International Symposium on Polysynthesis in the World's Languages
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Was Old Japanese a polysynthetic language?

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No.

However with regard to a number of the typological features under discussion in this symposium, Old Japanese (OJ; 8th century) is significantly different from modern Japonic varieties. We will discuss three features:

- Noun Incorporation (Yanagida 2005, Kinuhata 2010, Russell to appear)
- Crossreferencing prefixes *i-* and *saN-*
- Reciprocal prefix *api-*

Road map

1. Background
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6. Reciprocal prefix *api-*
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1. Background

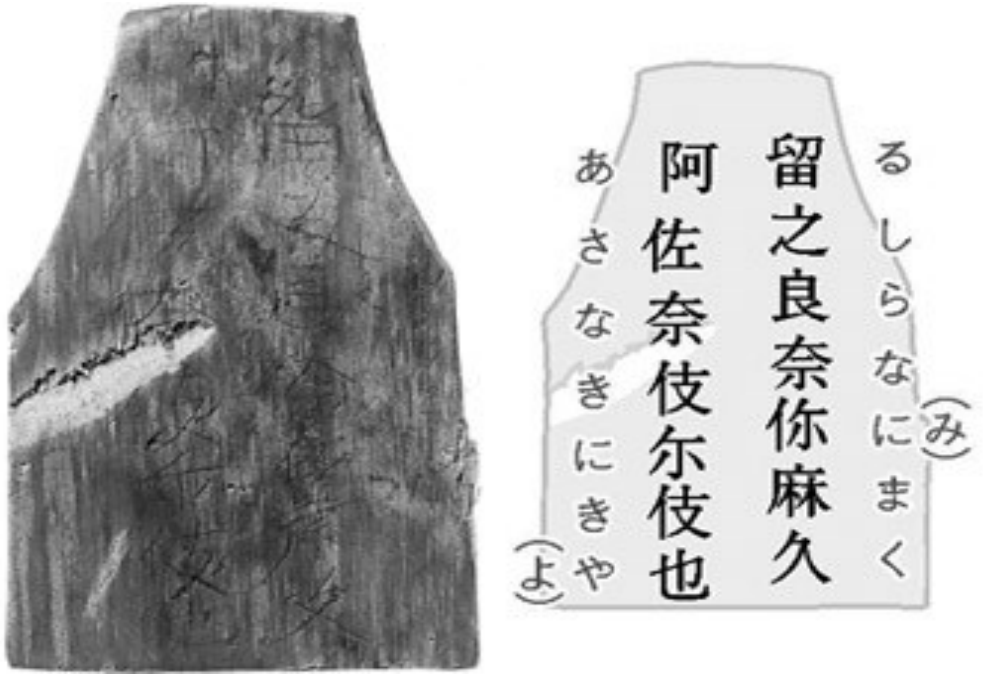
Old Japanese (OJ) is the oldest attested Japonic variety. The OJ corpus consists of texts datable to the 8th century, primarily from the capital (Nara) region (Central OJ), but also from Eastern Japan as far east as present- day Ibaraki Prefecture (Eastern OJ). COJ and EOJ show substantial phonological and syntactic differences.

Periodicization of OJ and Early Middle Japanese (800-1200) is based on significant phonological changes such as the merger of the vocalic nucleii i/wi, o/wo, and e/ye, but also syntactic changes, such as the loss of the weak pronouns *wa* '1', *na* '2', *ta* 'who' in embedded subject position.

1. Background: OJ Sources

- Mokkan 木簡 wooden writing tablets
- Inscriptions on stone 金石文
- Hentai kanbun 変体漢文
- *Man'yōshū* 万葉集 and other verse
- Early prose writing 散文

Uta mokkan 歌木簡。Ishigami site 石神遺跡 c. 745



「あさなぎにきや（よ）る　しらなに（み）まく」

Morning calm in come　white wave in wrap

osaka.yomiuri.co.jp/inishie/news/is81017b.htm

2. Chronology

710: Capital is moved to Nara.

712: The *Kojiki* 古事記 ’Record of ancient times’ is compiled.

720: *Nihon shoki* 日本書紀 ‘History of Japan’ is compiled.

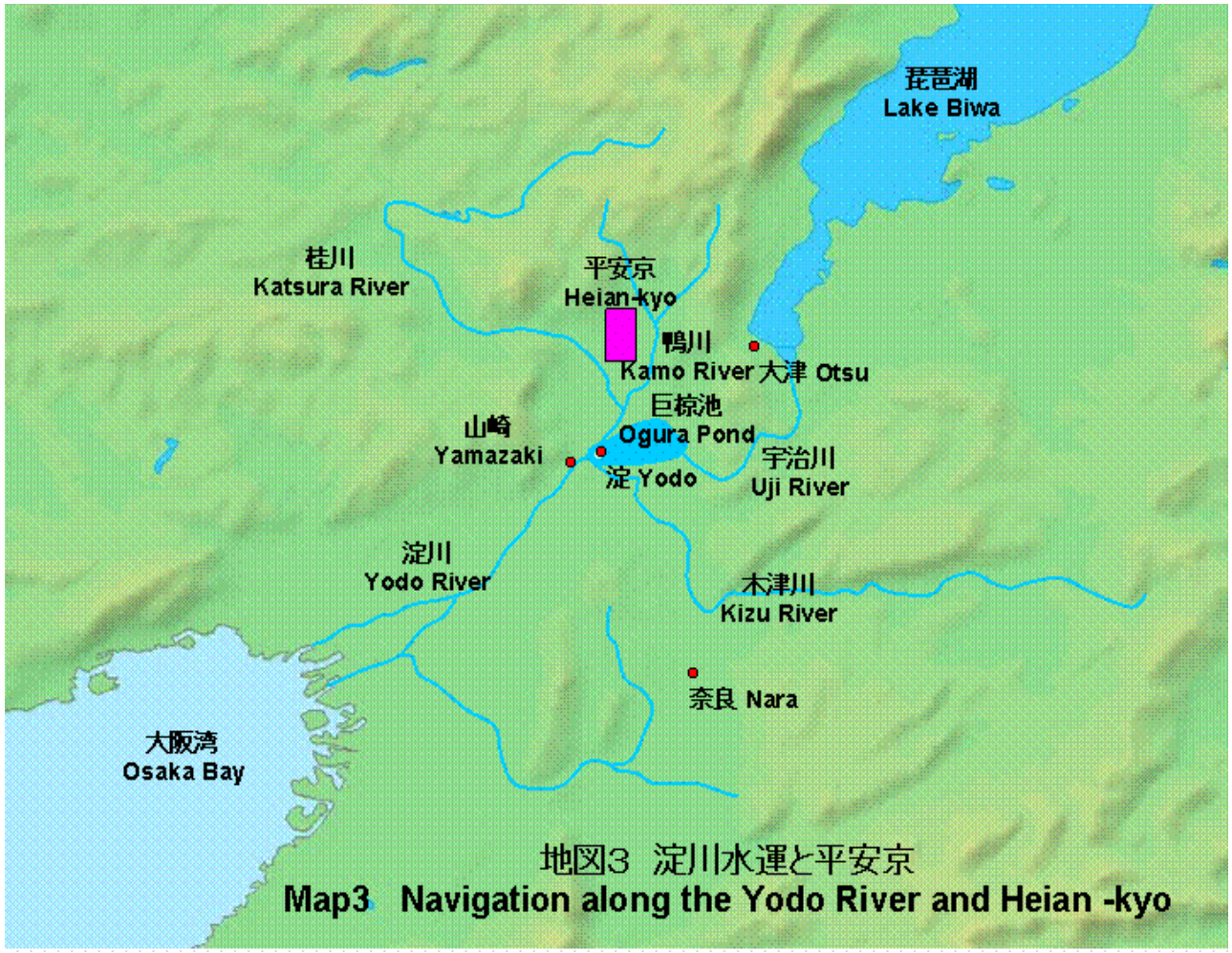
740-744: Capital is moved to Kuni-kyō 恭仁京.

745: Capital is moved to Naniwa-kyō 難波京.

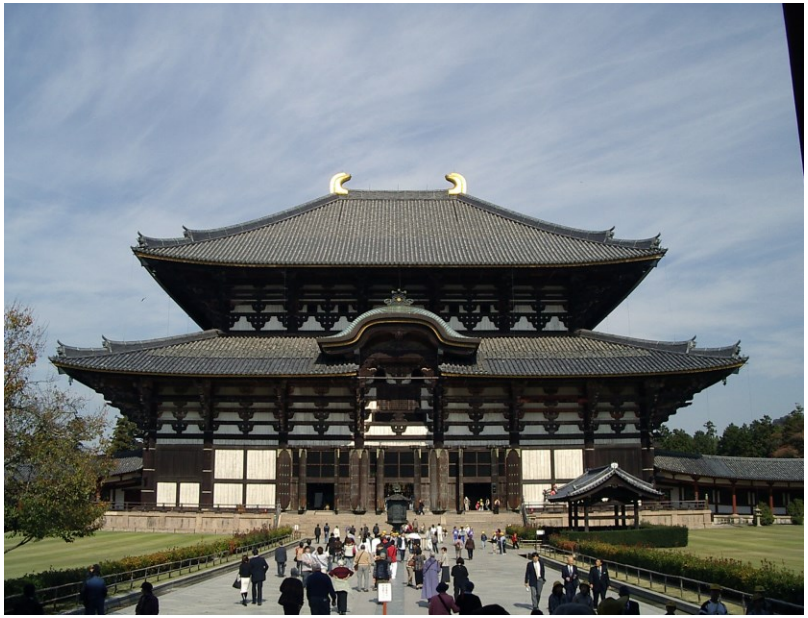
743: Emperor Shōmu issues orders construction of a large Vairocana statue.

749: Shōmu takes the tonsure in favor of his daughter Kōken 孝謙.

River navigation to Heian-kyô 平安京 and Nara (Heijō-kyō 平城京)



The Vairocana (毘盧釈那) Image (大仏) at Tōdaiji　東大寺



Emperor Shōmu 聖武and Empress Kōmyō 光明sponsored the building of Tôdaiji as an expression of their devotion to Buddhism.

2. Chronology (continued)

752: The Great Buddha (daibutsu 大仏)at Tōdaiji 東大寺 is completed.

75: Empress Kôken abdicates in 758.

759: Compilation of the first imperial poetic anthology, the *Man'yōshū* is completed.

764-770: Empress Kōken reascends the throne as Empress Shōtoku.

784: Emperor Kammu moves the capital to Nagaoka-kyō.

794: Emperor Kammu moves the capital to Heian-kyō.

3. Typological profile

3.1 Overall

Like modern Japonic varieties, OJ is a largely fixed OV, NP P, XP N language. However it differs in that it has:

3.2 Differential object marking

3.3 A number of quasi-grammaticalized preverbal auxiliaries < converbs

3.4 Widespread “nominalized” subordinate clause types

3.5 Differential subject marking in the patterns in 3.4

3.6 An active : inactive opposition in the patterns in 3.4

3.2 Differential object marking: acc marked objects = specific (Yanagida & Whitman 2009)

(1) 小松 下 乃 草 乎 苅 核

kwo matu=ga sita =*no* kaya=*wo* kara-*sane*

small pine gen$_a$ below gen$_i$ grass acc cut-imp

'Please cut the grass under the small pine'

(MYS 1.11; Frellesvig, Horn and Yanagida 2013)

(2) 安可見夜麻 久左祢 可利曾気

Akami yama *kusane Ø* *kari-soke*

Akami mountain grass cut-remove

'at Mount Akami I cut and remove grass…'

(MYS 14.3479; FHY 2013)

3.3 Preverbal negation in imperatives; preverbal auxiliaries *e* potential, *ari* stative, *api* reciprocal (cf. Dryer 1992)

(3) 故 敷 等 伊布波 衣=毛 名豆氣多理

kwopu to ipu pa e=mo naduke-tari

love comp say top pot even name-stative

‘The thing called love, I can even name it.’

(MYS 18.4078, Whitman 2010)

3.4 Widespread nominalized clause types (Here, a focus construction)

(4) 和 藝毛古=我 蘇弖 母 志保保 尓

*Wa.g.imokwo=**ga*** *swode=mo sipopo ni*

my.wife =gen$_a$ sleeves=even drenched

奈伎志 曽 母波由

naki-si *=so* *[o]mopay-u*.

cry-pst.adn=foc long.for-adn

'I long for my wife, who cries so that even her sleeves were sopping.'

(MYS 20.4357, Yanagida & Whitman 2010)

3.5 Differential genitive subject marking (Yanagida 2005, 2007)

(5) a. 君　我　由久　　道

kimi=***ga*** *yuk-u*　　miti

lord=gen$_a$ go-adn　road gen$_i$ length

‘the road my lord travels’

(MYS 15.3724)

b. 宇　能　花　能　　佐久　　都奇

u　　*no*　pana　=***no***　　*sak-u*　　*tukwi*

utugi gen$_i$ blossom gen$_i$　bloom-adn month

‘the month when the utsugi blossom is in bloom’

(MYS 18.4066)

3.6 An active : inactive opposition in the patterns in 3.4 (Yanagida 2005, 2007; cf. Vovin 1997)

(6) a. 比等豆麻古呂乎　伊吉尓　和我須流

Pito-dumakoro=wo　*iki=ni*　*wa=**ga*** *suru*

person wife Obj　long=for　I=gen$_a$ do-Adn

'I long for another person's wife.'

(MYS 14.3539)

b. 佐欲比賣　能　故　何　比列布利斯　夜麻...

*Saywopimye no=kwo=**ga*** pire　puri-si　yama

Sayohime　gen$_i$ child　gen$_a$ scarf　wave-pst.adn　mountain

'the mountain where Sayohime waved her scarf'

(MY 5.868)

3.6 An active : inactive opposition in the patterns in 3.4 (Yanagida 2005, 2007; cf. Vovin 1997)

c. 君 我 由久 道

kimi=***ga*** *yuk-u* miti

lord=gen$_a$ go-adn road gen$_i$ length

‘the road my lord travels’ (=5a)

d. 明日香河 逝湍

Asuka-gapa Ø yuk-u se

Asuka river go-Adn shallows

‘the shallows where the Asuka River flows’

(MYS 11.2713)

4. **Noun incorporation**

4.1 Lexical compounding

4.2 Morphological NV compounding 1: apophonic nouns

4.3 Morphological NV compounding 2: rendaku

4.4 Composition by juxtaposition

4.1 **Lexical NV compounding**

As pointed out by Kageyama (this symposium), the NV compounding pattern that survives in ModJ involves N+non-finite V. This pattern already exists in OJ. When used in a finite predicate context, N+V_{inf} can be supported by the light verb *se-/s-u* 'do'. An example is (7)*togari* 'falconing' < tori 'bird' +kari 'hunting':

(7) 等能 乃 奈可知 師 登我里 須 良 母

Tono no nakati =si to+gari su rasi mo.

palace gen_i middle.son=foc bird+hunt-inf do seem excl

'It looks like the middle son from the palace is going falconing!'

4.1 **Lexical NV compounding**

There are several pieces of evidence that *to+gari* ‘falconry/falconing’ is a nominal lexical compound.

- It passes the name-worthiness test (Mithun 1984: 848).
- It is phonologically irregular: *to-* is contracted from *tori* ‘bird’.
- *Kari* ‘hunting’ is itself a deverbal nominalization (< *kar-i* hunt-inf); viz. *ukepi+gari* ‘augury-hunting’.
- It triggers rendaku (sequential voicing/nasalization):

to+gari [toNgari]	<	*to(ri) no kari*.
		bird gen$_i$ hunting

4.1 **Lexical NV compounding**

Russell (to appear) lists 8 N+Vinf compounds that appear as predicates only with light 'do'. All trigger rendaku where possible. Russell lists 13 N+Vinf compounds which may appear with light 'do'; when they do and are also phonographically attested, these too trigger rendaku.

This raises the possibility that some case of rendaku in N+Vinf compounds results from contraction of genitive *no*, in a [N+[$_N$ V]] compound:

(8) *to+gari* [toNgari] < [*to(ri)=no* [$_N$ *kari*]]

bird =gen$_i$ hunting

4.2 Morphological NV compounding 1: apophonic nouns

Russell (to appear) also studies NV compounds where N is a bound form. The relevant class of nouns show apophonic alternations like the following:

ta-/te ‘hand’ < pJR *taj

ama- /ame ‘heaven’ < *amaj

ko-/kwi ‘tree’ *koj

tuku-/tukwi ‘moon’ < *tukuj

4.2 **Morphological NV compounding 1: apophonic nouns**

Some nouns, such as *ama+/ame* ‘heaven’ are richly attested in their bound forms in combination with verbs:

(9) 阿麻 登夫 登理
ama+tob-u *tori*
heaven+fly-adnom birds
‘birds flying the sky’ (*Kojiki*)

4.2 **Morphological NV compounding 1: apophonic nouns**

(10) 阿磨 佐箇屡　　避奈

ama+sakar-u　　*pina*

heaven+be.apart-adnom countryside

‘the boondocks heavens away’ (*Nihon shoki*)

(11) 阿遅可遠志

ama+gaker-i

heaven+soar-inf

‘soaring to the heavens’ (*MYS5.894*)

4.2 **Morphological NV compounding 1: apophonic nouns**

The object+V combination *ama+tob-* ‘heaven-fly’ (9) does not show rendaku due to a phonological contraint. The (unaccusative) subject+V combination *ama+s/zakar-* ‘be heavens apart’ shows rendaku in 16 out of 18 examples, as does the location+V combination *ama-gaker-* in its single phonographic attestation.

In general, rendaku is the rule with apophonic N+V compounds.

4.3 **Morphological NV compounding 2: rendaku**

The patterning of rendaku in N-V combinations is usually taken to be due to a contracted particle containing a nasal: genitive *no* or *ga* [Nga], dative/locative *ni*, or instrumental nite (Martin 1987: 96-98). On this account, examples like (12) do not trigger rendaku because the source construction involved a bare theme subject:

(12)	**ama*	*Ø*	*sakar-u*	*pina*
	heaven		be.apart-adn	countryside
	‘the boondocks heavens away’			

4.3 **Morphological NV compounding 2: rendaku**

In contrast (11) triggers rendaku because the source construction involves dative/locative *ni*.

(13) **ama =ni kaker-i* > */ama Ngakeri/*
heaven loc soar-inf
'soaring to the heavens'

4.3 **Morphological NV compounding 2: rendaku**

The same particle contraction account extends to non-apophonic N+V combinations which trigger rendaku:

(14) 久母 我久理

kumo+gakur-i	<	*kumwo=ni kakur-i
cloud-hid-inf		cloud loc hide-inf

‘hiding in the clouds’

(MYS 17.4011)

4.3 **Morphological NV compounding 2: rendaku**

Martin (1987: 96) and Russell (to appear) point out that some instances of N+V compounding with rendaku don't have a clear analytic source from N=postposition.

These include both

- object+V combinations (*mo+bik-* 'skirt+pull', *to+gar-i* 'falconry', and
- theme subject+verb combinations like *iro+duk* 'color+attach', *pana+dirap-* 'flower+fall', and the *ama+zakar-* 'be heavens apart' variant of (9).

4.3 **Morphological NV compounding 2: rendaku**

However both types of “unexpected” N+V rendaku combinations can be derived from postposition absorption.

•object+V combinations: *to+gari* ‘falconry’ < genitive *=no* in nominalizations: *to(ri)=no [$_N$ kar-i] ‘hunting of birds’. Also backformations from nominalized compounds.

•theme subject+verb combinations like *pana+dirap-* < genitive *no* in attributive constructions:

(15) 波奈治良布　　己能 牟可　都　乎

pana dirap-u　　kono muka　=tu　wo

flower scatter-adn this opposite=gen peak

‘this facing flower-scattered peak’

4.3 Morphological NV compounding

As Russell (to appear) argues, OJ MC satisfies some typological criteria for noun incorporation.

- It follows phonological patterns for N compounding (rendaku, apophony)
- Verbal prefixes can precede a morphological N+V compound (Russell to appear):

(16) 左乎妣吉

sa-wo+bik-i

pref-cord+pull-inf

'pulling the rein' (*MYS* 14.3535 EOJ)

4.3 Morphological NV compounding

Most important, morphological NV compounds change the referential status and discourse salience of N.

(11) 阿遅可遠志

ama+gaker-i

heaven+soar-inf

'soaring to the heavens' (MYS *5.894*)

(17) 宇梅 乃 落 花 之 安米尓登姚安我里

ume=no tir-u pana=no ame=ni tobi agar-i

'The scattered plum blossoms fly up in the sky' (MYS 17.3906)

4.4 Composition by juxtaposition

Non-apophonic Ns which do not trigger rendaku give no phonological evidence for N+V compounding. But there is syntactic evidence for 'composition by juxtaposition' (Mithun 1984), or quasi-compounding (Miayoka, this symposium). Recall that [specific] direct objects in "nominalized" clauses are realized to the left of the subject in the order O S=*ga* V (Yanagida 2005, 2007).

(6) a. 比等豆麻古呂乎　伊吉尓　和我須流

Pito-dumakoro=wo　*iki=ni*　*wa=**ga** suru*.

person wife Obj　long=for　I=gen$_a$ do-Adn

'I long for another person's wife.'

(MYS 14.3539)

4.4 Composition by juxtaposition

Yanagida counted 65 examples in the *Man'yōshū* of transitive clause with accusative-marked objects and *ga*-marked genitive subjects. All have OSV order. When S=gen O order occurs in OJ, the object is

- immediately adjacent to the verb
- zero-marked
- non-branching

Yanagida concludes that such objects are incorporated. She counts 90 examples of S=gen O V in the *Man'yōshū*. All but one meet the conditions above.

4.4 Composition by juxtaposition

Unlike morphological NI, quasi-incorporation appears to be unrestricted by referential status.

(6) b. 佐欲 比賣　能 故 何　　比列布利斯　　夜麻...

Saywopimye=no kwo=ga **pire** Ø puri-si　　yama

Sayohime　gen_i　child=gen_a scarf　wave-pst.adn　mountain

‘the mountain where Sayohime waved her scarf’

(20)　加奈思吉兒呂我　　尓努保佐流可母

kanasiki kwo-ro=ga　**ninwo** Ø posaru kamo

beloved child-aff=gen_a　cloth　dry　Q

‘Is my beloved child drying woven cloth?

(MYS.14.3351, EOJ)

4. Noun incorporation: Summary

OJ had a (probably already lexicalized) process of morphological NI and a productive process of quasi-NI. The two processes were most likely originally the same, but by OJ, rendaku (voicing/nasal assimilation) was a salient marker of morphological NI, probably due to backformation from the more productive N+N compounding pattern. It is likely that quasi-NI was lost in EMJ together with the loss of DOM, as =*(w)o* was generalized as an accusative marker.

5. Prefixes *i-* and *–saN*

The most prominent “non-polysynthetic” feature in OJ is the absence of agreement. The weak (semi-clitic) pronouns *a*= (1p) *wa*= (1p), *na*= (2p), *ko*= ‘this’ *so*= ‘that’ and *ta*- ‘who’ had to be supported by 1 or 2-syllable postpositions, but they do not attach to the predicate.

The best evidence for predicate head marking with a crossreferencing function involves the the prefixes *i-* and *saN-*. Yanagida (2007) and Yanagida & Whitman (2009) analyze these as agentive and nonagentive prefixes respectively.

5. Prefixes *i-* and *–saN*

(21) 楢乃京師乃 佐保川尓 伊去至而

Nara=*no* miyakwo *no Sapo* kawa=*ni* ***i-***yuki itarite

Nara=gen$_i$ capital =gen$_i$ Saho river–=loc i-go reaching

'I reached the River Sahokawa in Nara.' (MYS 1.79)

(22) 久米能若子我 伊觸家武 礒之草根

Kume=no wakugwo=*ga* ***i-***pure-*kyem-u* iswo…

Kume=gen$_i$ youth=gen$_a$ i-touch-PConj-Adn rock

'the rock… that the youth of Kume would have touched.' (MYS 3.435)

5. Prefixes *i-* and *–saN*

A total of 74 occurrences of *i-* are found in the *Man'yōshū* (Yanagida & Whitman 2009). 44 occur in infinitives, 28 in "nominalized" clauses, and only 2 in (possibly) indicative clauses. *–i* is particularly common on prefixed to verbs with agentive and nonagentive interpretations. Thus 18 examples occur with *yuk-* 'go', all in contexts with agentive human subjects.

5. Prefixes *i-* and *–saN*

In contrast, *saN-* occurs with predicates of lower agentivity, sometimes including activity verbs, but with nonhuman subejcts.

(23) 左奈良敝流　多可波　奈家牟等

sa*-narap-yer-u taka=pa* *nak-ye-mu to*

sa-be.tamed-perf-adn falcon=top cry-pst-presum c

‘that the tamed falcons would have cried’

(MYS 17.4011)

(24) 河湍尓波　年魚子小狭走

kapa se=*ni=pa* ayu kwo ***sa***-basir-i

river shallow=loc=top sweetfish sa-run-inf

‘the young sweetfish running in the river shallows’

5. Prefixes *i-* and *–saN*

There are 30 tokens in the the *Man'yōshū* of the prefix *sa-* on verbs, including *neru* 'sleep', *niturapu* 'shine', *pasiru* '(fish) run', *wodoru* '(birds) dance', *wataru* '(toads) cross', *nebapu* 'spread roots', *narabu* '(birds) line up', *kumoru* 'get cloudy', *nituku* 'get reddened'. All the verbs are intransitive, and all have non-agentive subjects. Aside from *ne-* 'sleep', all are nonhuman).

5. Prefixes *i-* and *–saN*

These prefixes are particularly common with verbs with either agentive or non-agentive interpretations. One verb in OJ, *watar-* 'cross', appears with *i-* or *sa-*. There are 4 examples of *i-watar-* in the Man'yôshû (MY 1742, 2081, 4101, and 4126), and 6 examples of *sa-watar-* (MY 800, 971, 1960, 1976, 2450, and 2804). The subject of *i-watar-* is [+human] and volitional in all four examples: 'young woman,' 'Tanabata' (Vega, the weaver star), 'the fisherfolk,' and 'Vega and Altair.' The subject of *sa-watar-* is [-human] in all six examples: ('toads' (800, 971), 'a cuckoo' (1960, 1976), 'the moon,' 'a teal'.

5. Prefixes *i-* and *–saN*

(25) 波志和多世良波曽能倍由母 伊和多良佐牟乎

pasi watasera-ba *sono pe =yu=mo* ***i–watar****-as-am-u*

bridge put.across-if that way abl too *i*-cross-hon-prop-adn

‘though if one put a bridge (across the Milky Way), (Vega and Altair) would *i*-cross over by that’

(MYS 18.4126)

(26) 雲間従 狭化月乃

kumo ma ywori ***sa*-watar-u** tukwi

cloud among from *sa*-cross-adn moon

the moon *sa*-crossing from among the clouds’

(MYS 15 .2450)

5. Prefixes *i-* and *–saN*: Summary

The prefixes *i-* and *–saN* appear not to crossreference person, but they mark the agency of the subject. Both disappear by EMJ. Their etymologies are unclear, but there are three OJ examples of pronominal *i*, usually glossed as a derogatory 2nd person. This *i* has also been interpreted as a reflexive. *SaN* may be related to the mesial demonstrative so, as well as the homophonous mesial adverb *sa* 'thus'. *SaN* also prefixes to nouns. This parallels exactly the distribtion of agreement prefixes The pattern where inactive prefixes occur on nouns and inactive verbs, while active prefixes occur on active verbs occurs elsewhere, e.g. Sateré-Mawé (Meira 2006).

6. Reciprocal *api-*

OJ has both preverbal reciprocal *api-* and postverbal *ap-*. The latter suffixes to the infinitive of the lexical verb and survives in ModJ. In ModJ, it has both reciprocal and sociative functions:

(27) ２人が殺し合った。

Hutari=ga koros-i-at-ta

2=nom kill-inf-recip-pst

‘The two killed each other.’

(28) ２人が苦しみ合った。

Hutari=ga kurusim-i-at-ta

2=nom suffer-inf-recip-pst

‘The two suffered together.’

6. Reciprocal *api-*

Both OJ reciprocals are grammaticalized from the verb *ap-* 'meet, join'. Preverbal *ap-i* is the infinitive form of this verb. In contrast to the preverbal auxiliary *e* potential (3), preverbal *api* appears to be inseparable from the lexical verb. There are 82 attestations of preverbal api (20 phonographic) in COJ, and 2 attestations in EOJ (both phonographic) (Frellesvig et al). There are 15 attestation of postverbal reciprocal *ap-*, 5 phonographic (ibid).

6. Reciprocal *api-*

The pre- and postverbal reciprocals appear to be specialized by function in OJ. The 20 phonographic examples with preverbal *api* occur exclusively with transitive lexical verbs: *makur-* ‘pillow’, *omop-* ‘think of’, *mi-* ‘see’.

(29) 家布 能 阿素毘=爾 阿比 見都流 可母

kyepu=no aswobi=ni api mi-tu-ru kamo

today=gen$_i$ play=loc recip see-perf-and-excl

‘We saw each other at today’s games!’

6. Reciprocal *api-*

The 5 phonographic attestations of postverbal *ap*-all occur with intransitive verbs. Their meaning is sociative.

(30) 安麻 能 伊射里波

ama=no izari=pa

fishermen=gen$_i$ light=top

等毛之	安倣里	見由
tomos-i	ap-yer-i	miy-u
light.up	recip-stat-inf	appear-conc

‘The fishermen’s lights look like they have lit up together.’

6. Reciprocal *api-*

Given the later development of the language, it seems likely that the OJ preverbal (reciprocal) function was conservative. In OV languages as auxiliaries and other verbal extensions shift from pre- to post-verbal position, the preverbal function often becomes more restricted, or grammaticalized. Thus EMJ preverbal *e* is restricted to negative potentials before disappearing. Burmese preverbal *peì-* < *peì* 'give' functions as a permissive causative (and is increasingly uncommon in colloquial registers), while postverbal *peì* has the more transparent function of a benefactive.

7. Conclusions

8th century Japanese is difficult to classify as a polysynthetic language, given the absence of agreement in particular. However it displays a number of 'polysythetic-ish' features not found in modern Japonic varieties. These include

- Noun incorporation (partly lexicalized morphological NI, productive quasi NI)
- Prefixal markers of subject agentivity
- A specialized prefixal reciprocal

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