Genitive/active to nominative case in Japanese: the role of complex experiencer constructions

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Introduction

Yanagida & Whitman (Y&W, 2009) propose that Old Japanese (8th century; OJ) displays active alignment (sometimes viewed as a subtype of ergative).

Y&W also propose that alignment change from active (a subtype of what is called more generally non-accusative) to nominative-accusative (generally called just accusative) took place sometime (around the 11th century) in Early Middle Japanese.

In this paper, I examine extensive data collected from the Corpus of Historical Japanese, and discuss a possible diachronic pathway from non-accusative to accusative alignment in the history of Japanese.
Many researchers propose that alignment change is caused by voice alternations. Voice is a valency changing category, morphologically realized as an affix attached to the verb.

(1) **Accusative > Ergative (Passive > Transitive)**

\[
\text{NP}_{\text{Nom}} \quad \text{NP}_{\text{Obl}} \quad \text{V}_{\text{voice}} \quad \rightarrow \quad \text{NP}_{\text{Erg}} \quad \text{NP}_{\text{Abs}} \quad \text{V}_{\text{Voice}}
\]

(2) **Ergative > Accusative (Antipassive > Transitive)**

\[
\text{NP}_{\text{Abs}} \quad \text{NP}_{\text{Obl}} \quad \text{V}_{\text{Voice}} \quad \rightarrow \quad \text{NP}_{\text{Nom}} \quad \text{NP}_{\text{Acc}} \quad \text{V}_{\text{Voice}}
\]
The explanation for alignment change from antipassive to transitive, however, is only applicable to languages that have attested antipassive constructions.

Not all languages have antipassives. Dryer & Haspelmath (2017) in *WALS online* identify 14 ergative and 2 active languages (out of a total of 36 ergative/active languages) with no antipassives.

OJ had no antipassives, so this route is not a possible explanation for alignment shift in Japanese.
Proposals:

A reanalysis of psych predicates, which I identify as “impersonal psych predicates,” as unaccusative (3) plays a crucial role in alignment change from non-accusative to accusative in Japanese.

(3) Active > Nominative

<table>
<thead>
<tr>
<th>Cause</th>
<th>Experiencer</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP_{AGT} (*NP_{1P}) V/A_{voice}</td>
<td>NP_{NOM} V/A_{voice}</td>
<td></td>
</tr>
</tbody>
</table>

Psych predicates in OJ are **impersonal**: the theme argument (stimulus) is analyzed as a **causer**, thus marked by active *ga*, while the experiencer argument is systematically unexpressed.
Proposals

Experiencer subjects marked by *ga* are an innovation which emerges in Early Modern Japanese around the 17th century (see example (28)). This innovation is the source for nominative *ga* in modern standard Japanese.

Malchukov (2008) proposes that patientive S intransitives in Native American languages evolved as a result of a reanalysis of “transimpersonal experiencer constructions” (a term due to Haas 1941) with object experiencers. The shift from active to accusative alignment in Japanese proposed in this paper involves a somewhat similar process: impersonal experiencer constructions are reanalyzed as patientive S intransitives.
Modern Japanese is a textbook example of a nominative-accusative language.

**Transitive (SOV)**
(4) boku no tuma ga natukusa o ka-tta
   I GEN wife NOM summer grass ACC mow-PST
   ‘My wife cut the summer grass.’

**Intransitive (SV)**
(5) ume no hana ga sai-ta
   plum GEN blossom NOM bloom-PST
   ‘The plum blossoms bloomed.’
Table 1: Two major clause types in OJ (700-800)

<table>
<thead>
<tr>
<th>Conclusive</th>
<th>Adnominal ‘Nominalizing’</th>
</tr>
</thead>
<tbody>
<tr>
<td>tab-u ‘eat’</td>
<td>tabu-ru ‘eat’</td>
</tr>
<tr>
<td>tasuk-u ‘help’</td>
<td>tasuku-ru ‘help’</td>
</tr>
<tr>
<td>nar-i ‘be’</td>
<td>na-ru ‘be’</td>
</tr>
</tbody>
</table>

Yanagida and Whitman (2009) argue that the adnominal form in OJ has a nominalizing function. It appears in various types of embedded clauses and main clauses that contain a focus/wh-phrase.
Conclusive clauses

Transitive (SOV)

(6) wagimo $\varnothing_A \ldots$ natu kusa $\varnothing_O$ karu (MYS 1272)

my.wife summer grass mow.CONCL

‘My wife cut the summer grass.’

Intransitive (SV)

(7) ume no pana $\varnothing_S$ ima sakari nar-i (MYS 820)

plum GEN flower now blossom be-CONCL

‘The plum tree is now in blossom.’
Conclusive Clauses

Table 2: Nominative/accusative patterns

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Intransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Ø</td>
<td>Ø</td>
</tr>
<tr>
<td>Object</td>
<td>wo/Ø</td>
<td></td>
</tr>
</tbody>
</table>

Nominalized Clauses

Transitive (SOV)

(8) [Saywopimye no kwo ga pire Ø puri-si] yama (MYS 868)

Sayohime GEN child AGT scarf wave-PST.ADN mount

‘the mountain where the child Sayohime waved a scarf’

Inactive Intransitive (SV)

(9) [pisakwi Ø opu-ru] kiywoki kapara (MYS 925)

catalpa (NOM) grow-ADN clear riverbank

‘on the banks of the clear river where catalpas grow’
Nominalized Clauses

(10) The Nominal Hierarchy (Silverstein 1976)

first/second person > third person > proper nouns > human > animate > inanimate

☞ Dixon (1979:86-87) interprets the nominal hierarchy (10) as “the agency potential of any given NP.” The coding property of the subject NP is determined by where the NP is located in the nominal hierarchy. Ga only appears on the prototypical agent arguments of active verbs. Unlike most documented languages with active alignment, OJ has no stative counterparts for personal pronouns.
Table 3: Three-way case marking for subjects of nominalized verbs

<table>
<thead>
<tr>
<th>Subject</th>
<th>Transitive/Active Intransitive</th>
<th>Inactive Intransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1P (clitic)</td>
<td>a=ga, wa=ga</td>
<td></td>
</tr>
<tr>
<td>2P (clitic)</td>
<td>na=ga</td>
<td></td>
</tr>
<tr>
<td>3P (clitic)</td>
<td>si=ga</td>
<td></td>
</tr>
<tr>
<td>Kinship</td>
<td>ga</td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>no</td>
<td>no/Ø</td>
</tr>
<tr>
<td>Non-Human</td>
<td>no</td>
<td>no/Ø</td>
</tr>
<tr>
<td>Inanimate</td>
<td>no</td>
<td>no/Ø</td>
</tr>
</tbody>
</table>
Nominalized Clauses

☞ Some intransitive verbs, such as *neru* ‘sleep’, *woru* ‘sit’ (which are limited to human subjects, predominantly first/second person clitics) occur with *ga*-marked subjects. Since these verbs do not occur with *zero* marked subjects, they are classified as active in OJ. It is known that the division between active and inactive verbs involves idiosyncratic properties varying by language.
Nominalized Clauses

_No_ is independent of alignment. It can mark both intransitive and transitive subjects.

**Intransitive (SV)**

(11) [mizu no tama ni nita-ru] mimu
    water GEN pearl DAT resemble-ADN see
    ‘(I) see water which resembles a pearl.’  (MYS 3837)

**Transitive (SOV)**

(12) soko mo ka pito no wa=wo koto nasa-mu?
    that too Q people GEN I=OBJ things say-Aux.ADN
    ‘Do people say that of me too?’  (MYS 1376)
Nominalized Clauses

In contrast to *no* as in (12), when the subject is marked by *ga*, the *wo*-marked object necessarily moves out of VP, resulting in OSV word order.

Transitive (OSV)

(13) a. *kimi wo* [VP *a=ga* mat-an-akuni]

lord OBJ I=AGT wait-not-NMLZ

‘I do not wait for you.’ (MYS 3960)

b. *yama miti wo* [VP *wa=ga* ku-ru]

mountain road OBJ I=AGT come-ADN

‘I cross the mountain road.’ (MYS 382)
Nominalized clauses

The typological literature suggests that there is a strong correlation between OSV and ergative alignment. For example, in Dyirbal (Australian; Dixon 1994), when the subject is marked by ergative, the object, regardless of whether it is marked accusative or absolutive, appears outside VP, resulting in OSV order.

Dyirbal, Transitive (OSV)

(14) ngana-na nguma-nggu bura-n
we-ACC father-ERG see-NONFUT
‘Father saw us.’

(15) yabu nguma-nggu bura-n
mother(ABS) father-ERG see-NONFUT
‘Father saw mother.’
Nominalized Clauses

(16) Object movement in ergative languages

\[
\text{TP} \rightarrow \text{OBJ} \quad \text{T'} \quad \text{T}
\]
\[
\text{vP} \rightarrow \text{v'} \rightarrow \text{v}[+\text{Agt}]
\]
\[
\text{SUB} \rightarrow \text{VP} \rightarrow \text{TP}
\]
Alignment Change

Periodization (Frellesvig 2010)

Old Japanese (OJ)  700–800
Early Middle Japanese (EMJ)  800–1200
Late Middle Japanese (LMJ)  1200–1600
Early Modern Japanese (EModJ)  1600–1800
Alignment Change

The OJ data are taken from the Oxford Corpus of Old Japanese (OCOJ). The data in EMJ (Genji (1010)) and EModJ (Toraakirabon Kyogen (1642)) are taken from the Corpus of Historical Japanese (CHJ) produced by the National Institute of Japanese Language and Linguistics. Genji contains 445,715 words. Toraakirabon Kyogen contains 234,863 words.
# Alignment change

Table 4: Occurrences of subject marking *ga* and *no* (OCOJ&CHJ)

<table>
<thead>
<tr>
<th>Period</th>
<th>OJ (700-800)</th>
<th>EMJ <em>Genji</em> (1010)</th>
<th>EModJ <em>Kyogen</em> (1642)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject=ga</td>
<td>902 (42%)</td>
<td>57 (4%)</td>
<td>1622 (76%)</td>
</tr>
<tr>
<td>Subject=no</td>
<td>1253 (58%)</td>
<td>1361 (96%)</td>
<td>504 (24%)</td>
</tr>
<tr>
<td>Total</td>
<td>2155</td>
<td>1418</td>
<td>2126</td>
</tr>
</tbody>
</table>
Alignment Change

As is well-known, the adnominal/conclusive distinction was completely lost by the time of EModJ, and the adnominal ending –(r)u was reanalyzed as a matrix clause ending. After the loss of adnominal/conclusive distinction, ga started to mark the subject of main clauses which results in a drastic increase of ga in EModJ. A question then arises:

• Why did ga decrease in its frequency in EMJ?
• Why did ga, not no, become the nominative case in modern standard Japanese?
Active > Nominative

Table 5: Active > Nominative through extension
(Harris & Campbell 1995:258)

<table>
<thead>
<tr>
<th></th>
<th>Transitive Subject</th>
<th>Intransitive Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Before change:</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After change:</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Nominative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☞ Extension is a mechanism which results in changes in the surface manifestation of a pattern and which does not involve immediate or intrinsic modification of underlying structure (Harris & Campbell 1995:51).
Table 6: Alignment change in Korean (King 1988)

<table>
<thead>
<tr>
<th></th>
<th>Transitive Subject</th>
<th>Intransitive Subject</th>
<th>Direct Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before change:</td>
<td>-i</td>
<td>Ø</td>
<td>Ø</td>
</tr>
<tr>
<td>Ergative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After change:</td>
<td>-i</td>
<td>-i</td>
<td>Ø / -l</td>
</tr>
<tr>
<td>Nominative</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Alignment Change

Whitman & Yanagida (2015), however, show that King’s hypothesis is not supported by the Korean data. A closer examination of the data in Japanese shows that the case system in Japanese did not simply change from active to nominative by extending *ga* to intransitive.

In Table 4, represented in Figure 1, we see that the use of *ga* decreased drastically in its frequency in EMJ, before *ga* was established as a nominative case in the late 17th century in EModJ.
Active > Nominative

Figure 1 (=Table 4) occurrences of ga and no

Subject=ga

Subject=no
Active > Nominative

Table 7: *Ga* in main clauses in LMJ (*Amakusa Heike 1592*, Yamada 2000)

<table>
<thead>
<tr>
<th></th>
<th>Transitive Agent</th>
<th>Unergative Agent</th>
<th>Adjective Theme</th>
<th>Unaccusative Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ga</td>
<td>2 (2%)</td>
<td>13 (16%)</td>
<td>15 (18%)</td>
<td>54 (64%)</td>
</tr>
<tr>
<td>No</td>
<td>1 (25%)</td>
<td>1 (25%)</td>
<td>2 (50%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>zero</td>
<td>41 (33%)</td>
<td>18 (15%)</td>
<td>33 (27%)</td>
<td>18 (15%)</td>
</tr>
</tbody>
</table>
Active > Nominative

In the present study, I collected data from *Toraakirabon Kyogen* published in 1642, half a century after the *Amakusa Heike*. The *Toraakirabon Kyogen* is also a relatively colloquial collection of texts, made up of *kyogen* (comic) plays.

The result of this survey is given in Table 8. I selected 50 high frequency verbs out of a total of 169 verbs which appear with a *ga*-marked subject. I then classified all 2263 instances of each verb into transitive, unergative and unaccusative.
Active > Nominative

Table 8: Ga in EModJ (Toraakirabon Kyogen 1642, CHJ)

<table>
<thead>
<tr>
<th>Subject= ga</th>
<th>Transitive (20)</th>
<th>Unergative (5)</th>
<th>Unaccusative (25)</th>
<th>Total (50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>237 (10%)</td>
<td>214 (9%)</td>
<td>1812 (80%)</td>
<td>2263 (100%)</td>
</tr>
<tr>
<td># of Verbs</td>
<td>4479 (23%)</td>
<td>2942 (15%)</td>
<td>11784 (61%)</td>
<td>19205 (100%)</td>
</tr>
</tbody>
</table>
Alignment Change

• Despite the fact that this text contains more unaccusative verbs (61%), the overall data is consistent with Yamada’s claim that nominative _ga_ started out to mark the theme argument of unaccusative verbs rather than the agent arguments of transitive verbs. The frequency of _ga_ marking theme arguments is significantly higher than _ga_ marking agent arguments.

• I propose that some particular psych predicate constructions in OJ, contribute to a shift from active to nominative.
Psych Predicate Constructions

(17) **Theme**

\[
\begin{array}{ccc}
S & V & O \\
Horror films & frighten & little kids. \\
\end{array}
\]

(EXP=OBJ)

(18) **Experiencer**

\[
\begin{array}{ccc}
S & V & O \\
Little kids & fear & horror films. \\
\end{array}
\]

(EXP=SUB)
Psych Predicate Constructions

Van Gelderen (2014) shows that the object experiencer verb *frighten* (17) had an overt causative affix in Old English. After the morphological causative was weakened, the participle- *en* suffix developed in Middle English.

The subject experiencer verb *fear* in (18), on the other hand, developed out of an object experiencer verb after a number of morphological changes occurred in Middle English.
(19) **Uniformity of Theta Assignment Hypothesis**
Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure.

(from Baker 1988: 46)

(20) **Thematic Hierarchy** (Pesetsky 1995)
Agent > Cause > Experiencer > Theme/Subject Matter
Psych Predicate Constructions

Assamese (Indo-Aryan; Woolford 2008)

(21)a. gan-tu-e xap-tu-k khogal korile
song-class-ERG snake-CLASS-DAT anger made/did
‘The song angered the snake.’

b. boroxun-e Ram-ok xant korile
rain-ERG Ram-DAT calm made/did
‘The rain calmed Ram.’

The object experiencer constructions involve a light verb korile ‘make/do’. The theme argument is interpreted as the causer, and thus marked ergative.
The theme (stimulus) marked by *ga* in OJ
(Kikuta 2012)

Old Japanese

(22)a. **imo** *ga* kopsisiku wasura-ye-nu-kamo
    my.lover **AGT** miss forget-VOICE-NEG-Q
    ‘Did I miss my dear and cannot forget her?’
    (My dear made me forget her, didn’t she?)

b. **yama kopeni-si** **kimi** *ga* omopo-**yu**-raku-ni
    mountain cross-PST you **AGT** think-VOICE-NMLZ-LOC
    ‘You came to my mind as I was crossing over the
    mountains.’ (You made me think about you.)
    (MYS 3191)
Psych Adjectives in OJ

Old Japanese
23)a. [papa wo panarete yuku] **ga** kana-si sa
   mother OBJ part go ADN CAUS sad-do NMLZ
   ‘I am sad about parting from my mother.’
   (Parting from my mother made me sad.)

   b. [tada pitor\-kwo ni a-ru] **ga** kuru-si sa
      only one-child DAT be-ADN CAUS pain-do NMLZ
      ‘It is painful to me to be the only child…’
Psych Adjectives in EMJ

Early Middle Japanese (*Genji*)

(24) a. [kokorobape wo mi.ru] ga woka-si-u mo
kindness ACC see-ADN CAUS thankful-do EXCL
‘I am thankful for your kindness. (Your kindness
makes me feel thankful).’

b. [notamapu to kiku] ga itopo-siku
say that hear-ADN CAUS sad-do
‘I am sad to hear her say that.’
(It makes me feel sad to hear her say that.)’
Impersonal Psych Adjectives

The psych predicates (22-24) in both OJ and EMJ are characterized by systematic absence of an experiencer. The unspecified experiencer necessarily refers to first person speaker, as originally observed by Ohno (1977). I propose that psych predicates in OJ and EMJ are impersonal. They have a vestigial causative structure with the causer marked by active ga.

(25) Impersonal psych adjectives in OJ/EMJ

<table>
<thead>
<tr>
<th>Cause</th>
<th>Experiencer</th>
<th>Predicate+Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP/[[S V] ga] (*NP_{1P})</td>
<td>Adjective+si ‘get/do’</td>
<td></td>
</tr>
</tbody>
</table>
The suffix *si* introduces a causer argument, thus, marked by *ga*. Note, however, that the historical relation between the suffix *si* and the causative light verb *si* ‘do’ is no longer transparent in OJ since psych adjectives (23-24) have a psychological state reading rather than a causative event reading.

Note that the auxiliary *yu* attached to the psych verbs in (22) was lost in EMJ, while psych adjectives with the suffix *si* continued to appear with *ga* after agentive *ga* was lost in EMJ.
Two types of Adjectives

Table 9: The conjugation of two classes of adjectives

<table>
<thead>
<tr>
<th></th>
<th>Irrealis</th>
<th>Infinitive</th>
<th>Conclusive</th>
<th>Adnominal</th>
<th>Realis</th>
</tr>
</thead>
</table>
| **Ku-adjective**
*topo-
‘distant’* | -ke       | -ku        | -si        | -ku       | -ke   |
| **Siku-adjective**
*kana-
‘sad’*     | -si-ke    | -si-ku     | -si        | -si-ki    | -si-ke |


Two Types of Adjectives

Table 10: $G_a$ (nominal/clausal arguments) with adjectives (CHJ)

<table>
<thead>
<tr>
<th>Periodization</th>
<th>OJ (700-800)</th>
<th>EMJ (1010)</th>
<th>EModJ (1642)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Psych</td>
<td>0/0</td>
<td>0/1</td>
<td>318/98</td>
</tr>
<tr>
<td>Psych</td>
<td>4/32</td>
<td>6/77</td>
<td>18/17</td>
</tr>
</tbody>
</table>
Emergence of Subject Experiencers

The subject experiencer marked by ga in (26) is innovative.

Early Modern Japanese (EModJ)

(26) onore ga otoko ni motopu ga nikupi podo myself NOM man DAT cling NOM hateful as ‘As I hate myself getting caught by the man…’

(Toraakirabon Kyogen 1642)
Subject Experiencers in Modern Japanese

Modern Japanese (ModJ)

(27) kare ga [NP haha no byooki] ga kanasii
   he NOM mother GEN illness NOM sad

(28) kare ga [S haha ga byooki na no] ga kanasii
   he NOM mother NOM sick be COMP NOM sad
   ‘He is sad that his mother is sick.’

☞ Koizumi (2008) provides a number of diagnostics to suggest that in Modern Japanese, the experiencer argument marked by *ga* behaves like the grammatical subject and the theme argument marked by *ga* behaves like the grammatical object of a transitive verb.
A Reanalysis of Psych Adjectives

(29) a. Causer

Experiencer

Predicate+Voice

NP/[s V_{NMLZ}] ga (*NP_{1P})

b. Theme

NP/[s V_{NMLZ}] ga

Adj+Ø

c. Experiencer

Theme

Predicate+Voice

NP ga NP/[s V] ga

Adj+Ø

☞ Larson & Cheung (2015) argue that crosslinguistically the object NP of a subject experiencer verb is analyzed syntactically as a clause, labeled as CL, at an abstract level.
Emergence of Nominative ga

Early Modern Japanese (Toraakirabon Kyogen 1642)
Intransitive Subjects

(30) [sisai wa iwa-nu]  
good

‘As for details, It is better not to say (about them).’

(31) a. te  
cold
b. mimi  

painful
c. tenki  
good/bad
Emergence of Nominative *ga*

Early Modern Japanese (*Toraakirabon Kyogen 1642*)

Transitive Subjects

(32)a. are *ga* kane no ne o kii-tara ba…
   that NOM bell GEN sound ACC hear-AUX if
   ‘If that person hear the sound of the bell…’

   b. sore *ga* ta pe mizu o ireteoku
      that NOM field LOC water ACC put
      ‘That person put water into the field.’
Nominative ga has emerged through the historical processes indicated in (1-4).

1) Ga marked the agent arguments of transitive/active intransitives in OJ (700-800).
2) Agentive ga decreased drastically in its frequency in EMJ (800-1200).
3) Ga started to mark the theme arguments of unaccusative/adjectives in LMJ (1200-1600).
4) Ga was extended to mark the subject (i.e., agent) of transitive clauses in EModJ (1600-1800).
Conclusion

As noted earlier, Harris & Campbell (1995:258) describe a possible but hypothetical change from active to nominative through extension. Given the data collected from the historical corpus of Japanese, active to nominative shift in Japanese did not simply extend active *ga* to come to mark inactive intransitive subjects, because agentive *ga* was once almost lost in EMJ. The data suggest that *ga* marking on the sole argument of psych predicates, which was an already existing pattern in OJ, was reanalyzed as unaccusative by the time of EModJ. This causes a significant increase of *ga* marked subjects of unaccusative verbs, and subsequent change in the case marking system from active to accusative alignment.
Thank You!
Digitalized texts

Man'yōshū Kensaku, (Yamaguchi University) http://ds26.cc.yamaguchi-u.ac.jp/~manyou/
The Corpus of Historical Japanese, the National Institute of Japanese Language and Linguistics, https://maro.ninjal.ac.jp/
The Oxford Corpus of Old Japanese, http://vsarpj.orinst.ox.ac.uk/corpus/

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Ohno, Susumu. 1977. Shukaku joshi ga no seiritsu [The development of the nominative case particle ga], *Bungaku* 45, 102-117.


