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Differential argument marking in Old Japanese: Morphology, semantics, and syntax

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1. Introduction

Yanagida and Whitman (2009) propose that two major clause types in Old Japanese (OJ, 8th century), the one traditionally labeled as *shūsi* 'conclusive' and the other identified by Yanagida and Whitman as 'nominalized' clauses, display different alignment and word order. While the subjects of conclusive verbs are zero-marked, the subjects of nominalized verbs are realized with the genitive ga, no, or zero. Yanagida and Whitman (2009) propose that the genitive ga, ancestor of the Modern Japanese nominative, is the realization of an active case on the external argument (i.e. the agent) of transitive or active intransitive verbs. Kikuta (2012), however, addresses certain problems with Yanagida and Whitman's hypothesis, suggesting that variable subject-marking in OJ is conditioned, not by the θ -role (i.e. agent) assigned by the verb, but by the place of the subject on the animacy hierarchy. First/second person pronouns are invariably marked by ga, but inanimate nouns are marked by no. In Kikuta's analysis, OJ has a nominative-accusative system with two differential subject markings, ga and no. It should be noted that while this opposition between ga and no has gained much attention in traditional grammar, no previous work, including Kikuta's, has as of yet integrated a discussion of zero-marked counterparts; they are simply set aside as instances of stylistic case drop.

In recent typological and theoretical literature, languages with variable case marking have been investigated from the perspective of a broader pattern of differential argument marking. Differential subject marking occurs primarily in ergative languages, while differential object marking is independent of alignment and widely attested to in both ergative and accusative languages. This chapter discusses the characteristic phenomenon of differential argument marking in OJ. According to this approach, the crucial contrast is not merely between *ga* and *no*, but between case-marked and *zero*-marked arguments. *Zero*-marked arguments cannot be characterized simply as case drop, because they have both syntactic and semantic significance.

The chapter is organized as follows. Section 2 begins with a critical review of the analysis of alignment in OJ as proposed by Vovin (1997) and Takeuchi (2008). Section 3 provides the basic morphosyntactic characteristics of active alignment as discussed widely in

1

the literature, which provides an empirical basis for the claim that nominalized clauses in OJ show active alignment. Section 4 describes the results of a comprehensive survey of variable subject marking in OJ utilizing the Oxford-NINJAL Corpus of Old Japanese (ONCOJ). The data revealed that, while the alternation between ga and no is determined by the semantics of NPs, as widely assumed, differential subject marking associated with ga and zero is closely linked to the θ -role assigned by the verb, implying a binary classification of predicates into active and inactive. Section 5 investigates the phenomenon of differential object marking vis a vis close inspection of two prose texts in OJ: *Norito* and *Senmyō*. This analysis revealed that *wo* marks specific objects and that the specific object moves out of VP.

2. Alignment

The typological literature widely assumes that alignment systems are classified into three types. Following Dixon's (1979) familiar terminology, S refers to the subject of an intransitive verb, A to the subject of a transitive verb, and O to the object of a transitive verb.

(1) Three Types of Alignment



In a nominative-accusative pattern, often abbreviated as 'accusative pattern', A and S are marked with a nominative case, and O is accusative. In ergative and active patterns, often abbreviated as 'non-accusative', S and O are marked with an absolutive case, and A is marked ergative or active. An active-inactive pattern is often analyzed as a subtype of an ergative pattern with a split intransitivity; the subject of an active intransitive verb (SA) is marked in the same way as the subject of a transitive verb (A), but differently from the subject of an inactive intransitive verb (SO). Many languages classified as non-accusative, however, exhibit a split ergativity in which a nominative-accusative pattern shows up in certain grammatical contexts typically conditioned by person or tense/aspect (cf. Dixon 1979).

2.1 Vovin (1997)

Vovin (1997) initially proposes that OJ has active-inactive alignment. Under Vovin's analysis, the case marker *i*, which is treated as a nominative particle by traditional grammarians (cf. Yamada 1968), is, in fact, an active case marking the subjects of transitive and active intransitive verbs. His examples are cited in (2):

- (2) a. papa i more-domo... (MYS 14.3393) mother AGT guard-although 'Though [my] mother guards [me]...'
 b. unapi wotokwo i ame apugi... (MYS 9.1809)
 - Unapi man AGT sky look up 'The man from Unapi looked up at the sky and...'

Vovin observes that the subjects of inactive intransitives are overwhelmingly unmarked in the same manner as objects of transitive verbs. Similarly, the morphological case *wo*, ancestor of the Modern Japanese accusative *o*, marks not only the objects of transitive verbs, but also the subjects of inactive intransitives. In particular, *wo* marks the subjects of adjectival predicates with *-mi*, which Vovin calls 'quality stative verbs'. This is illustrated in (3-4).

- (3) [*izami no* yama wo taka-mi] kamo yamato no mi-ye-nu (MYS 1.44)
 Izami GEN mountain ABS high-GER Q Yamato GEN see-PASS-not
 'Is it because the Izami mountains are so high that I can't see Yamato?
- (4) [kuni Ø topo-mi] kamo (MYS 1.44)
 province ABS far-GER Q
 'Is it because I came too far from my country?'

Given these observations, Vovin claims that the unmarked *zero* form and *wo* are both absolutive in OJ.

Vovin's analysis of *wo*, however, relies heavily on the *wo...-mi* construction. Aside from this construction, the examples Vovin cites do not necessarily show that *wo* marks the subject of intransitives. For example, consider (5):

(5) murasaki no nipop-yeru imwo wo niku-ku ara-ba
Violet GEN beautiful-PERF beloved ABS unpleasant-GER be-COND
pitoduma yuwe ni ware kwopwi-me ya mo (MYS 1.21)
other.wife due to I love-FUT-EXCL Q even
'If [my] beloved, who is beautiful like a violet, was not beautiful to me, would I love her even though she is another's wife?'

In (5), *imwo* 'my beloved' is the subject of the adjectival predicate *nikuku* 'unpleasant' (as Vovin observes), but, at the same time, it is the object of the matrix verb *kwopu* 'love'. That is, the entire clause has the configuration $[DP_i wo [pro_i V] V]$, in which the object marked with *wo* appears in the higher clause, and the embedded clause contains the phonologically null subject (*pro*) coindexed with it.

Takeuchi's (2008) proposal that OJ has active alignment is heavily based on Vovin's (1997) observations about *wo*. Example (6) is cited from Takeuchi (2008).

(6) miti no siri kwopoda wotomye wo kamwi no goto kikoye-sika-domo road GEN back Kohada maiden ABS God GEN like be.heard-FOC-but api makura-maku (Kojiki Kayo 45) together sleep-AUX.NMLZ

'Rumors about the Kohada maiden in her far-off land rumbled like thunder, but we lie together.'

Takeuchi (2008) claims that the *wo*-marked argument is the sole argument of the intransitive verb *kiko-yu* 'can be heard'. It is important to note, however, that (6) has exactly the same structure as (5). In (6), the *wo*-marked argument that precedes the embedded *domo*-clauses is, in fact, the associative object of the matrix verb *makura-maku* 'sleep together'.¹ Aside from DP *wo*...*-mi* constructions, neither Vovin nor Takeuchi present convincing evidence that *wo* marks the subject of inactive intransitive verbs. On the contrary, there is substantial evidence that subjects of non-active intransitives are marked with the genitive *no*.

- (7)makwi no (MYS 3.241) a. tatu ara yama naka *ni* GEN stand rough mountain inside LOC tree 'in the rough mountains covered with trees' b. tukwi u no pana *no* saku (MYS 18.4066) utsugi GEN blossom GEN bloom.ADN month
 - 'the month when the utsugi blossom is in bloom.'

If *wo* is an absolutive case marker, then we have no explanation for why the subject is never marked with *wo* in adnominal contexts (7a-b).

For now, we may set aside the status of the NP *wo. . .-mi* pattern in (3). However, it is important to note that Tsuta (2004) convincingly argues that the diachronic source for *-mi* is

the infinitive of the transitive verb *mi*- 'see'. According to this analysis, the subject of the adjectival predicate is, in fact, the matrix object of the verb **mi*- (at least in pre-OJ). Similarly, Yanagida and Whitman (2009) analyze the *wo...-mi* pattern as adjunct AspPs, analogous to Acc-ing gerunds, such as 'travel being painful' in English. These have the following structure:

(8) [AspP tabi wo [VP kurusi] mi] kwopwi wore-ba
 (MYS 15.3674)
 travel OBJ painful MI long.for be-PROV
 'travel being painful, since I long for my wife'

In this analysis, *-mi* is the spellout of the head of [+transitive] AspP. The subject of the adjectival predicate is susceptible to a matrix object (or ECM) analysis of the verb **mi*-.

The hypothesis that *wo* marks the absolutive is based on the whole-language characterization of alignment typology, which assumes that the objects of transitive verbs are marked absolutive in ergative languages. However, the skewed ergative (active)-accusative pattern is widely attested, for example in Indic languages such as Hindi. Hindi, traditionally classified as ergative, in fact features active alignment; agent subjects of unergative verbs are marked with *-ne*, but the theme subjects of unaccusative verbs are morphologically *zero* (Mohanan 1994: 71).

Hindi (Indo-Aryan)

(9)	a.	raam -ne nahaayaa.	b.	raamØ giraa.	
		Ram-ERG bathe-PERF		Ram.ABS fall-PH	ERF
		'Ram bathed.'		'Ram fell hard.'	

The animate objects of transitive verbs, however, are necessarily marked with the accusative ko (10). The inanimate objects are marked with ko when they are specific; otherwise, they are morphologically *zero* (12) (Mohanan 1994: 79-80).

Hindi (Indo-Aryan)

(10) a. ilaa-ne ek bacce-ko ut^haayaa.
 Ila-AGT one child-ACC lift/carry-PERF
 'Ila lifted a child.'

b. ilaa-ne haar Ø ut^haayaa.
Ila-AGT necklace.ABS lift-PERF
'Illa lifted a necklace (non-specific).'

As shown in Hindi, many ergative languages feature the phenomenon of differential object marking. Depending on the animacy, specificity, or definiteness of NPs, certain objects are marked with the accusative case, but others are not. Differential object marking in OJ will be discussed in Section 5.

2.2 What is 'active'?

Both the typological and theoretical literature have tended to classify 'active' as a subtype of ergative alignment because both ergative and active cases mark the agentive subjects (A) of transitive verbs, but not the patient arguments (S) of intransitive verbs. It is well known, however, that active-stative languages display considerable divergence in both morphology and syntax, which makes it difficult to find a coherent implementation of languages of this type. This section discusses the characteristic properties of active alignment that provide an empirical basis for the claim that OJ displays an active-inactive pattern.

2.2.1 The two classes of predicates

Active languages divide intransitive verbs into two categories: active and inactive. The exact lexical division differs crosslinguistically, but the two classes of intransitive verbs are distinguished by case marking. Active intransitive subjects (SA, typically agent arguments of unergatives) have the same marking as transitive subjects, while inactive intransitive subjects (S₀, typically patient arguments of unaccusatives) have the same marking as transitive objects. We see such a pattern in Hindi, as illustrated in (9). Dixon (1979: 80-83) divides active alignment into fluid-S and split-S systems. In fluid-S systems, verbs are divided according to the meaning of each particular token. The active pattern appears when the S argument has control over the activity, and the inactive pattern appears when control is lacking. We see this pattern in Batsbi, a fluid S language cited by Comrie (1978: 366). In split-S systems, on the other hand, the two classes of intransitive verbs have fixed membership: they are classified as active or inactive based on their prototypical meaning. Guaraní (Tupí-Guaraní Mithun, 1991), a head-marking language, features a split-S system. In Guaraní, the unaccusative verb 'die', which involves no intention or control, is classified as active, while it is classified as inactive in most fluid S languages. In other words, this binary classification of active and inactive is based on some idiosyncratic meanings of a given word.

2.2.2 Nominal hierarchy

It is important to note that active and inactive marking depends not only on the semantics of predicates but on the place of S in the nominal hierarchy (11):

(11) The Nominal Hierarchy (Silverstein 1976, revised by Dixon 1994: 85) first/second person > third person > proper nouns > human > animate > inanimate

Here, Dixon (1979: 86-87) interprets the nominal hierarchy (11) to "roughly indicate the overall 'agency potential' of any given NP," and observes that "a number of languages have 'split' case marking exactly on this principle." As Mithun (1991) points out, case systems based on agency are frequently restricted to nominals referring to human beings.² According to Mithun, Koasati shows agentive case marking of pronominal prefixes within verbs, but accusative case marking of nouns. The active system in Batsbi (Tsova-Tush) is limited to the first and second persons. Central Pomo has an active system in nominals referring to humans only. The Georgian active system is likewise restricted to human beings, while the Yuki system is restricted to animates. From these cross-linguistic observations, it follows that active marking is used with NPs from the left-hand side to the right-hand side of the nominal hierarchy. That is, if a language has agent marking in the third person, it also has agent marking in the first and second persons, which is exactly the opposite of the ergative case used with NPs from the left-hand side of the nominal hierarchy (Dixon 1979).

In languages like Guaraní (Tupí-Guaraní), transitive verbs are marked either active or inactive, depending on which of the two arguments is located higher on the nominal hierarchy. The argument that ranks higher is cross-referenced on the verb (Velazquez-Castillo 1996: 17). When the subject outranks the object or two arguments are of the same rank, the agent is cross-referenced on the verb (active marking). When the object outranks the subject, it is the patient that is cross-referenced on the verb (inactive marking). Even though the thematic role assigned by the verb is identical, assignment of active case is strictly determined by the place of the subject on the nominal hierarchy. That is, the active-inactive division in Guaraní is a clause-level phenomenon defined as the type of the grammatical relation between subject and object NPs.

2.2.3 Active/Genitive syncretism

It has been widely acknowledged that ergative/active patterns show syncretism between ergative/active marking and possessive marking, e.g. Mayan (Coon 2008, Coon and Salanova

2009), Inuktitut (Johns 1992), Austronesian (Kaufman 2009, Aldridge 2015), Cariban (Gildea 1998, 2000), East Caucasian (Authier 2013), Guarani (Velazquez-Castillo 1996), Indic Iranian (Bynon 2005), and many others. Johns (1992) argues that, in Inuktitut, the ergative case is homophonous with the genitive case (*-up* for ergative/genitive); thus, the possessive construction and the ergative/active construction are structurally identical. Johns (1992) develops a synchronic account of Inuktitut ergativity based on possessive constructions. Gildea (1998, 2000) and Bynon (2005) propose a similar analysis for Cariban and Indic Iranian languages, respectively. Following this approach, syncretism between agent marking and genitive marking arises as a result of reanalysis of a possessive construction with the copula 'be' as monoclausal structure. A possessor is reanalyzed as an external argument (i.e. agent), and the biclausal copular structure is reanalyzed as a monoclausal transitive clause.

2.2.4 Syntax

Many researchers propose that the ergative (or active) case is assigned to the external argument (AGENT) in the specifier position of vP (cf. Woolford [1997, 2008], Legate [2008], Aldridge [2004, 2008] and Anand and Nevins [2006], and many others). The external argument (AGENT) is θ -marked and inherently case-assigned by v in a vP projection above VP, as represented in (12).

(12) Differential subject marking at argument structure



Legate (2008) points out that, while ergative is assigned to the external argument in the specifier position of [+transitive] v, active is assigned to the external argument in the specifier of [+Agent] v. The descriptive generalization, which supports the view that the ergative is an inherent case assigned by v, derives from the fact that ergative subjects, in some instances, occur in non-finite clauses, while structural nominative subjects do not (cf. Aldridge 2008). Derived subjects are never ergative; that is, no language promotes objects to ergative through operations such as raising or passive. Some recent researchers, however, have argued against the inherent case analysis of ergative, suggesting that ergative case is instead structural case.

Baker (2014) argues that the ergative case in Shipibo is a structural case rather than inherent. Rezac, Albizu and Etxepare (2014) claim that Basque ergative is structural, based on the ergative-to-absolutive in so-called 'defective' T contexts, such as raising and ECM constructions. Yanagida (2018a) proposes that ergative/active case is structural when it responds to the subject-in-situ generalization (SSG), which Alexiadou and Anagnostopoulou (2001) claim to be a universal principle on structural case. The SSG states that when the subject remains in Spec, *v*P, the object must be externalized.

(13) **The Subject-in-Situ Generalization** (SSG)

By Spell-out, *v*P can contain only one argument with an unchecked Case feature. (Alexiadou and Anagnostopoulou 2001)

A widely observed feature of syntactically ergative languages is that, while the external subject of a transitive verb remains inside *v*P, the object of a transitive verb appears outside VP (Bittner and Hale 1996, Manning 1996, among others). These languages include Dyirbal (the Pama-Nyungan language of Australia; Dixon 1994:130), Kuikúro and Panare (Cariban languages; Franchetto 1990 and Gildea 1998, 2000), Vafsi (Northwest Iraniar; Haig 2008: 188). These languages are split ergative languages. In a nominative-accusative pattern, a direct object remains inside VP. When the subject is marked with ergative case, the direct object moves outside VP. Importantly, object movement is not a property of absolutive DP. As noted by Dixon, the object moves regardless of whether it is absolutive (unmarked) or accusative (case-marked). In section 5, we will show that OJ exhibits object movement characteristic of non-accusative languages when the subject is marked with *ga*.

3. Morphology

3.1 Active/Inactive Prefixes

Crosslinguistically, active alignment can be manifested in the morphological case marked on nouns, but many active languages are strictly head-marking. As is well-known, OJ possesses various verbal prefixes whose syntactic and semantic functions have been left unexplained by traditional grammarians. Yanagida and Whitman (2009) provide a comprehensive study of these prefixes and suggest that *i*- is attached to active verbs and *sa*- to inactive verbs. Examples (14) and (15) are cited in Yanagida and Whitman (2009: 117). N.B. all 75 occurrences for *i*- in the *Man'yōshū* are given in Yanagida (2007: 178-179).

(14)	a.	<i>nara no</i> miyakwo <i>no</i> Sapo kapa <i>ni</i>	<i>i</i> -yuki itarite	(MYS 1.79)
		Nara GEN capital GEN Saho river LOC	I-go reaching	
		'I reached the River Sahokawa in Nara	a.'	
	b.	kume no wakugwo ga i-pure-kyemu	iswo no kusane	(MYS 3.435)
		Kume GEN youth AGT I-touch-AUX.A	DN rock GEN grass root	
		'the root of the grass that the youth of	Kume would have touch	hed.'
(15)	a.	sa-ne-si tumaya ni i	de-tati sinwopi	(MYS 3.481)
		SA-sleep-PST.ADN bedroom LOC	eave-out remember	
		'remembering, leaving the bedroom w	here (I) slept'	
	b.	<i>sa</i> -ni <i>turap-u</i> wa ga opokimi		(MYS 3.420)
		SA-shine-ADN I GEN great.lord		
		'my great lord who shines'		
	c.	[vp sugwi no nwo ni sa-wodo	oru] kigisi	(MYS 19.4148)

cypress GEN field LOC SA-dance pheasant 'The pheasant dances in the cypress field.'

Predicates that appear with -*i* include: *yoseru* 'put aside', *puru* 'wave', *yuku* 'go', *wataru* 'cross', *toru* 'take', *karu* 'mow', *kakuru* 'hide', *wogamu* 'pray', *maporu* 'go around', *poru* 'dig', *wakaru* 'part from', *kogu* 'row a boat', *mukapu* 'head out', *pirou* 'pick up', *mureru* 'gather', etc. Predicates that appear with the prefix *sa*- include: *neru* 'sleep', *niturapu* 'shine', *pasiru* '(fish) run', *wodoru* '(birds) dance', *wataru* '(toads) cross', *nebapu* 'spread roots', *narabu* '(birds) line up', *kumoru* 'get cloudy', and *nituku* 'get reddened'. Although these prefixes are somewhat vestigial in OJ, the distribution of *i*- and *sa*- strongly suggests that *i*-appears with active verbs, while *sa*- appears with inactive intransitive verbs. It should be noted that *sa*- occurs as a noun prefix, as in *sa-yo* 'night', while *i*- does not. This division parallels exactly the distribution of agreement prefixes occur with both nouns and inactive verbs while active prefixes occur with active verbs only.³ Furthermore, of both nouns and verbs as in (16), *sa*- triggers the process known as *rendaku*, in which the initial voiceless obstruents of a noun or a verb become voiced.

- (16) a. *sa koromo > saNkoromo > sa-goromo 'his clothes'
 - b. *sa pasiri > saNpasiri > sa-basiri 'his running'

(16) shows that *sa* may reflect an original possessive S argument. The *rendaku* process involves an earlier syllable of the form nasal + vowel (NV). The literature has suggested that the NV sequence is the earlier form of the genitive particle *no*.

Yanagida and Whitman (2009) cited one apparent counterexample to the generalization in MYS 804 in which *ga* and prefixal *sa*- appear to surface in the same clause:

(17)	wotomye-ra ga	sa-nasu	itatwo wo	osi-piraki	
	maiden-PL AGT	SA-sleep	door OBJ	push-open	
	'pushing open the	e door when	e the maidens s	sleep.'	(MYS 5.804)

Kojima, Kinoshita and Tōno (1972), however, interpret *wotomyera ga* 'maidens GA' as the genitive possessor of *itatwo* '(wooden) door', a metonymic expression for 'bedroom'. The entire NP, then, is interpreted as 'pushing open the maiden's (bedroom) door where they sleep'. This structure depicted in (18):

(18)	[NP wotomyer	ra ga [[<i>]</i>	itatwo]] wo		osipiraki	
	maidens	GEN	SA-sleep	door	OBJ	push open

In this interpretation, wotomyera ga is not the clausemate subject of sa-nasu 'sa-sleep.'

3.3 wataru 'cross'

Yanagida and Whitman observe that a verb, *wataru* 'cross' appears with either *i*- or *sa*-. There are 4 examples of *i*-watar- in the Man'yōshū (MYS 1742, 2081, 4101, and 4126), and 6 examples of *sa*-watar- (MYS 800, 971, 1960, 1976, 2450, and 2804). The subject of *i*-watar- is [+human] and volitional in all four examples: *kwo* 'the young woman' (1742), *tanabata* 'Vega, the weaver star'(2081), *ama* 'the fisherfolk' (4101). The subject of *sa*-watar- is [-human] in all six examples: *taniguku* 'toads' (800, 971), *pototogisu* 'a cuckoo' (1960, 1976), *tukwi* 'the moon' (2450), *kamo* 'a teal' (2804). Typical examples of each pattern as cited by Yanagida and Whitman are given in (19-20).

- (19) ama no gapa pasi watasera-ba sono pe yu mo *i-watara-sa-mu wo* sky GEN river bridge span-COND that over from too I-cross-HON-AUX EXCL
 'though if one put a bridge across the Milky Way, (they=Vega and Altair) would *i*-cross over on that' (MYS 18.4126)
- (20) kumo-ma ywori sa-wataru tukwi *no opoposiku* api misi kwo-ra cloud-gap from SA-cross moon like faintly join saw child-DIM
 'the girl I saw faintly like the moon *sa*-crossing between the clouds' (MYS 11.2450)

I-watar- 'cross (over the bridge)' is agentive, volitional, and telic—a stereotypical active verb. *Sa-watar-* is non-agentive and designates an incomplete action (the moon passing before the speaker's view); it is a stereotypical inactive predicate. Commenting on (19), Kojima, Kinoshita and Tōno (1995, vol. 3: 191) observe precisely the distinction between *i-watar-* and *sa-watar-* described here. They also note that, while *i-watar-* occurs only with human subjects, *sa-watar-* is restricted to nonhuman subjects.

To summarize this section, OJ nominalized clauses show the vestiges of head-marking of an active-inactive division: active predicates by the prefix *i*- is in opposition to inactive predicates by the prefix *sa*.

4. Differential subject marking

In OJ, 'nominalized clauses', as identified by Yanagida and Whitman (2009), show three distinct ways of case marking. The genitive *ga*, the ancestor of Modern Japanese nominative case, is used for agentive case marking predominantly for the subjects of active verbs, while the theme subjects of inactive verbs are predominantly marked *zero*. The other genitive *no* is used independently of predicates; it can mark the subject of either an active or inactive verb. The coding property of the subject NP is determined by the location of NP in the nominal hierarchy, as stated in (11).

	Transitive, Active	Inactive
	Intransitive	Intransitive
1P (clitic)	a=ga, wa=ga	
2P (clitic)	na=ga	
3P (clitic)	si=ga	
Kinship	ga	zero
Human	no	no/zero
Non-Human Animate	no	no/zero
Inanimate	no	no/zero

Table 2: Three-way case marking patterns on the subject of nominalized verbs

As discussed in 2.2.2, the nominal hierarchy is interpreted as 'the agency potential of given NPs' (Dixon 1979: 86-87). Nominals higher up in the hierarchy are more likely to serve as the subject of a prototypical transitive verb. Table 2 shows that the alternation between *ga* and *no* depends on the place of the subject in the nominal hierarchy. *Ga* occurs on the weak or clitic forms of personal pronouns (primarily monosyllabic forms such as *a*, *wa* [1P], *na* (2P), *si* [3P]) and kinship terms, such as 'mother' and 'child', while the other genitive *no* occurs on common NPs.

The genitive ga marks the possessors of NP (21), the agent subject of the transitive verb (22), and the active intransitive verb (23) (See Appendix I for other nominal clause types).

Possessor-possessed NP

(21) [*wa ga sekwo ga yadwo*] (MYS 20.4303) I GEN lover GEN house 'my lover's house'

Adnominal Clauses

(22)	[saywopimye no	o kwo ga	pire Ø puri-si]	yama	(MYS 5.868)
	Sayohime GEN c	hild AGT	scarf wave-PST.ADN	mountain	
	'the mountai	in where Sa	ayohime waved her cloth	h'	
(23)	kimi ga yuk	<i>u</i> miti			(MYS 15.3724)
	you AGT go n	road			
	'the road my lo	ord (you) tr	avels'		

The patient subjects of inactive intransitive verbs (24), on the other hand, behave like the objects of transitive verbs (22) insofar as they are *zero*-marked. *Zero*-marked subjects appear predominantly with unaccusative verbs and strictly adjacent to the verb.

- (24) a. aki no nwo ni tuyu Ø opyeru pagwi wo ta-wora-zu-te (MYS 20.4318)
 fall GEN field LOC dew cover bush.clover OBJ hand-break-not-GER
 'without breaking off the dew-laden bush clover in the fall meadow'
 - b. uramwi ywori kadi no oto Ø suru pa amawotomye kamo (MYS 15.3641)
 Urami from oar GEN sound make TOP fisherfolk.maiden Q
 'Is the sound of the oar from Urami a maiden of the fisherfolk?'

Kinship terms are predominantly marked with ga, but there are some instances in which they are marked *zero* (25) when the predicate is inactive.

- (25) a. tama sika-ba *kimi* Ø *ki-masa-mu ka* kiywoki pamapye *ni* (MYS 19.4271)
 pebble lay-COND you/lord come-AUX-AUX Q clean seashore LOC
 'If I lay pebbles, will you/lord come on this clean seashore?'
 - b. puri siku yuki *ni* kimi Ø *imasa-me ya mo* (MYS 19.4233)
 fall spread snow LOC you stay-AUX FOC Q
 'Will my lord stay despite of this heavy snowfall?'
 - c. kimi Ø mase-ba tokotu mikadwo *to* tono-wi suru *kamo* (MYS 2.174)
 lord rest-PROV eternal palace as on-duty do Q
 'Since the lord rests (there), shall I be permanently on night duty (in the Court)?'

N.B. The genitive *no* is independent of alignment, unlike *ga*. It can mark both the subject of transitive verbs (26) and the subject of inactive intransitive verbs (27).

- (26) *ipyebito no idura to ware wo topa-ba ikani ipa-mu* (MYS 15.3689)
 family GEN where COMP I OBJ ask-if how say-AUX.ADN
 'If your family should ask me where (you are now), how should I reply to them?'
- (27) a. makwi no tatu ara yama naka ni
 (MYS 3.241)
 great.tree GEN stand rough mountain inside LOC
 'in the rough mountains covered with trees'

b. *u no* pana *no saku tukwi* utugi GEN blossom GEN bloom.ADN month 'the month when the utsugi blossom is in bloom'

Kikuta (2012) provides some counterexamples to Yanagida and Whitman's hypothesis, suggesting that Japanese has never actually undergone an alignment change. She instead posits that adnominal clauses show a nominative-accusative pattern throughout the history of the language, but in OJ this pattern shows with two differential case markers: *ga* and *no*. Kikuta's proposal is primarily based on the observation that *ga* marks, not only the subjects of active verbs, but also the subjects of inactive intransitive verbs. Possible counterexamples cited by Kikuta (2012) will be examined in detail below.

4.1 Psych Predicate

Kikuta (2012) points out that the OJ *ga* appears on the non-agentive theme subjects of experiencer verbs, such as *wasur-* 'forget', *omop-* 'think', *mi* 'see', as illustrated in (28). According to Kikuta, this raises a problem for Yanagida and Whitman's (2009) hypothesis that *ga* marks the active case in OJ.

- (28) a. *imo ga kwopisiku wasura-ye-nu kamo* (MYS 20.4407) my.lover AGT miss forget-MID-NEG Q 'Did I miss my dear and cannot forget her?'
 - b. yupuma yama kwoye-*ni-si* kimi ga omopo-yu*r-aku ni* (MYS 12.3191)
 Yūma mountain cross-PERF-PST you/lord AGT think-MID-NMLZ COP
 'you who had crossed over Mount Yūma came to mind!'

Note, however, that these specific psych-verb constructions with a ga-marked theme subject contain an unspecified first-person experiencer and a form of the auxiliary yu (stem ye-), which derives middles, passives, and potentials. -Yu is arguably related to the acquisitive light verb u (stem e-) 'get', which Whitman (2008) proposes as the source of the well-known transitivity alterations in -e- in OJ and later stages of the language. -E derives both transitives and intransitives, which is a property of acquisitives such as the English auxiliary get. Yanagida (2018b) argues that experiencer middles such as (28) may have an original causative source, i.e. 'my dear got me to forget' or 'my lord got me to think.' Yanagida suggests that these particular object experiencer predicates in OJ are semantically transitive

and possess the following characteristics: 1) they are *impersonal*, i.e. a first-person experiencer is necessarily unexpressed; 2) the predicates take the vestigial causative light verb; and 3) an argument marked with *ga* is necessarily interpreted as a causer, but not as an experiencer. Accordingly, (28) can be analyzed as a causative construction. N.B. the agent subject is invariably an external argument, but the causer argument of a psych-verb is also an external argument. Thus, in many languages, the causer argument of an object-experiencer verb is marked with the ergative (see Woolford [2008] for Assamese [Eastern Indo-Aryan language]).

4.2 Active/Inactive predicates

If *ga* is an active case, we do not expect it to cooccur with non-agentive stative verbs. Kikuta (2012), however, provides possible counterexamples beside psych-predicates, as illustrated in (29-30):

- (29) imo ga papi nite mase-ba... (MYS 2.213)
 lover AGT ash into be/go-PROV
 'when my dear has gone into ashes...'
 (30) tegwona ga ari-sika-ba... (MYS 14.3385)
- (30) tegwona ga ari-sika-ba...
 maid AGT be-PST-PROV
 'When there was a maid...'

These verbs are generally treated as inactive: the subject has no control or intention over the activity denoted by the verb. Given the data taken from Koji (1988), as cited in Table 1 and 2, Kikuta (2012) argues that differential case-marking in OJ is not conditioned by the semantics of the predicates, but by the location of the nominals on the animacy hierarchy.

		J 1		1		c	5(-)
	wa	a	na	ono	ta	si	kore	total
	1P	1P	2р	2р	3p	3p	this	
subject	45	31	4	3	0	2	1	86
Possessive	89	34	7	8	3	0	0	141

Table 1: Pronominal subject and pronominal possessives marked with ga (Kikuta 2012)

	kimi	imo	wag- imo	waga sekwo	wotomye	рара	kwo	others	total
subject	90	49	37	28	16	9	6	23	258
possessive	39	97	26	25	11	5	9	76	288

Table 2: Nominal subject and nominal possessives marked with ga (Kikuta 2012)

The genitive *ga* is obligatory for first/second personal pronouns; *w*(*a*) and *na*, and the nominals intimate to the speaker, such as *kimi* 'you/lord', (*wag-*)*imo*, *seko* 'lover', *wotomye* 'girl', *papa* 'mother', and *ko* 'child' (cf. Ohno 1977, Nomura 1933). The other genitive *no*, in contrast, is used for nominals lower on the animacy hierarchy.

However, no previous work—including Kikuta's—has discussed the *zero* case in OJ. The crucial contrast here is not merely between *ga* and *no*, but between *ga* and *zero*. If *ga* and *zero* are associated with the active/inactive division, as argued in Yanagida and Whitman (2009), we would expect *ga* to appear with active predicates whose subjects are not marked *zero*, but possibly with *no* if the subject NP is lower in the nominal hierarchy. The data represented in Tables 3 and 4 were obtained from the Oxford-NINJAL Corpus of Old Japanese (ONCOJ), a syntactically annotated corpus, and selected by means of an exhaustive search designed to select predicates whose subjects are marked with *ga*, *no*, and *zero*.⁴

	Total	待 wait	泣 weep	行 go	振 wave	植 plant	着 wear	寄 approach	渡 cross	笑 laugh
ga	903	43	30	24	11	7	5	4	3	2
no	1255	8	26	12	0	1	1	1	3	1
zero	2054	0	0	0	0	0	0	0	0	0

Table 3: Verbs with high volitionality (non-conclusive form)⁵

Table 3 includes the total number of subjects marked with *ga/no/zero* with predicates in the non-conclusive form. This study reveals that verbs which most frequently appear with *ga*-marked subjects never appear with *zero*-marked subjects. Table (4), on the other hand, shows possible counterexamples in which *ga* appears with predicates with low volitionality.

	寝	座	居	有	濡	死	total
	sleep	be/go	sit	be	get wet	die	
ga	12	9	7	5	1	1	37
no	1	3	0	4	0	3	25
zero	0	5	0	31	6	5	71

Table 4: The class of verbs with low volitionality (non-conclusive form)

The verb $\underline{\mathbb{R}}$ is ambiguously interpreted as either the existential 'be' (inactive) or 'go' (active). Kikuta cites (29) as a counterexample, but *imas*- in (29) could mean 'go'. In OJ, the low volitionality verbs *ne*- 'sleep' and *wor*- 'sit' are, in fact, categorized as active since their subjects are marked with *ga* but never with *zero*. (Recall that the division of verbs into active/inactive subclasses involves some idiosyncratic properties of a given language [see 2.2.1]). There is only one problematic example in which *ne*- 'sleep' appears with a *zero*-marked subject.

(31) asipye ni pa kari Ø ne (宿) -taru kamo (MYS 10.2135)
 Reed.clump LOC TOP geese sleep/stay-PERF Q
 'Wild geese might have stayed in a clump of reeds.'

Nakanishi (2005[1983]) points out that the Chinese character 宿 in (31) could be read as *yador*- 'stay' rather than *ne*- 'sleep'. Given that this is the only exception we found in the ONCOJ, I simply assume that the verb 宿 here is read as *yador*- 'stay' and that its subject appears unmarked.

Although the data reviewed contain some counterexamples, specifically, 5 tokens of ga with the verb $\bar{\pi}$ 'be' (illustrated in [30]), overall, the data obtained from the ONCOJ support the hypothesis that ga and zero divide predicates into active/inactive in OJ.

5. Differential Object Marking

5.1 Zero-marked object

Miyagawa (1989) proposes that, in OJ and Early Middle Japanese, adnominal and conclusive clauses have distinct case assigning mechanisms. The conclusive form of the verb is truly verbal and assigns abstract case, that is, morphologically *zero*, to the object in the underlying object position, while the adnominal form has no case assigning ability. The object is

assigned overt structural case in the form of *wo* in order to avoid violation of the Case Filter. Miyagawa's (1989) generalization is stated in (32).

(32) Miyagawa's (1989) generalization (1989: 206)
 Accusative Case Assignment: The conclusive form assigns abstract case while the case assigning feature of the attributive (=adnominal) form must be manifested overtly as *wo*.

However, as pointed out by Kinsui (1993, 2011), and Yanagida (2007a,b) there are a number of examples in which an adnominal predicate takes an object lacking a morphological case. Miyagawa and Ekida (2003) attempt to account for these exceptions to Miyagawa (1989), but their study is not sufficient to cover all the exceptions. In response to Miyagawa (1989), Kinsui (2011:104) suggests that the marking of objects with *wo* is purely stylistic. In some cases, whether *wo* occurs at all is determined by poetic versification with the basic line configuration of 5-7-5-7 syllables.

(33) titi papa wo mire-ba taputwosi mye kwo mire-ba megusi utukusi (MYS 5.800) father mother OBJ see-PROV respect wife child see PROV cute beautiful
'When I see my father and mother, I feel respect; when I see my wife and children, they are lovable and beautiful...'

In (33), the first and second objects appear in the same syntactic contexts: inside a provisional clause headed by *ba* 'when'. Nonetheless, the first occurrence of the object is marked with *wo*, and the second occurrence of the object is morphologically unmarked. It is important to note, however, that the second occurrence of *mekwo* 'wife and child' ends with the labialized mid-back vowel, which, according to one interpretation, is homophonous with the case particle *wo*. This analysis raises the possibility that deletion of the second occurrence of *wo* may simply be a case of haplology, or, more specifically, the poet taking advantage of haplology to preserve the meter.⁶ I hypothesize that poetic versification does not override language's core grammar, but comes into play only when the grammar allows optionality.

Yanagida (2007a,b) indicates that in the *Man'yōshū*, there are at least 90 occurrences of a transitive clause whose subject is marked with *no* or *ga* and object is morphologically unmarked. Fifty-five occur with adnominal predicates. These include examples like (34).

- (34) a. saywopimye no kwo ga pire Ø puri-si yama no na (MYS 5.868)
 Sayohime GEN child AGT scarf wave-PST.ADN hill GEN name
 'the name of the hill where Sayohime waved a scarf'
 - b. kanasiki kworo ga ninwo Ø posaru kamo (MYS 14.3351)
 beloved child AGT cloth dry Q
 'Is my beloved drying woven cloth?'

Examples like (34a-b) are clearly counterexamples to Miyagawa's (1989) generalization. Yanagida (2007a,b), however, indicates that although *zero*-marked objects do occur with adnominal predicates, Miyagawa's exceptions are predictable. The objects that follow the *ga*-marked subject are, without exception, non-branching noun heads immediately adjacent to the verb. Yanagida (2007a,b) and Yanagida and Whitman (2009) suggest that *zero*-marked nouns, such as *pire* 'scarf' and *ninwo* 'cloth', are syntactically incorporated into the verb.⁷ That is, given that an incorporated noun need not be assigned a structural case, as suggested by Baker (1988: 106), examples like (34a-b) are analyzed as derived intransitives (N.B. object incorporation is a salient feature of languages with active alignment as observed by Klimov (1977: 125-6) and Sapir (1911). In section 2.2.4, it was shown that nominalized clauses display a non-accusative pattern when *v* assigns no structural case to the object. From a typological perspective, Miyagawa's (1989) synchronic treatment of adnominal clauses in OJ displays strong evidence that adnominal clauses have a non-accusative pattern.

5.1 Wo-marked objects

Yanagida (2006), following Motohashi (1989), proposes that *wo*-marked objects in OJ are interpreted as definite, while *zero*-marked objects are indefinite. However, since there are examples in which specific (i.e. D-linked) *wh*-phrases are marked with *wo*, Yanagida and Whitman revise Yanagida's (2006) original claim and propose that the accusative case occurs when objects are specific.

(35) sipo pwi-na-ba tamamo kari tum-ye ipye no imo ga tide recede-PERF-COND seaweed cut gather-IMP house GEN wife AGT pamadutwo kopa-ba nani wo simyesa-mu? (MYS 3.360) shore.gift want-COND what OBJ proffer-AUX.ADN
'If the tide has gone out, cut and gather the precious seaweed! If my wife at home asks for gifts from the shore, which (other) shall I offer her?'

(36) makwi *no* itatwo *wo* osi piraki *siweya ide ko-ne* noti pa **nani** se-mu wood GEN door OBJ push open damn out come-OPT after TOP what do-AUX.ADN
'Pushing open the wooden door (I say) "Come out!" Then what will (I) do?'

(MYS 11.2519)

In (35), the set of items that the speaker might offer his wife is defined as *pamadutwo* 'gifts from the shore'. In this case, *nani wo* 'what/which Obj' picks out specific items from that set. In (36), by contrast, the universe of things the speaker might do is completely undefined by previous discourse.

Frellesvig, Horn and Yanagida (2015) make a complete search for the two types of objects using the ONCOJ. They suggest that a contrast between *wo*-marked and *zero*-marked objects in OJ fits into typologically well-attested differential object marking. The minimal pair examples (37-38) are cited in Frellesvig, Horn and Yanagida (2015).

(37)	kami tu se <i>ni</i>	u wo	ya-tu	kaduke				
	upper GEN stream DAT	cormorant OBJ	eight-CLF	make.dive				
	simo tu se <i>ni</i>	u wo	ya-tu	kaduke				
	lower GEN stream DAT	cormorant OBJ	eight-CLF	make.dive				
	'making all eight of my cormorants dive in the upper reaches, making all eight of							
	my cormorants dive in t	the lower reaches	5'	(N	(YS.13.3330)			
(38)	tosi no pa <i>ni</i> ayu si	pasira-ba	sakitakapa	ı u	ya-tu			
	every year sweetfish PA	RT run-COND	Sakita.Riv	ver cormorant	eight-CLF			
	kadukete kapase	tadune-mu						

make.dive river.stream search-AUX

'Each year when the sweetfish run, making many cormorants dive, we shall scour rivers and streams' (MYS.19.4158)

In OJ, the numeral quantifier *ya-tu* 'eight-CLF' is ambiguous; it can denote a precise cardinality or a non-specific sense of 'many'. Example (37) describes the eight fishing cormorants in the upper reaches (specific) and eight cormorants in the lower reaches (specific). This interpretation is consistent with the presence of *wo* on the host noun *u wo* 'cormorant'. In contrast, *ya-tu* 'eight-CLF' in (38) denotes a non-specific sense of 'many', hence the absence of *wo* on the host NP.

Finally, in languages in which specificity plays an important role in object marking, specific objects tend to move out of VP, while non-specific objects remain in situ (cf. Diesing

1992). We find this pattern in OJ. *Wo*-marked objects necessarily move over the *ga*-marked subject, resulting in the configuration [Object=*wo* Subject=*ga* V]. This is illustrated in (39).⁸

- (39) a. aki-yama wo ikani ka kimi ga pitori kwoyu-ramu (MYS 2.106) autumn-mountain-OBJ how-Q you AGT alone cross-AUX
 'How do you cross the autumn mountain alone?'
 - b. *ware wo* yamwi ni ya imo ga kwopwi-tutu aru ramu? (MYS 15.3669)
 I OBJ dark LOC Q wife AGT longing.for-CONT be AUX
 'Would my wife be longing for me in the dark?'

As discussed in section 2.2.4, this particular OSV order is characteristic of non-accusative alignment. The subject appears in the external argument position, namely, Spec vP (see [12]). Since v does not assign structural case, the object moves outside vP. In the next section, I will strengthen the differential object marking hypothesis by providing a close inspection of the two prose texts, *Senmyō* and *Norito* unplagued by metrical questions.

5.2. Senmyō and Norito

The preceding analysis was primarily based on the Man'yōshū, a collection of poems with versification restrictions. By examining the two major prose texts in OJ, Senmyō (Shokunihongi Senmyo) and Norito (Engishiki Norito), this section attempts to show that the skewed distribution of wo is not due to poetic versification, as proposed by Kinsui (2011). Shokunihongi Senmyō is comprised of the sixty-two imperial edicts preserved in the Shokunihongi (Chronicles of Japan), an imperially commissioned Japanese history text completed in 797 CE. Volume VIII of the Engisiki Norito was compiled in the tenth century and contains Shinto rituals and practices in their pristine form. Obviously, the origin of these rituals dates to a much earlier period than that of the Norito's compilation, and their composition is believed to reflect the language of the Nara period. The writing style of the Senmyo and Norito differs from the Man'yoshu insofar as it uses a set of writing conventions known as Senmyögaki. In Senmyögaki, grammatical particles, auxiliaries, and verb endings are, in some manuscripts, written phonographically in a smaller size. Lexical/content words, such as nouns and verbs, are written logographically in a larger size. Although the Senmyō contains a hybrid of phonogrammatic spellings and sections with a superficial Chinese-like style, it is known to reflect the Japanese language of the 8th century.

Wrona and Frellesvig (2010) present an extensive study of the distribution of wo- and zero-marked objects in these two prose texts. Contrary to Miyagawa's (1989) generalization, quantitative study shows that there is no significant difference in the use of wo vs. zero-marking between adnominal and conclusive clauses. Wrona and Frellesvig suggest that wo- and zero-marking have no semantic effects either and conclude that zero-marked objects are simply analyzed as stylistic case drops. However, one problem with the Senmy \bar{o} that Wrona and Frellesvig fail to address has to do with the nature of the text. Rather than being a complete and explicit transcript of imperial proclamations, Senmyo texts contain the characters of shorthand guides or notes for the orally pronounced proclamation, to be read out loud by specialized officials. They therefore omit some functional morphemes that are to be supplied by the reader, potentially including accusative wo. Thus, passages without wo in the written text do not necessarily correspond to zero-marked objects. The annotated versions of the Senmyo with so-called yomisoe 'supplied readings' are based on the original interpretation of Motoori (1803), and all subsequent annotated texts basically follow Motoori's annotation. According to Ikeda (1996), Motoori's (1803) text contains 83 tokens of supplied wo. Kitagawa's (1982) version of the Senmyō text, on which Wrona and Frellesvig's analysis is based, contains 85 tokens of supplied wo. Neither Motoori nor Kitagawa, however, provide explanations as to why wo is supplied in certain cases, but not in others. Given that the exact basis for *yomisoe* readings has never been made clear, it is extremely difficult to determine what counts as a zero-marked object. This problem is less significant in the Man'yōshū, because in most cases, the supplied wo occurs when the object is logographically written or in the kanbun 'Chinese' style. Crucially, the Man'yoshu, as a poetic text, follows the rules of Japanese versification, which generally require phrases to be arranged in five- or seven-syllable phrases. This makes it possible to predict with some degree of accuracy whether objects without phonographic wo should, in fact, be read with wo.

When counting the number of *wo*-marked and phonographically "unmarked" objects in the *Norito* and *Senmyō*, I found that the ratio between *wo*-marked and unmarked objects was similar to Wrona and Frellesvig's.⁹

(40)

Wo-Marke	d Objects	Unmarked Objects			
Senmyō	Norito	Senmyō	Norito		
498 261		256	166		

Quantitative data for *Senmyō* are from Kitagawa (1982), and those for *Norito* were taken from Kurano and Takeda (1958). The unmarked objects include tokens of supplied *wo*. In both the *Senmyō* (SM) and *Norito* (NT), *wo*-marked objects are consistently interpreted as specific. Some examples are given in (41-42) in which the supplied particles are in the parenthesis.

- (41)yatukwo ka wa(ga) mikadwo wo somuki-te... sika suru a. tare (si) (no) who (FOC) (GEN) retainer Q 1P (GEN) emperor OBJ betray-INF this do.ADN 'Whose retainer betrays my emperor... and acts in this way.' (SM: Edict 16) ware *wo* uramu-beki koto pa b. pito-tu *mo* omopoye-zu one-CLF FOC 1P OBJ hate-AUX that TOP think-not 'I didn't think anyone would hate me.' (SM: Edict 16)
- (42) a. yomo-(no)-kuni wo yasu-kuni to tapirakeku sirosimyesu ga yuwe ni four-(GEN)-country OBJ peaceful-country as tranquil rule GEN because LOC 'because [I] rule the country in peace, as a tranquil nation' (NT: 祈年祭)
 - b. opomitakara *no* tukuri tukuru mono wo...nasi-tamapa-zu sokonapyeru pa...
 people GEN grow.INF grow.ADN thing OBJ do-HON-not harm TOP
 'not allowing what [my] subjects grow to ripen, and doing harm'

(NT:竜田風神祭)

The personal pronouns and the possessor + NP in (41-42) are inherently specific. In (42b), *tukuru mono* 'crops' is marked by *wo* because it refers to specific crops grown by the people of the nation (mentioned in the previous sentence). The *Norito* uses many instances of the expression [*kusagusa* Gen NP] 'various/many NPs'. The NPs marked by *wo* are unambiguously specific, while *zero*-marked NPs are non-specific. This is illustrated in (43) and (44).

- (43) sumyegamwi *no* mapye *ni* sirwoki uma sirwoki wi sirwoki tori kusagusa (no)
 deity GEN before LOC white horse white boar white cock various (GEN)
 iromono *wo* sonape maturite (NT: 祈年祭)
 things OBJ prepare enshrine
 'Before the sovereign deities of the Grains, I will prepare for and provide various kinds of offerings such things as the white horse, the white boar and the white cock.'
- (44) mima ni mikura Ø sonapete kusagusa no mitegura Ø sonapete (NT: 龍田風神祭)

horse LOC saddle provide many GEN offerings prepare for 'Providing a saddle for the horse and preparing for various kinds of offerings (for the deity).'

In (43), the set of the items offered to the deity is defined by the previous context, while in (44), the NP *mitegura* 'offering' is not defined by the previous discourse, which explains the absence of wo.

N.B. *opo-ya-sima-no kuni* 'the islands of Japan' is always used in the unmarked form in the preverbal position of the verb form *sira-* 'govern'. But *wo* shows up when it is specific and moved out of VP, as shown in the contrast between (45) and (46).

- (45) sikwi-sima ni opo-ya-simaguni-Ø sirasi-si sumyemima (no) mikoto
 Shiki-island LOC large-eight-island govern-PST God (GEN) Son
 'The Son of God (emperor) that governs the Shiki Island.' (NT:竜田風神祭)
- (46) akitu mikamwi *no* opo-ya-simaguni *wo*... tapirake*ku* sirosimyesa-*mu* koto
 Emperor GEN large-eight-island OBJ... peacefully govern-AUX that
 'That the emperor governs the islands of Japan peacefully.' (NT: 儺祭詞)

In (45), *opo-ya-simaguni* appears immediately adjacent to the verb *sira-* 'govern'. The NV complex is interpreted as the predicate 'govern (lands) in general'. In (46), *opo-ya-simaguni* refers to the specific islands of Japan that are governed by the emperor.

Close examination, however, reveals that the bare objects that appear in *Senmyō* behave quite differently from those in the *Norito*. The *Norito* exhibits the same pattern as the *Man'yōshū*, insofar as preverbal bare objects in adnominal clauses invariably receive non-specific interpretations, as illustrated in (47).

- (47) a. sumye-mima-(no)-mikoto *no* oponipe Ø kikosimyesa-*mu* tame (no) yuwe *ni* Son (GEN) God GEN harvest partake-AUX reason (GEN) for LOC
 'in order that the Emperor partakes of rice harvest' (NT:大嘗祭)
 - b. **tasuki** Ø kakuru tomo no wo *wo... magapi* Ø nasa-sime-zusi*te* sash put.on companion GEN man OBJ mistake do-AUX-not.GER 'making sure that officials who put on the sash do not go wrong' (NT:大殿祭)

The *Senmyo*, on the other hand, contains many counterexamples. That is, in (48), the bare objects of the adnominal verbs are unambiguously interpreted as specific.

- (48) a. opodi opo-mapye tu kimi no tonokadwo Ø arasikegasu koto naku grandfather great GEN lord GEN dignitary.gate defile that not
 'without defiling the gates of dignitaries and ancestors' (SM: Edict 13)
 - b. sumyera ga mikadwo Ø mamori tukape-maturu koto kapyerimi *naki* pito-domo emperor GEN lord protect serve-HON that look.back not people-PL
 'people who selflessly serve and protect the emperor' (SM: Edict 13)
 - c. nakamaro ga ipye no mono Ø kazwopuru ni pumi no naka ni nakamaro to NM GEN house GEN thing examine.ADN LOC letter GEN inside LOC NM with kaywopasi-kyeru pakarikoto no pumi ari (SM: Edict 30) lay-PST conspiracy GEN letter exist
 When (the amperer) examined things in Nelsamaro's house among the letters.

'When (the emperor) examined things in Nakamaro's house, among the letters was a secret letter in which (he) laid a conspiracy with Nakamaro.'

A question then arises as to why Senmyo does not pattern in the same way as Norito. It is important to note that Shoku Nihongi, in which Senmyo is included, is about the chronological history of the *ritsuryō* sei replicating China's political system from the Tang Dynasty. Kotani (1986) argues that the reason for the different writing styles in Senmyō and Norito lies in the fact that they have different origins. According to Kotani, Senmyō was composed on the basis of Shochoku 'imperial rescript' and written in Old Chinese. Thus, these texts contain many sentences in the kanbun 'Chinese' style. Even sentences in the Japanese style are based on kanbun, then transcribed from kanbun to Japanese by changing the word order and adding particles or verb endings to their original kanbun counterparts. *Norito*, on the other hand, originates in the oral tradition, which takes the form of folktales, songs, or chants, and thus reflects a genuine oral language. Although we must leave open the issue concerning *yomisoe* 'supplied reading', it is plausible to assume that the objects with specific interpretations, such as (48), are the ones presumably read with the supplied wo. Norito, on the other hand, does not share the shorthand character of Senmyō texts. It therefore provides more reliable evidence as to the presence or absence of =wo. Examination of Norito texts shows that preverbal bare objects pattern like Man'yoshū in that they receive non-specific interpretations.

6. Conclusion

This chapter has investigated two distinct levels of differential argument marking attested to in Old Japanese. Differential subject marking is associated with the semantic role assigned by the verb; specifically, agentive subjects are marked by *ga*, while non-agentive subjects are marked by *zero* or the other gentive *no*. The use of *ga* vis-a-vis *zero/no* is sensitive to the subject's position on the nominal hierarchy. The human NPs higher up on the hierarchy are associated with prototypical agents, which express volition and control, while the non-human or inanimate NPs lower down on the hierarchy are not transitivity prototypes. The OJ data showed that transitivity is a clause-level phenomenon defined as the type of NPs that serve as grammatical subjects. Differential object marking in OJ, on the other hand, is associated with a specific/non-specific distinction of object NPs. The distinctive [O *wo* S *ga* V] pattern of transitive clauses is consistent with the view that objects marked by *wo* are specific and that specific objects move outside VP.

Appendix I

Other 'nominalized' clause types, which show the same patterns, are inflected in the provisional (49), conditional (50), and nominal form in -(a)ku (51).

(49)	Realis (<i>izenkei</i>) conditional			
	wa ga wore-ba	ura sipo miti-	ku	(MYS 15.3707)
	I AGT be-PROV	bay tide be.fu	ll-come	
	'When I was present the tide was high in the bay.'			
(50)	Irrealis (<i>mizenkei</i>) conditional			
	masakikute imo go	a ipapa-ba		(MYS 15.3583)
	safely wife AGT bless-COND			
	'if you bless me godspeed'			
(51)	V-aku Nominal form			
	wotomye-ra ga	ime ni	tugur-aku	(MYS 17.4011)
	maiden-PL AGT	dream LOC	recount-NMLZ	
	'what the maidens recounted in my dream'			

Each of the nominalized clause types in (49-51) shares the active alignment properties of the adnominal clauses; the external arguments of transitive verbs are marked by ga, but not by *zero*.

Appendix II

As Yanagida (2006: 61) indicates, there is one possible counterexample in which the subject marked by *ga* is followed by the *wo*-marked object. This is illustrated in (52).

(52) yama no na to ipi-tugye to kamo saywopimye ga kono yama no pe ni hill GEN name as say-tell that Q Sayohime AGT this hill GEN upon LOC pire wo (遠) puri-kyemu (MYS 5.872) sash OBJ wave-AUX

'Was it for transmitting as the name of the mountain that Sayohime waved a sash upon this hill.'

The *Man'yōgana* 遠 in (52) is read *wo*. Yanagida (2006) suggests the possibility that this character is used to write the noun 緒 *wo* 'long cloth/string/thong', in which case, *pirewo* is a compound noun ('long sash') functioning as the object of the verb *puri* 'wave'. Kuroda (2008), however, casts doubt on Yanagida's proposal, suggesting an alternative interpretation for MYS 872. He notes that "the part of *Man'yōshū* in question is thought to originate in the collection of poems kept by Yamanoue Okura, one of the prominent poets of *Man'yōshū*, who, however, is believed to be a non-native speaker of Japanese. This fact may be relevant for this counterexample" (Kuroda 2007: 282). However, close examination of the *Norito* (*Engisiki Norito*) shows that there is a possibility that *pirewo* in *Man'yōshū* (872) is used as *engo* 'related word', associated with *pire kakuru tomono wo* (比禮懸伴緒) in the *Norito* (53).

(53) sumyemima (no) mikoto (no) mike yupu no mike (ni) asa no Godness (GEN) emperor (GEN) morning GEN meal evening GEN meal (DAT) tukape maturu pire (比禮) Ø kakuru tomo(no) (懸伴) wo (緒) serve-give.ADN sash put.on fellow (GEN) head tasuki Ø kakuru tomo(no) wo magapi wo te (no) sash put.on group (GEN) head OBJ hand (GEN) mistake nasa-sime-zute (NT: 御門祭) asi (no) magapi Ø foot (GEN) mistake do-CAUS-not 'As for the head of the group of the women, who serves for the emperor's

morning and evening meals, and who puts her sash on over her shoulder,

not making any mistakes with her hands and her feet.'

Tsugita (2008: 262-264) points out that the word *pire*, which appears in the *Man'yōshū*, as in (52) and in the *Norito* in (53), both refer to the long sashes symbolically worn by noble women in the Nara period. According to Tsugita, the women who serve meals for the emperor ritually put sashes over their shoulder. The word *wo* 緒 in (53), which originally means long cloth/string/thong, here is in reference to the head of the group of women who serve the emperor his meals. The use of *pire* in a combination with the noun *wo* 緒 in the *Norito* favors Yanagida's (2006) original interpretation in that *wo* in MYS 872 is used, not to write the case particle, but rather the noun $\frac{34}{3}$.

Texts (Primary Sources)

Kitagawa, Kazuhide. 1982. Shoku nihongi senmyō. Tokyo: Yoshikawa Kōbunkan.

- Koji, Kazuteru. 1988. Man'yōshū joshi no kenkyū. Tokyo: Kasama Shoin.
- Kojima, Noriyuki, Masatake Kinoshita and Haruyuki Tōno. 1971-1975. *Man'yōshū* (1-4), *Nihon Koten Bungaku Zenshū*. Tokyo: Shogakkan.
- Kurano, Kenji and Yukichi Takeda. 1958. Kojiki norito. Nihon Koten Bungaku Taikei. Tokyo: Iwanami Shoten.
- Motoori, Norinaga. 1803. *Shokki Rekichō Shōshikai* [Commentaries on imperial edicts in the *Shoku Nihongi*].
- Nakanishi, Susumu. 1978-1983. Man'yōshū. Tokyo: Kōdansha Bunko (reprinted in 1978-2005).

Digitalized Texts

- The Corpus of Historical Japanese (CHJ), the National Institute of Japanese Language and Linguistics, https://maro.ninjal.ac.jp/
- The Oxford-NINJAL Corpus of Old Japanese (ONCOJ), https://oncoj.ninjal.ac.jp/

References

- Aldridge, Edith. 2004. *Ergativity and word order in Austronesian Languages*. Ithaca, New York: Cornell University dissertation.
- Aldridge, Edith. 2008. Generative approaches to ergativity. *Language and Linguistics Compass: Syntax and Morphology* 2(5). 966-995.
- Aldridge, Edith. 2015. A minimalist approach to the emergence of ergativity in Austronesian

languages. Linguistics Vanguard 1(1). 313–326.

- Alexiadou, Artemis and Elena Anagnostopoulou. 2001. The subject-in-situ generalization and the role of case in driving computations. *Linguistic Inquiry* 32(2). 193-231.
- Anand, Pranav and Andrew Nevins. 2006. The locus of ergative case assignment: Evidence from scope. In Alana Johns, Diane Massam, and Juvenal Ndayiragije (eds.), *Ergativity: Emerging Issues*, 3-25. Dordrecht: Springer.
- Authier, Gilles. 2013. The origin of two genitive cases and inalienability split in Budugh (East Caucasian). *Faits de Langues* 41. 177–192.
- Baker, Mark C. 1988. Incorporation. Chicago: The University of Chicago Press.
- Baker, Mark. C. 2014. On dependent ergative case (in Shipibo) and its derivation by phase. *Linguistic Inquiry* 45, 341-379.
- Bittner, Maria and Ken Hale. 1996. The structural determination of case and agreement. *Linguistic Inquiry* 27. 1–68.
- Bynon, Theodora. 2005. Evidential, raised possessor, and the historical source of the ergative construction in Indo-Iranian. *Transactions of the Philological Society*, Vol. 103:1, 1-72.
- Comrie, Bernard. 1978. Ergativity. In Lehmann Winfred (ed.), *Syntactic typology*, 329–394. Austin: University of Texas Press.
- Coon, Jessica. 2008. When ergative=genitive: Nominals and split ergativity. In Natasha Abner and Jason Bishop (eds.), *Proceedings of the 27th West Coast Conference on Formal Linguistics*, 99–107. Somerville, MA: Cascadilla Proceedings Project.
- Coon, Jessica and Andrés Pablo Salanova. 2009. Nominalization and predicate-fronting: Two sources of ergativity. *University of Pennsylvania working papers in linguistics* 15(1). 45–54.
- Diesing, Molly. 1992. Indefinites. Cambridge, MA: MIT Press.
- Dixon, R.M.W. 1979. Ergativity. Language 55. 59-138.
- Dixon, R.M.W. 1994. Ergativity. Cambridge: Cambridge University Press.
- Franchetto, Bruna. 1990. Ergativity and nominality in Kuikúro and other Carib languages. In In Doris.L. Payne (ed.), Amazonian linguistics: Studies in lowland South American languages, 407-428. Austin: University of Texas Press.
- Frellesvig, Bjarke, Stephen Horn and Yuko Yanagida. 2015. Differential object marking in Old Japanese: A corpus based study. In Dag Haug et al. (eds.), *Historical linguistics: Current issues in linguistic theory*, 195–211. Amsterdam: John Benjamins.
- Gildea, Spike. 1998. On reconstructing grammar. Oxford: Oxford University Press.
- Gildea, Spike. 2000. On the genesis of the verb phrase in Cariban languages. In Spike Gildea

(ed.), *Reconstructing grammar: Comparative linguistics and grammaticalization*, 65–106. Amsterdam: John Benjamins.

- Haig, Geoffrey. 2008. Alignment change in Iranian languages: A construction grammar approach. Berlin/New York: Mouton de Gruyter.
- Ikeda, Yukie. 1996. Senmyō no wo kaku hyōji [The objective case wo in Senmyō]. Machikaneyama ronsō 30. 19–32. Osaka: Osaka University.
- Johns, Alana. 1992. Deriving ergativity. Linguistic Inquiry 23(1). 57-87.
- Kageyama, Taro. 1980. Goi no kōzō [The structure of lexicon]. Tokyo: Shohakusha.
- Kaufman, Daniel. 2009. Austronesian nominalism and its consequences: A Tagalog case study. *Theoretical Linguistics* 35(1). 1–49.
- Kikuta, Chiharu. 2012. Jōdai nihongo no *ga* kaku nitsuite [On the case marker *ga* in Old Japanese]. *Dōshisha daigaku jinbun gakkai* (The Literary Association) 89. 89–123. Kyoto: Doshisha University.
- Kinsui, Satoshi. 1993. Kotengo no wo ni tsuite [On the particle wo in premodern Japanese].In Y. Nitta (ed.) Nihongo no kaku o megutte [Perspectives on case in Japanese],191-224. Tokyo: Kurosio Publishers.
- Kinsui, Satoshi. 2011. Tōgoron [Syntax]. In Satoshi Kinsui, Yoshiyuki Takayama, Tomohide Kinuhata and Tomoko Okazaki (eds.), *Bunpōshi* [The history of grammar], 77–166. Tokyo: Iwanami Shoten.
- Klimov, Georgij A. 1977. *Tipologija jazykov aktivnogo stroja* [Typology of languages of the active type]. Moscow: Nauka.
- Kotani, Hiroyasu.1986. *Mokkan to senmyō no kokugogakuteki kenkyū* [A linguistic study of *Mokkan* and *Senmyo*]. Osaka: Izumi Shoin.
- Kojima, Noriyuki, Masatake Kinoshita and Haruyuki Tōno. 1972. Man'yōshū, Nihon Koten Bungaku Zenshū. Tokyo: Shogakkan.
- Kuroda, S.-Y. 2008. On the syntax of Old Japanese. In Bjarke Frellesvig, John C. Smith and Masayoshi Shibatani (eds.), *Current issues in the history and structure of Japanese*, 263–318. Tokyo: Kurosio Publishers.
- Legate, Julie. 2008. Morphological and abstract case. Linguistic Inquiry 39(1). 55-101.
- Manning, Christopher D. 1996. *Ergativity: Argument structure and grammatical relations*. Stanford, CA: CSLI Publications.
- Meira Sergio. 2006. Stative verbs vs. nouns in Sateré-Mawé and the Tupian family. In Grazyna J. Rowicka and Eithne B. Carlin (eds.), *What's in a verb: Studies in the verbal morphology of the languages of the Americas* (Lot Occasional Series), 189–214.

Amsterdam: Netherlands Graduate School of Linguistics.

- Mithun, Marianne. 1991. Active/agentive case marking and its motivations. *Language* 67(3). 510–546.
- Miyagawa, Shigeru. 1989. *Structure and case marking in Japanese* (Syntax and semantics 22). New York: Academic Press.
- Miyagawa, Shigeru and Fusae Ekida. 2003. Historical development of the accusative case marking in Japanese as seen in classical literary texts. *Journal of Japanese Linguistics* 19: 1-95.
- Mohanan, Tara. 1994. Argument structure in Hindi. Stanford: CSLI Publications,
- Motohashi, Tatsushi.1989. *Case theory and the history of the Japanese language*. Tucson, AZ: University of Arizona dissertation.
- Nomura, Takashi. 1993. Jōdaigo no *no* to *ga* ni tsuite [On the particles *no* and *ga* in Old Japanese]. *Kokugo Kokubun* 62. 1–17.
- Ohno, Susumu. 1977. Shukaku joshi *ga* no seiritsu [The development of the nominative case particle *ga*]. *Bungaku* 45. 102–117.
- Rezac, Milan, Pablo Albizu, and Ricardo Etxepare. 2014. The structural ergative of Basque and the theory of Case. *Natural Language & Linguistic Theory* 32,1273-1330.
- Sapir, Edward. 1911. The problem of noun incorporation in American languages. *American Anthropologist* 13. 250–282.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In R. M. W. Dixon (ed.), *Grammatical categories in Australian languages*, 112–171. Canberra: Australian Institute of Aboriginal Studies.
- Takeuchi, Shiro. 2008. Kodai nihongo no kakujoshi *wo* no hyōji-iki to sono henka [The distribution and historical change of the case particle *wo* in earlier Japanese]. *Kokugo to Kokubungaku* 85(4). 50–63.
- Tsugita, Uruu. 2008. *Shin-pan Norito shinkō* [New edition: A new lecture on the *Norito*. 1927, Tokyo].Tokyo: Ebisukosyō Publication.
- Tsuta, Kiyoyuki. 2004. Mi no sekai [The world of *mi*] *Kokugo Kokubun* 73:12, 10-29 Velazquez-Castillo, Maura. 1996. *The grammar of possession*. Amsterdam: John Benjamins.
- Vovin, Alexander. 1997. On the syntactic typology of Old Japanese. *Journal of East Asian Linguistics* 6. 273–290.
- 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*, 159–174.

Amsterdam: John Benjamins.

- Woolford, Ellen. 1997. Four-way case systems: Ergative, nominative, objective, and accusative. *Natural Language and Linguistic Theory* 15. 181-227.
- Woolford, Ellen. 2008. Differential subject marking at argument structure, syntax and PF. In Helen de Hoop and Peter de Swart (eds.), *Differential subject marking*, 17–40.
 Dordrecht: Springer.
- Wrona, Janick and Bjarke Frellesvig. 2010. The Old Japanese case system: The function of wo. In Shoichi Iwasaki, Hajime Hoji, Patricia M. Clancy and Sung-Ock Sohn (eds.), Japanese/Korean Linguistics 17. 565–580. Stanford: CSLI Publications.
- Yamada, Yoshio. 1968. Narachō bunpō shi [The history of Nara grammar]. Tokyo: Hobunkan.
- Yanagida, Yuko. 2006. Word order and clause structure in Early Old Japanese. *Journal of East Asian Linguistics* 15. 37–68.
- Yanagida, Yuko. 2007a. Jōdaigo no nōkakusei ni tsuite [On ergativity in Old Japanese]. In Nobuko Hasegawa (ed.), Nihongo no shubun genshō [Main clause phenomena in Japanese], 147–188. Tokyo: Hituzi Shobo.
- Yanagida, Yuko. 2007b. Miyagawa's (1989) exceptions: An ergative analysis. *MIT Working Papers in Linguistics* 55: 265-276.
- Yanagida, Yuko. 2018a. Differential argument marking and object movement in Old Japanese. In Nishiyama, Kunio, Hideki Kishimoto and Edith Aldridge (eds.), *Topics in theoretical Asian linguistics*, 181-205. Amsterdam: John Benjamins.
- Yanagida, Yuko. 2018b. Differential subject marking and its demise in the history of Japanese. In Ilja Seržant and A. Witzlack-Makarevich (eds), *Diachrony of differential argument marking*. 403–425. Berlin: Language Science Press.
- Yanagida, Yuko and John Whitman. 2009. Alignment and word order in Old Japanese. Journal of East Asian Linguistics 18. 101–144.

¹ As shown in section 5.1, *wo* in OJ marks a much wider range of internal arguments than ModJ *o* (For detailed observations, see Yanagida [2006]).

² Mithun (1991) identifies the semantic basis of the active-marking of various West Hemisphere languages, both synchronically and diachronically.

³ Sateré-Mawé (Tupian) has an active system marked by two series of personal prefixes on the verb (cf. Mithun [1991]). Meira (2006) shows that, in Mawé, nonactive verbs are strikingly similar to (possessed) nouns. The same set of personal prefixes appear on nouns

and nonactive verbs, and these prefixes do not select active verbs.

⁴ I owe many thanks to Stephen Horn for his help in obtaining data from the ONCOJ.

⁵ Subjects of predicates in the conclusive form are excluded since they are assigned nominative (i.e. zero) marking both S and A. Moreover, subjects with *naku*, meaning 'make a cry' (nonvolitional) as opposed to 'sweep' (volitional), are not included. They are all non-human animate (86 tokens). Inanimate bare subjects with *yuku* 'go/pass/come', as in (i), are not included either (14 tokens).

(i) aki yuke-ba kurenawi *nipopu* (MYS 3227)
 autumn come-PROV crimson smell
 'When autumn comes crimson smells'

(i) involves no volitional activity performed by the agent.

⁶ I extend my thanks to John Whitman for this observation.

⁷Modern Japanese does not have noun incorporation in the strict sense. The patterns of incorporation discussed by Kageyama (1980), such as *kosi o kakeru* vs. *kosikakeru*, *tema o toru* vs. *temadoru*, are not productive. These expressions are possibly analyzable as lexical compounds.

⁸ See Yanagida (2007a) for all the examples with OSV order in the *Man'yōshū*. For one possible counterexample to this word order restriction, see appendix II.

⁹ I ignored 是以, since there are many tokens which may or may not appear with *wo*. Ikeda's (1996) data on Kitagawa (1982) excludes this phrase.