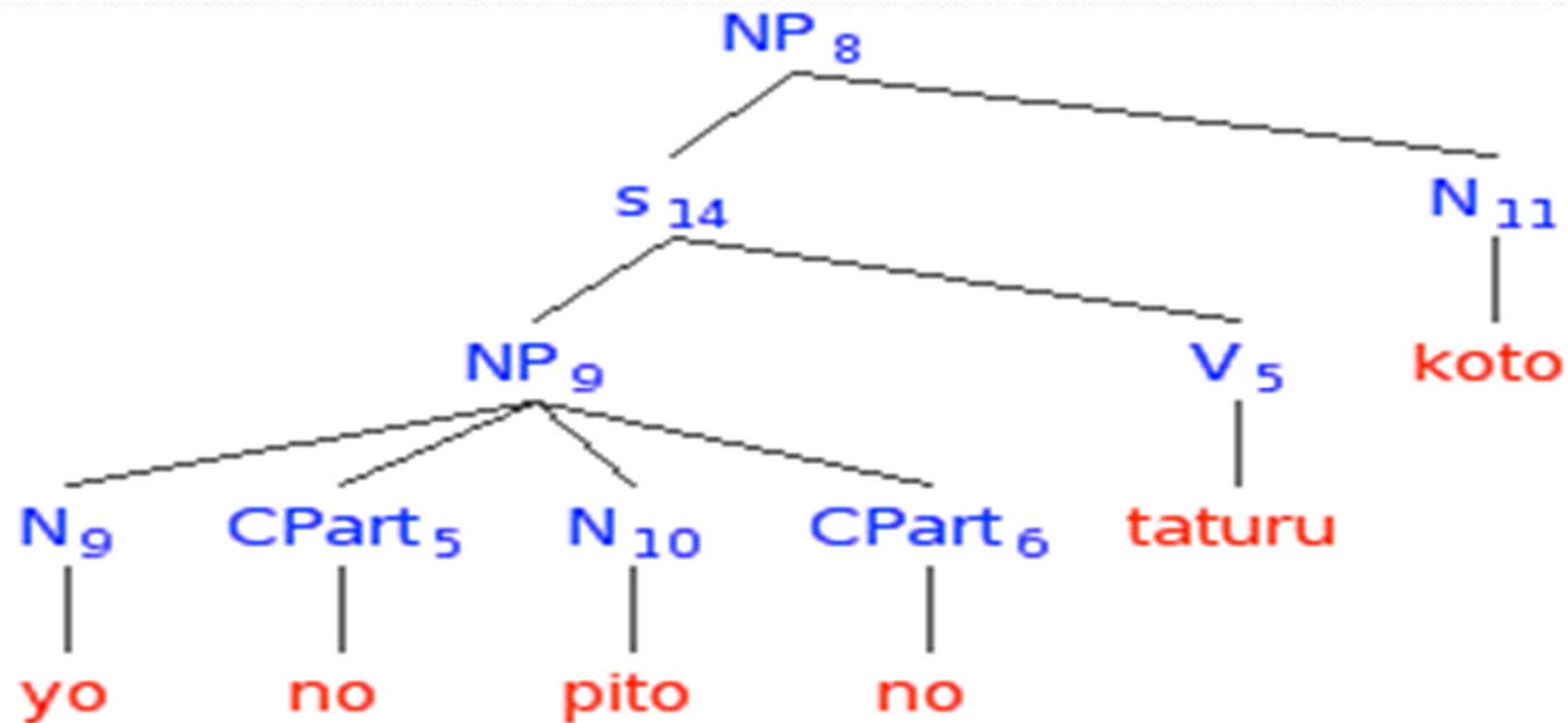
'what people say' (MYS 18.4106)

多都流 許等

taturu koto

立つる 言

tate- 'raise (trans.)'



Quadrigrade ~ Bigrade Alternation

四段～二段活用の交替

Quadrigrade 四段

Trans 他動

yak- 燒
‘burn’

Bigrade 二段

Intr 自動

yake- 燒
‘burn’

yak- 'burn (trans.)'

加良怒

karanwo

枯野

karano boats

袁

wo

を

ACC

志本爾

sipo ni

塩に

salt DAT

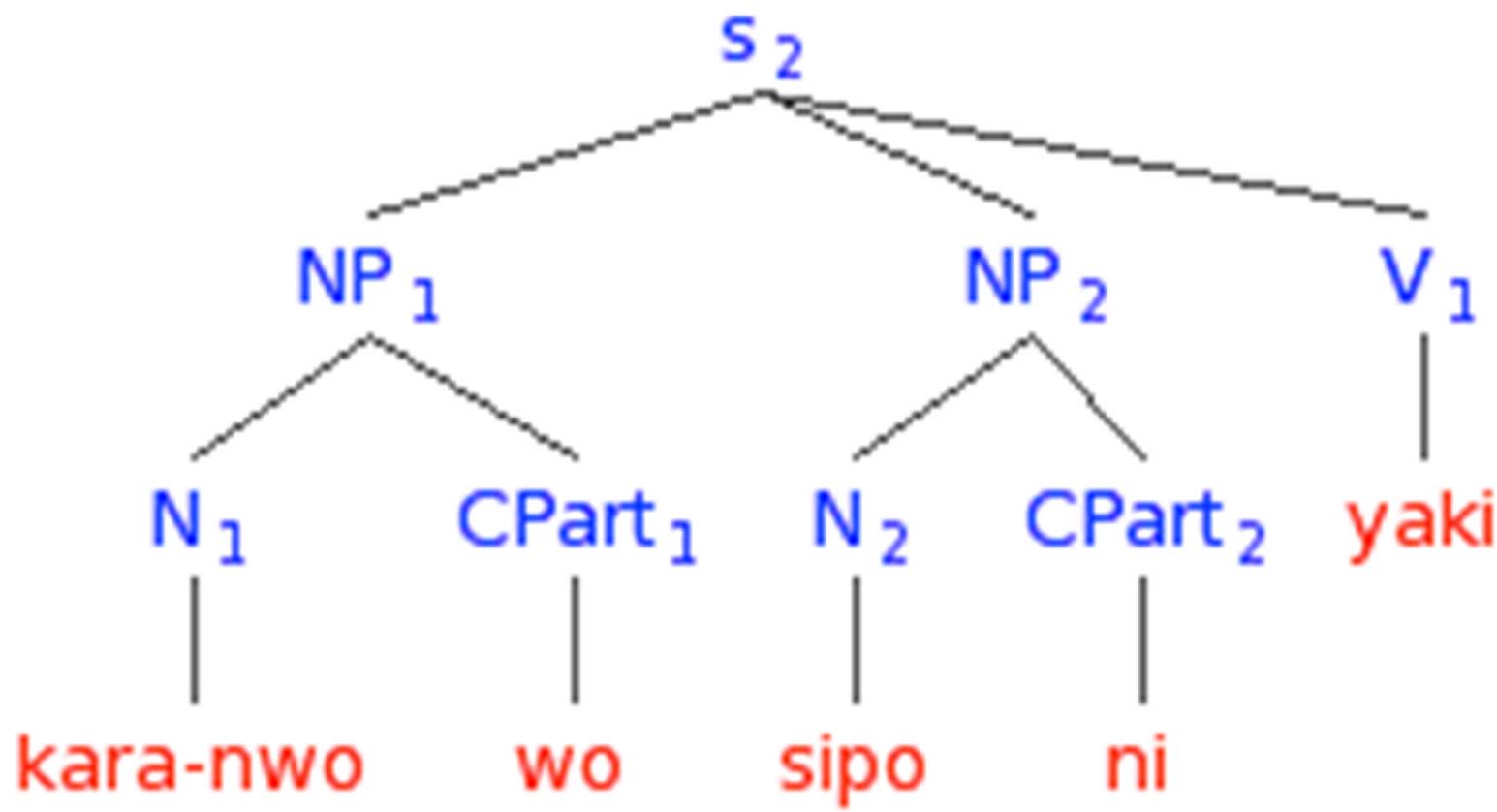
夜岐

yaki

焼き

burning

'burn the *karano* boats to make salt' (KK 74)



yake- ‘burn (intr.)’

夜気牟

志婆加岐

yake-mu

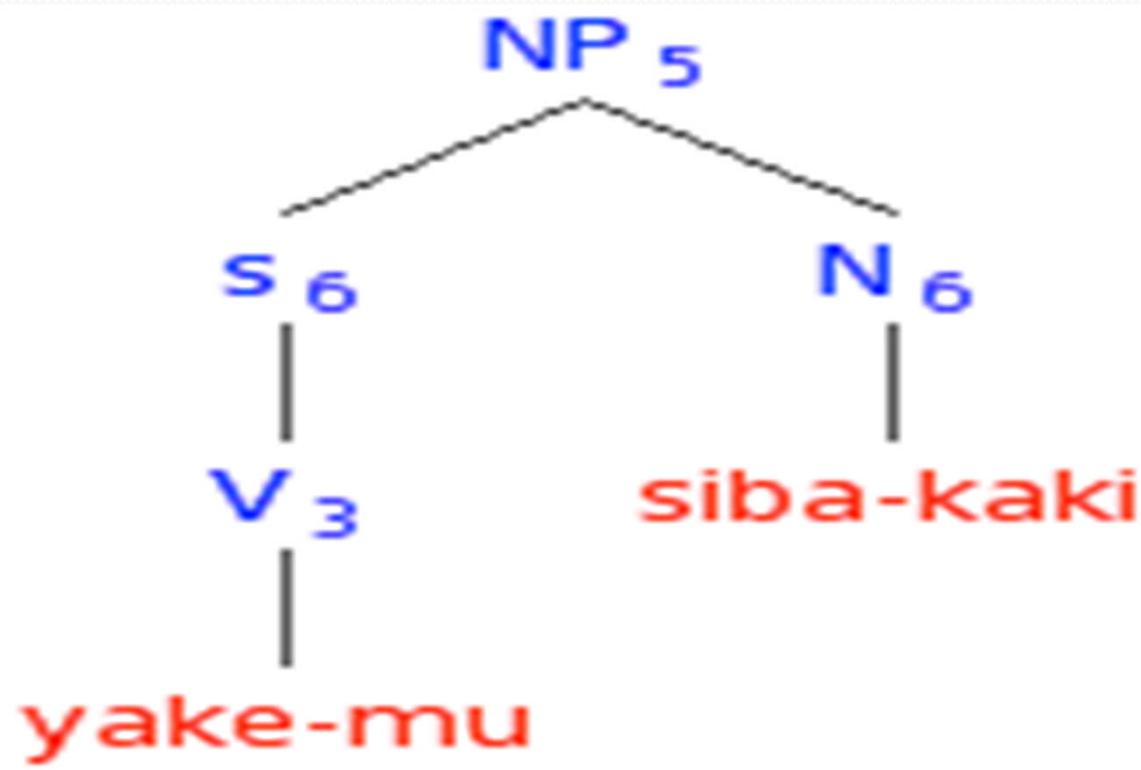
sibakaki

焼けむ

柴垣

burn-CONJ brushwood.fence

‘the brushwood fence which will burn’ (KK 109)



Other transitivity alternations involving Bigrade verbs

二段動詞が関わるそのたの自・他交替

Bigrade (trans.)

kasane- ‘pile up’

tome- ‘stop’

-r- intransitives

kasaranar- ‘increase’

tomar- ‘stop’

Bigrade (intr.)

ide- ‘emerge’

kure- grow dark’

-s- transitives

idas- ‘take, put out’

uras- ‘spend (time)’

Quadrigrade
買

kap- ‘mix_{INTR}, buy, change_{INTR}’ 替・

かひ

Bigrade

kape- ‘change_{TR}’ 替・易
かへ

-r-

kapar- ‘change_{INTR}’ 変・替・更
かはり

-s-

kapas- ‘switch_{TR}’ 易
かはし

Basic facts about the Bigrade conjugation class

- Just over 20% of all Old Japanese verbs belong to the Bigrade conjugation (Nidan 二段活用), against 75% which belong to the Quadrigrade (Yodan 四段活用) conjugation.
上代語には二段動詞が20%強、四段動詞が約75%を占める。
- Bigrade verbs comprise two distinct subclasses:
 - Lower Bigrade (Shimo Nidan 下二段活用)
c. 20% of OJ verbs; stems ending in *-e-*
 - Upper Bigrade (Kami Nidan 上二段活用)
c. 30 verbs; stems ending in *-wi-*

Basic facts about the Bigrade conjugation class

- Not all bigrade verbs take part in transitivity alternations.
すべての二段動詞が自・他交替を示すのではない。
- Only (but far from all) lower Bigrade verbs take part in transitivity alternations with simple Quadrigrade verbs.
自・他交替を示す二段動詞は、（古事記歌謡における少ない例外以外）下二段活用に限られるが、すべての二段動詞が自・他交替を示すのではない。
- The Bigrade conjugation was lexicalized only fairly shortly before the Old Japanese period. 二段活用の語彙化は上代語（8世紀）の直前に遡るであろう。

Accounts of the origin of the Bigrade conjugation which we will discuss today

- Ohno 1953 大野晋 1953年
- Unger 1977
- Takeda 1957, Yoshida 1973 武田祐吉 1957 · 吉田金彦 1973
- Whitman 2008; Frellesvig 2008

Ohno 大野晋 1953

- The difference between Bigrade and Quadrigrade conjugation reflects differences in root shape.
二段・四段の違いは動詞語幹の違いに由来する。
- However, this gives no account of the transitivity alternations which the bigrade verbs take part in.
ただし、大野説には二段動詞が関わる自・他交替の説明はない。

Unger 1977

- All pJ roots end in a vowel (contra Ohno).
- 日本祖語の語幹はすべて母音（開音節）で終わると想定する。

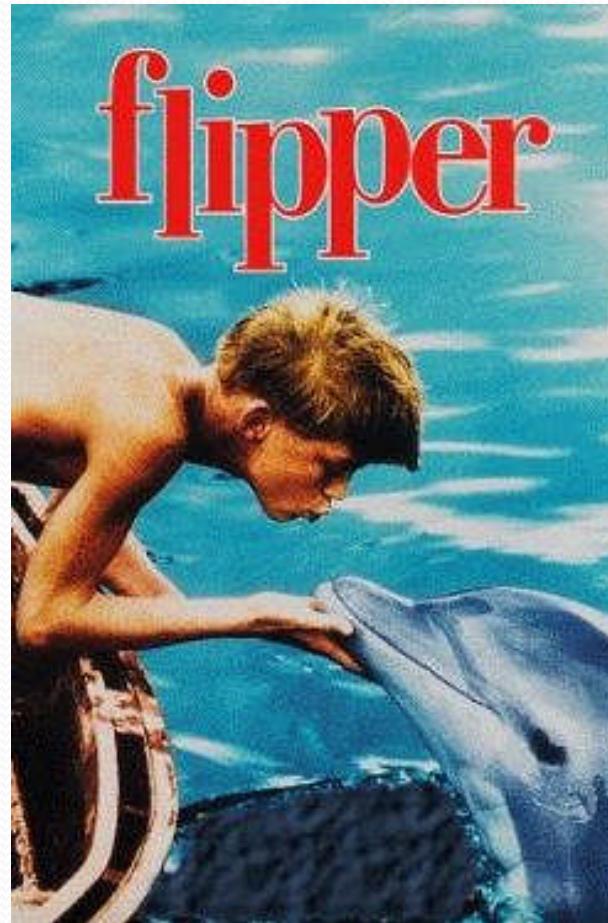
Unger 1977

- Bigrade verbs involve additional derivational material, in particular a ‘transitivity flipper’ which originally had the shape *-gi-, thus accounting for the origin of the transitivity alternations, e.g.
- 二段動詞の場合には、派生語尾*-gi-という形の‘transitivity flipper’ 「自・他交替形態素」を再建する。

*tata ‘rise’ + **-gi-** => *tatagi- ‘raise’ > *tatai- > *tate-*

*yaka ‘burn (t)’ + **-gi-** => *yakagi- ‘burn (i)’ > *yakai- > *yake-*

Professor Unger and the Transitivity Flipper



The transitivity flipper

- The transitivity flipper hypothesis does not work as an account of the origin of the Bigrade conjugation:
 - (Virtually) no upper bigrade verb is involved in a transitivity alternation with a simple Quadrigrade verb.
Only a minority of lower bigrade verbs are.
 - Some bigrade inflecting auxiliaries are morphologizations of derivational suffixes retaining the same valency, e.g.

intransitive <i>-r-</i>	passive <i>-re</i>
transitive <i>-s-</i>	causative <i>-se</i>

Whitman 2008: The *Get* Hypothesis

- The transitivity alternating Bigrade verbs originate in the suffixation of the verb *e-* ‘get’ to the basic stem (or root) of Quadrigrade verbs.
- 二段活用における自・他の交替は、動詞 **e-* 「得」を直接に語幹に接尾辞として添付した結果である。
 - *tat-* ‘rise’ + *e-* ‘get’ => *tate-* ‘raise’
 - *yak-* ‘burn (t)’ + *e-* ‘get’ => *yake-* ‘burn (intr.)’

Takeda 武田 1953, Yoshida 吉田 1973

The *Get* Hypothesis

- The idea that Bigrade verbs originate from **e-* ‘get’ has a long history. Takeda (1953) and Yoshida (1973) make this suggestion. 二段活用が「得」に由来する提案は国語学の先行研究に（少なくとも50年代から）見られる。
- Yoshida (1973) makes the point that both the form and meaning of **e-* ‘get’ fits. 吉田1973は**e-* 「得」の形も意味も二段活のそれと一致することを指摘している。

The Get Hypothesis: Form 形

- *e-* ‘get’ and other lower Bigrade verbs conjugate identically. *e-* 「得」とその他の二段動詞は（いうまでもなく）活用形を共有する

	‘get’	‘raise’	‘burn’
Basic stem 語幹	<i>e-</i>	tate <i>e-</i>	yake <i>e-</i>
Infinitive 連用形	<i>e</i>	tate <i>e</i>	yake <i>e</i>
Conclusive 終止形	<i>u</i>	tatu	yak <i>u</i>
Adnominal 連体形	<i>uru</i>	taturu	yak <i>uru</i>
Exclamatory 已然形	<i>ure</i>	tature	yak <i>ure</i>
Imperative 命令形	<i>eyo</i>	tateyo	yakeyo

The Get Hypothesis: Form 形

Direct root affixation

語幹への直接添付

- This is an instance of direct affixation of a verb to the basic stem (root) of another verb
- Other examples of direct root affixation include
 - Old Japanese Stative auxiliary *-yeri* 完了の助動詞「リ」:
 - *sak-* ‘come into bloom’ + *-yeri* => *sakyeri* ‘be in bloom’
 - Pre-Old Japanese Negative auxiliary *-anu 祖語の否定語尾:
 - **sak-* ‘come into bloom’ + *-anu => **sakanu* ‘doesn’t bloom’

The *Get* Hypothesis: Function 機能 *e-* ‘get’ in Old Japanese

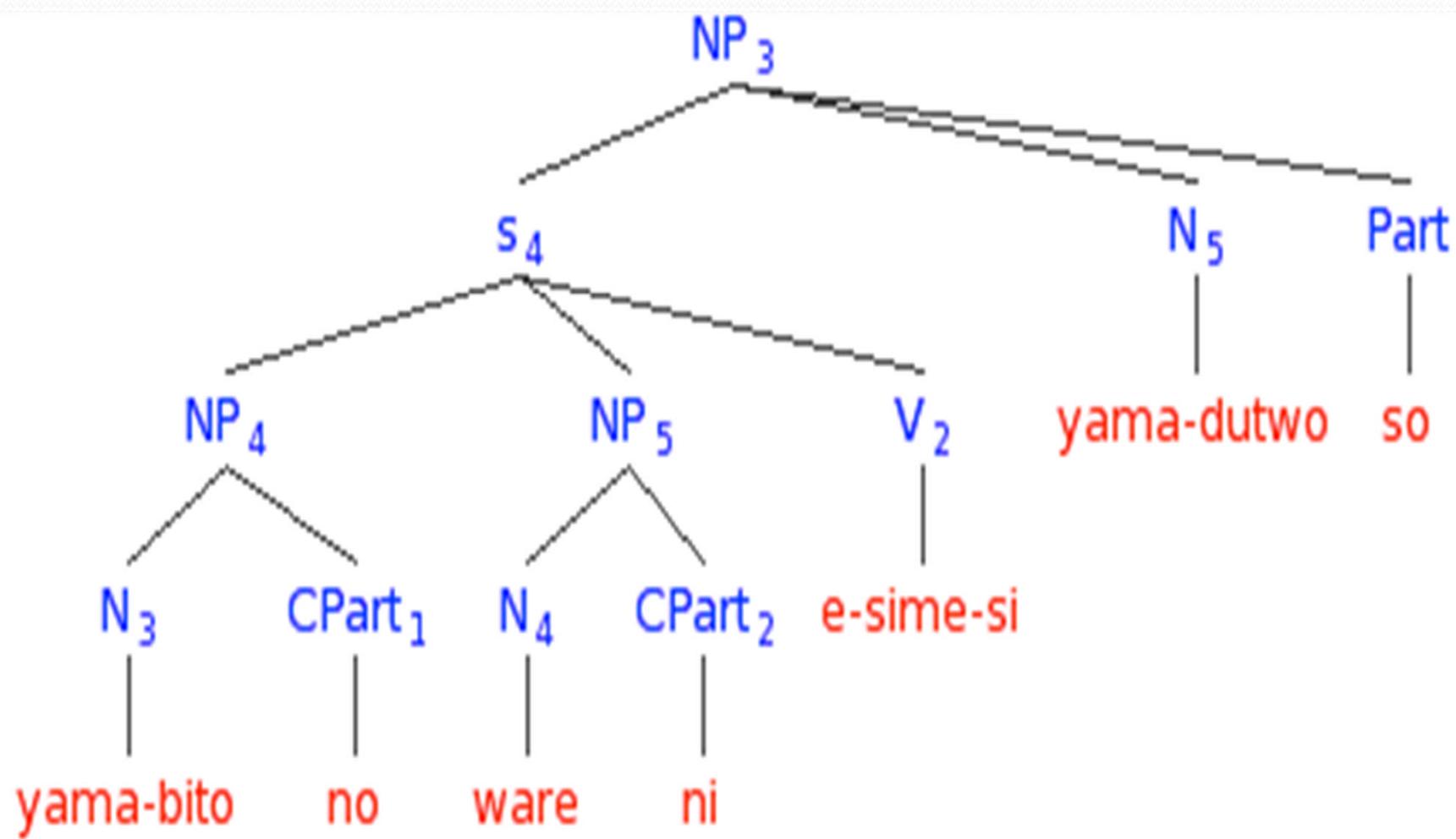
- Transitive lexical verb ‘get, acquire’
- Potential auxiliary verb
- Potential prefix

Lexical *e-* ‘get’

山人	乃	和礼爾	衣志米之
yamabito	<i>no</i>	<i>ware ni</i>	<i>e-sime-si</i>
山人	の	我れに	得しめし
mountain.folk GEN	I	DAT	get-CAUS-PAST

夜麻都刀	曾
山づと	そ
<i>yamadutwo</i>	<i>so</i>
mountain.souvenir	FOCUS.Particle

‘This is the mountain souvenir which the mountain folk made me get (gave me)’ (MYS 20.4293)



The *Get* Hypothesis: Typology 類型

Taking *e-* ‘get’ as the source for the
Bigrade alternations fits the general
pattern of **acquisitive** derivations.

These include:

- Modal derivations, e.g. potential (van der Auwera et al. 2009)
- **Diathetic derivations**

The *Get* Hypothesis: Typology 類型

Diathetic Aquisitive Derivations

- Intransitive/anticausative (Heine and Kuteva 2003: 144-147)
‘Kay **got** chosen.’
- Transitive/causative (Abraham 1990, Fleisher 2006).
‘Chris **got** Kay chosen.’

The *Get* Hypothesis: Typology 類型

German *kriegen* ‘get’ (McIntyre 2005)

- **Intransitive (passive)**

Er kriegt geholfen.

he gets helped

- **Transitive (causative)**

Er kriegt das Problem gelöst.

he gets the problem solved

The *Get* Hypothesis: Typology 類型

Seychelles Creole *Ganny* passive < Fr. *gagner*
‘win’ (Haspelmath 1990, Michaelis & Rosalie ND)

Bidze 2005 ti **ganny** approve menm zour.
budget 2005 PST PASS approve same day
'The budget for 2005 was approved the same day.'
(example cited from Michaelis & Rosalie)

The *Get* Hypothesis: Typology 類型

Southern Min *chhoə7* causative <
‘haul’ 拽 (Chen 2008)

只景

拽 人

憔悴

Chi2 keng2 chhoə7 lang5 chiau5-chui7.
this scene chhoə7 people emaciated
‘This scene makes people emaciated.’

The Get Hypothesis: Diachrony 歴史

In OJ, Bigrade transitive : Quadrigrade intransitive is relatively common.

上代語には下二段の他動詞が四段の自動詞に対応する場合が比較的に多い。

Intr 自

tat-

‘rise, set out’

Trans 他

tate-

‘raise’

The Get Hypothesis: Diachrony 歴史

However Bigrade intransitive : Quadrigrade transitive is confined to a handful of verbs, all involving accomplishment transitives.

下二段の自動詞が四段の他動詞に対応する場合が目立って少ない。わずかの達成動詞に限られる。

Trans 他

yak- 燃

‘burn’

Intr 自

yake- 燃

‘burn’

The Get Hypothesis: Diachrony 歴史

Furthermore, the Bigrade intransitive : Quadrigrade transitive pattern appears not to be reconstructible to proto-Japanese. While transitive *yak-* ‘burn_{TR}’ and *tak-* ‘burn/cook_{TR}’ have corresponding verbs in Yonaguni (Ikema 2003) and prewar Yaeyama (Miyara 193), their intransitive counterparts appear to be unattested.

下二段の自動詞が四段の他動詞に対応する場合が日本祖語まで再建できないようである。与那国語（池間2003）と戦前の八重山語群（宮良1930）には他動詞に対応する動詞はあるが、自動詞に対応する形がないようである。

The Get Hypothesis: Diachrony 歴史

Among the Bigrade transitivity alternations, then,
Bigrade transitive : Quadrigrade intransitive appears
to be diachronically prior.

二段他動詞の自・他交替においては、二段の他動
詞が四段の自動詞に対応するパターンが通時に古
いのであろう。

The Get Hypothesis: Diachrony 歷史

Given *e- ‘get’ as the formally motivated source verb, and the transitive use as primary, the most plausible source construction is *get* + ACHIEVEMENT/STATE in a resultative construction, similar to the Southern Min pattern with *chhoat* ‘haul’. This source derives accomplishments.

*e- 「得」を二段他動詞起源と想定すると、*e- 「得」+到達/状態という形の結果構文がもっとも妥当性のある元構文だと思われる。こういった結果構文が達成動詞へと発達する。

◦

The *Get* Hypothesis: Diachrony 歷史

ACHIEVEMENT/STATE + *e- > ACCOMPLISHMENT
get

The Get Hypothesis: Diachrony 歴史

This hypothesis is supported by the semantic division of labor between Bigrade -e- transitives and Quadrigrade transitives in -s-.

この仮説は二段の他動詞と-s-で語幹が終わる四段動詞の意味的役割に裏付けられる。

The Get Hypothesis: Diachrony 歷史

The semantic range of *-s-* is wider. Thus *-s-* attaches to activities.

四段-s- の意味論的範囲がより広い。-s-は活動動詞にも付く。

map- 'spin
舞ふ

mapas- turn_{TR}
回す

The Get Hypothesis: Diachrony 歷史

Bigrade -e- does not attach to activities.

二段-e- は活動動詞にも付かない。

map- ‘spin

舞ふ

tat- ‘rise, set out’

立つ

sir- ‘know’

知る

~~*mape-*~~ turn_{TR}

回~~△~~—

tate- ‘raise’

建て—

sire- ‘inform’

令知（知れ）

The Get Hypothesis: Diachrony 歴史

The resultative source for transitive bigrade *-e-* is further supported by the semantic difference between the reciprocal uses of *kapas-* ‘switch, exchange’ and *kaqe-* ‘change’. *Kapas-* can derive reciprocals from activities.

二段他動詞-e- の結果構文起源は相互助動詞としての「交す」と「変え」の意味論的違いにも裏付けられる。相互助動詞の「交す」は活動動詞の連用形を受ける。

都麻 欲妣可波須

tuma ywobi kapasu MYS 3993

spouse call exchange ‘spouse-calling each other’

The Get Hypothesis: Diachrony 歷史

However *ka-pe-'change'* is attested only as deriving reciprocals from achievements.

二段「変え一」の場合には相互助動詞としては到達動詞しか受けないようである。

帶 解 替 而
OBI TOKI KAPE-TE
sash untie change-GER MYS 43¹
'untying each other's sash'

Conclusions まとめ

- The Nidan transitivity alternations are derived from affixation of *e- ‘get’ to the bare verb stem.
- 二段「変え一」の場合には相互助動詞としては到達動詞しか受けないようである。

Conclusions まとめ

- This derivation is relatively new, newer than the transitivity alternations in *-s* and *-r*.
- この派生は（史前日本語史においては）*、-s* and *-r*による自・他交替と比べて通時的に「新しい」（深い）ものである。

Conclusions まとめ

- The older of the Nidan transitivity alternations is transitive, derived from the combination *e- 'get + ACHIEVEMENT/STATE.
- 二段活用の自・他交替の元の（より古い）用法は「他動」である。この用法は *e- 「得」 + 到達熟語 / 状態熟語に由来する。

References

- Abraham, Werner. 1990. Die Grammatikalisierung von Auxiliar- und Modalverben. *Beiträge zur Geschichte der Deutschen Sprache und Literatur* 112/2, 200-208.
- van der Auwera, J., P. Kehayov & A. Vittrant. 2009. Acquisitive modals. In : Hogeweg, L., H. de Hoop & A. Malchukov (eds.) *Cross-linguistic semantics of tense, aspect, and modality*. Amsterdam, Benjamins, 271-302.
- Chen, I-Hsuan. Grammaticalization of Causative Verbs in Earlier Southern Min Texts A Comparison between Southern Min and Mandarin. Paper given at NRG 4 *New reflections on Grammaticalization* 4. University of Leuven 16-19/7/2008.
- Enfield, Nicholas. 2003. *Linguistic epidemiology. Semantics and grammar of language contact in mainland Southeast Asia*. London & New York: Routledge Curzon.
- Fleisher, Nicholas 2006. The origin of passive *get*. *English Language and Linguistics* 10.2: 225-252.

References

- Frellesvig, Bjarke. 2008. On reconstruction of proto-Japanese and pre-Old Japanese verb inflection. In: Bjarke Frellesvig and John Whitman (eds.), *Proto-Japanese: Issues and prospects*. Amsterdam, Benjamins, 185-203.
- Gronemeyer, C. (1999). On deriving complex polysemy: the grammaticalization of *get*. *English Language and Linguistics* 3: 1-39.
- Haspelmath, Martin 1990. The grammaticalization of passive morphology. *Studies in Language* 14.1: 25-71.
- Malchukov, Andrej 1993. Adversative constructions in Even in relation to passive and permissive. In Comrie, B. and Polinsky, M. (eds.), *Causatives and Transitivity*, 269-284. Amsterdam: John Benjamins.
- McIntyre, Andrew. 2005. The Semantic and syntactic decomposition of *get*: An Interaction Between Verb Meaning and Particle Placement. *Journal of Semantics* 22(4):401-438.

References

Michaelis, Susanne and Rosalie, Marcel. ND. Seychelles Creole. Accessed at

<http://lingweb.eva.mpg.de/apics/images/2/21/SurveySeychelles.pdf>

Miyara Tōsō. 1980. *Yaeyama goi*. Tokyo:Tōyō bunko.

Ohno, Susumu. 1953. Nihongo no dōshi no katsuyōkei no kigen ni tsuite. *Kokugo to Kokubungaku* 350:47-56.

Takeda, Yûkichi. 1957. *Man'yôshû zenchûshaku 2: Gengo*. Tokyo: Kadokawa shoten.

References

- Unger, J. Marshall. 1993 [1977]. *Studies in early Japanese morphophonemics, 2nd edition*. Bloomington: IULC.
- Whitman, John. 2008. The source of the bigrade conjugation and stem shape in pre-Old Japanese. In: Bjarke Frellesvig and John Whitman (eds.), *Proto-Japanese: Issues and prospects*. Amsterdam, Benjamins, 168-182.
- Yoshida, Kanehiko. 1973. *Jôdai jodôshi no shiteki kenkyû*. Tokyo: Meiji Shoin.