

SPECIAL COLLECTION: FOCUS CONCORD CONSTRUCTIONS IN JAPANESE AND OTHER LANGUAGE

C-T Inheritance and the left periphery in Old Japanese

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This paper proposes an analysis of movement to the left periphery in Old Japanese within the framework of C-T Inheritance. Particular attention is given to the fact that nominative subjects precede focused constituents in focus concord constructions known as kakari-musubi (KM). I propose that this order is ensured by the nature of the features motivating these respective movements. Following Richards (2007), I propose that uninterpretable features - particularly those seeking a value - must be spelled out as soon as they are valued. Consequently, these features must be inherited so that they are in the domain of the phase head when spell out takes place. Building on earlier analyses of KM constructions as involving agreement between a focus particle and the verbal inflection which covaries with that particle (Ikawa 1998; Watanabe 2005; Kuroda 2007, and others), I propose that focused constituents must move to [Spec, TP], since their movement is motivated by an unvalued focus feature. In contrast to this, subject movement to value nominative case is not driven by an uninterpretable probe on the phase head like $[u\varphi]$, because Japanese lacks subject/verb agreement. Following Saito (2016), I propose that subjects undergo movement agnostically in order to value their own case features. Since there is no probe on C driving this movement, inheritance does not take place, and the subject moves to [Spec, CP], with the result that it precedes the focused constituent in surface word order.

Keywords: C-T Inheritance; left periphery; kakari-musubi; focus concord; Old Japanese

1 Introduction

This paper proposes an analysis of the ordering of contituents in the left periphery in 8th century Old Japanese (OJ) clauses. Of particular interest is the relative positions for the nominative subject and focused constituents. As is familiar from work within the Cartographic program (beginning with Rizzi 1997), subjects are generally assumed to be licensed within TP, while topicalized and focused constituents move to higher positions in the left periphery. In (1), the subject is preceded by a low topic, a focused constituent, and a high topic.

(1) Italian (Rizzi 2013: 203) Credo [$_{CP}$ che a Gianni IL MIO LIBRO domani [$_{IP}$ Piero gli dovrebbe dare]]. 'I believe that to Gianni MY BOOK tomorrow Piero should give.'

In contrast to this, OJ nominative subjects occupy a position preceding focused constituents, which I propose in this paper is [Spec, CP], while the position for focused constituents is [Spec, TP].

This paper builds on work by Miyagawa (2010; 2017) to account for the relative positions of subject and focus in OJ. Working within the framework of C-T Inheritance (Chomsky 2008), Miyagawa proposes a parameter to determine which features are inherited by T from C. Chomsky (2008) assumes that the unvalued ϕ -feature responsible for licensing nominative case and copying agreement features from the subject is inherited universally by T. For the Italian example in (1), this accounts for the position of the subject following the topic and focus constituents in the CP layer.

In contrast to this, Miyagawa (2010; 2017) proposes that in "discourse-configurational" languages (in the sense of Kiss 1994), it is topic or focus features which are inherited by T. This accounts for the OJ example in (2), since the focus feature will be inherited by T, while the subject can move to [Spec, CP] for licensing.

In this paper, I also propose that a focus feature is inherited by T in OJ. However, I additionally consider the question of what condition forces inheritance of subject licensing features in some languages but discourse related features in others. I propose that it is the nature of the features themselves which determines whether they will be inherited by a lower head. Specifically, the determination is made on the basis of the interpretability of the feature on C and whether the feature seeks a value.

(3) Feature type and inheritance

- a. Uninterpretable features probe as soon as they enter the derivation.
- b. Unvalued features must be spelled out in the phase where they are valued.

I follow Richards (2007; 2012) in observing that C-T Inheritance is necessary in order to spell out unvalued features as soon as they are valued. Otherwise, these uninterpretable features would not be deleted and consequently would be transferred to the interpretive component. This is why unvalued Φ -features must be passed to T, so that they are spelled out in the domain of the phase head C, which is TP.

I also follow the standard assumption since Chomsky (1993) that uninterpretable features act as probes, so they seek goals as soon as they enter the derivation. This ensures that unininterpretable features that do not seek a value will also begin to probe as soon as they enter the derivation, but they need not be spelled out in the domain of the phase head. They can remain in the edge of the phase and simply be deleted when Agree takes place. Finally, base merger of adjuncts and agnostic (in the sense of Franks and Lavine 2006) movements of arguments, e.g. topicalization, will take place last, because these operations are not motivated by probes at the landing sites. Consequently, the principles in (3) derive the following hierarchy, which in turn accounts for the commonly found order in (1).

(4)
$$[F] > [uF] > [uF:]$$

TOP FOC SUBJ

In contrast to this, in languages which do not register ϕ -feature agreement on C/T, there is no reason a priori to assume that nominative case is the product of the valuation of these

¹ The assumption that high topics are not attracted to the phase edge by probes but are simply interpreted as such by occupying this position is admittedly a stipulation. I save full investigation of this possibility for future investigation, but I note here that this idea is in concert with Frascarelli (2000; 2004), who shows on the basis of scope, binding, and minimality effects that high topics, which she calls "shifting" topics, are base generated in the left periphery and resumed in the clause by clitics when they refer to arguments. Other indications that high topics are base generated in the edge of the CP phase comes from the fact that these are frequently adjucnts like locative and temporal adverbials, referred to by Benincà and Poleto (2004) as "scene setting" adverbials. Finally, I note that Rizzi (2004; 2013) observes that what he calls "pure" topic movement is not sensitive to locality restrictions found with other types of movement. One way to account for this is simply to assume that movement of "pure" topics does not take place.

features. And if the language does not have an unvalued ϕ -probe, then according to (3) there is no need for the feature responsible for valuing nominative case to be inherited by T. I adopt Saito's (2016) proposal that subjects in Japanese undergo movement in order to value their case features, but there are no unvalued ϕ -features on the licensing head. Accordingly, C-T Inheritance does not take place, and the DP undergoes movement to [Spec, CP] in order to value its case feature. But because focus movement is driven by an uninterpretable feature, this feature will be inherited by a lower head, and focused constituents will move to a position below the subject.

In the next section, I summarize the basic empirical facts relevant to the proposed analysis, affording particular attention to focus constructions of the type shown in (2). Section 3 introduces and argues for my proposal for feature inheritance and the licensing of subjects and other constituents in the OJ left periphery. Section 4 provides additional evidence for the proposal on the basis of the broader distribution of subjects in OJ.

2 OJ case marking and focus concord constructions

In this section, I provide an empirical overview of the phenomena addressed in this paper. Section 2.1 summarizes case marking in OJ, and section 2.2 introduces the basic properties of focus concord constructions. All OJ examples are taken from the 8th century poetry anthology *Manyoshu*.

2.1 OJ case marking

In modern standard Japanese, nominative case for subjects is indicated by the particle *ga*, and a different particle *o* marks accusative case on objects.

- (5) a. Hanako = ga ringo = o tabe-ta. Hanako = NOM apple = ACC eat-PAST 'Hanako ate an apple.'
 - b. Hanako = ga i-ru. Hanako = NOM be-PRES 'Hanako is here.'

In contrast to this, nominative case in 8th century Old Japanese (OJ) was not overtly marked. As in modern Japanese, basic word order in OJ was SOV, and the unmarked position for the nominative subject was clause-initial. Objects were also generally unmarked for case when they remained in their base positions, surfacing in immediate preverbal position, as in (6b). Specific or definite objects were marked with the particle *wo*, cognate with the modern accusative particle *o*. I show below that objects were typically marked with *wo* when they were dislocated. Note further the inflection on the verbs in (6), "SS" indicating *shuushi* 終止 'conclusive' ending found in finite indicative clauses.

- (6) a. 烏梅能波奈 伊麻佐可利奈理 (MYS 820) [Ume=no pana] ima sakari-nar-i. plum=GEN flower.NOM now open-be-ss 'The plums are now in bloom.'
 - b. 我期大王 國所知良之 (MYS 933) [Wa-ga opo-kimi] kuni sirasu ras-i. 1SG-GEN great-lord.NOM country rule seem-ss 'My great lord rules seems to rule the land.'

Another case marker sometimes appearing on subjects was genitive. There were two genitive particles in OJ. The precursor of the the modern Japanese nominative particle *ga* is

found on pronouns and personal nouns that refer to specific human individuals close to the speaker.² Other genitive nominals are marked with *no*, which functions as the sole genitive particle in modern standard Japanese. (7) shows examples of these particles marking possessors.

- (7) a. 和何世古 (MYS 812) wa-**ga** sekwo 1SG-GEN lover 'my lover'
 - b. 我屋<戸>前乃 花橘 (MYS 1481) [wa-ga yadwo]=no pana tatipana 1SG-GEN house=GEN flower orange 'the flowering orange blossoms of my home'

Subjects appear with genitive case in nominalized embedded clauses, including relative clauses, conditional clauses, and focus concord constructions. The examples in (8) show relative clauses; note the adnominal inflection, glossed as "RT" for *rentai* 連体 'adnominal', on the verbs in (8), indicating their nominalized status.

- (8) a. 隱口乃 泊瀬越女我 手二纒在 玉 (MYS 424)
 komoriku=no patuse wotomye=ga te=ni mak-ye-ru tama
 secluded=GEN Patuse girl=GEN hand=DAT wind-PAST-RT bead
 'the beads that the maiden of the secluded Patuse wound around her wrist'
 - b. 白雲乃 棚引山 (MYS 287) sira kumwo=**no** tanabik-u yama white cloud=GEN hang-RT³ mountain 'the mountain that white clouds hang over'

For the analysis of genitive case, I follow Yanagida (2006), Yanagida and Whitman (2009), and Yanagida (2012) in treating this as inherent case assigned within the nominalized νP . Part of the evidence that the genitive subject remains in the νP comes from the fact that it follows an accusative marked object. Yanagida (2006) identifies an asymmetry⁴ in OJ between bare objects and objects taking the particle wo: wo-marked objects are interpreted as specific and are required to precede a genitive subject, as in (9b), while bare objects remain in their base positions immediately preceding the verb, as shown in (9a). Yanagida analyzes wo-marked objects as undergoing object shift to the edge of νP .

- - b. 蜻野叫人之懸者 (MYS 1405) $[_{vP}$ Akidu nwo=wo $[_{v}$ pito=no $[_{vP}$ t_{Obj} kakur-e-ba]]] Akizu field=ACC man=GEN speak.of-IZ-COND 'When a man speaks of the moorland of Akizu…'

² The reader is referred to Yanagida and Whitman (2009) for detailed discussion on the distribution of the two genitive particles.

³ As is true for several OJ verb classes, the *rentai* adnominal and *shuushi* conclusive forms for this verb are syncretic. In the interest of clarity, I gloss these inflections according to their function in each example.

⁴ Yanagida discusses this asymmetry particularly with regard to nominalized clauses, but it is found in SS clauses as well.

In contrast to this, a nominative subject can precede a *wo*-marked object, as shown in (10). This suggests that genitive subjects occupy a position lower than a nominative subject. In the next subsection, I show that genitive subjects also follow focused constituents, which in turn must follow nominative subjects, providing clear evidence for the low position of genitive subjects.

(10) 霍公鳥 今城岳叫 鳴而越奈利 (MYS 1944)
Pototogisu [Imaki=no woka]=wo naki-te kwoyu-nar-i.
cuckoo.NOM Imaki=GEN hill=ACC cry-CONJ cross-be-SS
'The cuckoo seems to cry as it passes over Mt. Imaki.'

The following table summarizes OJ case marking. In this paper, I refer to nominative subjects that are not marked with another particle such as a focus or topic particle as "bare nominative subjects". I also refer to objects that lack overt marking as "bare objects".

(11)	Case	Form	Context
	NOM	NULL	Subject in [Spec, CP]
	ACC	wo	Specific object, dislocated
	PART	NULL	Non-specific internal argument in VP
	GEN	ga	High animacy possessors and subjects of nominalized clauses
	GEN	no	Low animacy possessors and subjects of nominalized clauses

As I discuss in sections 3 and 4, structural nominative case is available in both conclusive "SS" clauses and in finite clauses where the verb carries nominalizing morphology, such as those occurring in focus concord constructions. Following Yanagida and Whitman (2009), I assume that *wo* marks structural accusative case valued by a functional head with a dislocated object in its specifier.⁵ I analyze bare nonspecific objects which remain in VP as receiving inherent partive case from the verb. Yanagida and Whitman (2009) propose that nonspecific objects undergo incorporation to the verb in nominalized clauses. However, these objects can also be phrasal, as even they point out.

(12) 秋風乃 寒朝開乎 佐農能岡 将超公尔 (MYS 361; Yanagida & Whitman 2009: 139) [akikaze=no samu-ki asaake=wo **Sanu no oka** kwoyu-ramu] kimi ni fall.wind=GEN cold-RT early.am=ACC Sanu GEN hill cross-MOD lord to 'to the lord who is going over the hill of Sano in the early morning when the autumn wind is cold'

Furthermore, the asymmetry between specific dislocated objects and nonspecific objects in VP is not restricted to nominalized clauses. Rather, it is found in SS clauses as well. The nonspecific object in immediate preverbal position in (13a) is bare, while the fronted object in (13b) is marked with *wo*.

- (13) a. 吾勢子波 借廬作良須 (MYS 11)
 Wa-ga sekwo=pa **karipo** tukura-su.
 1SG.GEN husband=TOP hut make-HON.SS
 'My husband makes a hut (for the night).'
 - b. 多都乃麻乎 阿礼波毛等米牟 (MYS 808)
 Tatu=no ma=wo are=pa motome-mu.
 dragon=GEN horse=ACC 1SG=TOP seek-MOD.SS
 'I will try to find a dragon's horse.'

⁵ For Yanagida and Whitman, this functional projection is an aspectual phrase. The exact identity of this projection is not important for the purposes of the current proposal.

Runner (1993) has proposed the same type of analysis for objects in the typologically similar language Turkish. Just as in OJ, specific objects in Turkish are dislocated and marked with overt accusative case, while nonspecific objects are bare and remain in immediate preverbal position. Runner proposes that the overtly marked, dislocated objects receive structural case in the specifier of a functional projection above VP.

- (14) *Turkish* (Runner 1993: 23)
 - a. Ben dun aksam **cok guzel bir biftek** yedim. I yesterday evening very nice a steak ate 'Yesterday evening, I ate a very nice steak.'
 - b. Ben **bifteg-i** dun aksam [$_{VP} t_{Obj}$ yedim]. I steak-ACC yesterday evening ate 'I ate the steak yesterday evening.'

2.2 Focus concord constructions

This subsection introduces the characteristics of the OJ focus construction known as kakari-musubi (KM) kakari-musubi (KM) constructions, the focused constituent is marked with a particle like the identificational focus marker ka, or the contrastive focus marker ka. The subject of a ka construction is often marked with genitive case, which correlates with the verbal morphology. If the focus particle is ka, the verb takes adnominal RT inflection, the same verbal inflection found in relative clauses. Note further that the focused constituent always precedes the genitive subject, as first observed by Nomura (1993), illustrating the low position for genitive subjects.

- (15) a. 由布佐礼婆 比具良之 伎奈久 伊故麻山 古延弖曽 安我 久 流 (MYS 3589)
 Yupu sar-e-ba pigurasi ki-naku ikomayama kwoe-te=so
 evening go-IZ-COND cicada come-cry Mt. Ikoma cross-CONJ=SO
 a-ga ku-ru.
 1SG-GEN come-RT
 'It is climbing over Mt. Ikoma, where the cicadas come to sing in the
 evening, that I come.'
 - b. 何物 鴨 御狩 人之 折而 将插頭 (MYS 1974)
 Nani=wo ka=mo mi-kari=no pito=no wori-te kazasa-mu?
 what=ACC KA=FOC HON-hike=GEN person=GEN pick-CONJ wear.MOD.RT
 'What should the hikers pick and wear (on their hair)?'

It has been claimed that this type of KM construction derives historically from a cleft (Quinn 1997; Whitman 1997; Shinzato 1998; Serafim & Shinzato 2005). The relative clause packaging the presupposition has been reduced to the size of ν P, with the genitive subject residing in this specifier. The constuction is also clearly monoclausal,

⁶ There are two additional KM particles which I do not consider in this paper, *ya* and *namu/namo*. *Ya* is another type of interrogative particle, and most typically found in clause-final position in *yes/no* questions. When ya appears in clause-medial position, the verbal inflection is RT. *Namu* attaches to clause-medial focused constituents in declarative contexts and expresses a weaker type of focus than *so* or *koso*. The verbal inflection in this case is also RT. I do not give data for these particles in this paper in the interest of saving space. To my knowledge, nothing significant in the analysis offered here would change if they were included. I have chosen specifically to focus on *ka*, *so*, and *koso* for two reaons. First, inclusion of koso allows consideration of both types of verbal inflection, only *koso* requiring an inflection other than RT, occurring with the IZ inflection, as shown below. Secondly, inclusion of *ka* and *so* allows for consideration of both interrogative and declarative clause types in the RT type of KM construction.

since dislocations such as subject movement and object scrambling, which I discuss in the following section, occur freely from this νP without invoking violations of the Complex NP Constraint. For these reasons, KM constructions are not clefts synchronically but rather should be treated as a type of "focus concord" construction also found in some other languages such as Sinhala (Gair 1983; 1998; Kishimoto 1992; 2005; Hagstrom 1998; Slade 2011; and others). The "concord" referred to here indicates the covariance between the verbal inflection and the particle marking the focused constituent. In OJ, there are in fact two types of inflection surfacing in KM constructions.

When the focus particle is the contrastive focus marker *koso*, the verb takes *izen* 已然 'realis' inflection, which is marked by changing the final -u of the adnominal ending to -e.

(16) 人社不知 松者知良武 (MYS 145)
Pito=koso sira-ne, matu=pa siru ramu.
person=KOSO know-NEG.IZ pine=TOP know MOD.RT
'Though people do not understand, the pine may know.'

This covariance between IZ inflection and *koso*, RT inflection and *ka/so*, and SS inflection in the absence of a focus particle has prompted several generative linguists to analyze OJ KM constructions as involving agreement between the focus particle and the verbal inflection (Ikawa 1998; Watanabe 2005; Kuroda 2007; and others). I adopt this approach in section 3.

IZ morphology does not project a relative clause. Independent of KM constructions, IZ inflection is found heading "though" or "because" type adjunct clauses (Ishida 1939a; b; Ohno 1993; Quinn 1997; Whitman 1997; Sasaki 2003; and others).

大雪乃 乱而来礼 不奉仕 (MYS 199; from Ohno 1993: 101) Opo yuki=no midare-te ki-ta-re maturwopa-zu. great snow=GEN flurry-CONJ come-PRV-IZ surrender-NEG 'Though the snow is flying around me, I do not give in.'

This makes it unlikely that the *koso* construction has its origin in a cleft. The origin of the *koso* KM construction as an adjunct clause is further suggested by the fact that it is frequently followed by another clause, as in the previous example, particularly to express contrast (Saji 1974; Ohno 1993; Ishida 1939a; b; Tsuta 2011; Hando 1993; 2003; Morino 2002). Genitive subjects are also frequently found in *koso* KM constructions, as I show in the following section. I assume that this is because IZ morphology is added to the adnominal verbal stem. The following table summarizes the KM patterns I consider in this paper.

(18)	Particle	Focus Type	Verbal Inflection
	ka	Interrogative	Adnominal (rentai)
	so	Identificational	Adnominal (rentai)
	koso	Contrastive	Realis (izen)

For the syntactic derivation of KM constructions, the fact that the focus precedes a genitive subject strongly suggests some type of movement. Additional evidence for dislocation comes from the fact that focused constituents can precede objects marked with accusative

wo. Given that the object must move minimally to the edge of vP, as per Yanagida (2006), the focus preceding this object has to be located outside of vP.

- (19) a. 何尔可 君之三船乎 吾待将居 (MYS 2082)
 Iduku=ni=ka kimi=ga mi-pune=wo wa-ga mati-ora-mu?
 where=DAT=KA lord=GEN HON-boat=ACC 1SG-GEN wait-be-MOD.RT
 'Where shall I be waiting for your boat?'
 - b. 後将相跡 思許増 己命乎 長欲為礼 (MYS 2868)
 Noti=mo apa-mu to omop-e=koso ono=ga inoti=wo
 after=FOC meet-MOD C think-IZ=KOSO self=GEN life=ACC
 nagaku horisu-re.
 long want-IZ
 'It is because I want to see you again that I desire my life to be long.'

Movement is also suggested by the fact that locality is observed. As pointed out by Whitman (2001) and Yanagida (2005), no island boundary can appear between the particle and the verb showing concord with it. Interestingly, the focused constituent itself can appear inside a syntactic island, but the particle must attach outside of the island containing the focus.⁷ (20a) shows an interrogative constituent inside a relative clause. In (20b), there is an interrogative constituent inside an adjunct clause.

- (20) a. 福何有人香 黑髮之 白成左右 妻之音乎聞 (MYS 1411)

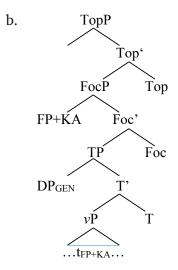
 [DP [Sakipapi=no ika na-ru] pito]=ka kurwo kami=no sirwo-ku fortunate=GEN how be-RT person=KA black hair=GEN white-ADV na-ru made imwo=no kowe=wo kik-u? be-RT until wife=GEN voice=ACC hear-RT 'A man whose fortune is how (good) will hear his wife's voice until his black hair has turned white?'
 - b. 雁之 翅乃 覆羽之 何処 漏香 霜之 零異年 (MYS 2238)
 [CP [[Kari=no tubasa=no opopi-pa]=no iduku mori-te]]=ka
 goose=GEN wing=GEN great-wing=GEN where leak-CONJ=KA
 shimo=no furi-kye-mu.
 frost=GEN fall-PAST-MOD.RT
 'The frost has fallen, because what part of the great wings of the wild goose is leaking?'

Word order facts like these have prompted several generative linguists to posit a movement analysis of KM constructions. Focusing on the fact that *wh*-phrases marked with KA often precede a subject marked with *ga*, Watanabe (2002; 2005) proposes that OJ had *wh*-movement to a focus position external to TP.⁸

(21) a. 何処従鹿 妹之入来而 夢所見鶴 (MYS 3117)
Iduku=yu=ka imwo=ga iri-ki-te ime=ni
where=from=KA dear=GEN enter-come-CONJ dream=DAT
mi-ye-tu-ru?
see-PASS-PRV-RT
'From where did my dearest come and appear in my dream?'

⁷ See also Gair (1983; 1998), Kishimoto (1992; 2005), Cable (2010), Slade (2011), and others on the locality restriction in similar constructions in other languages, specifically Sinhala and Tlingit.

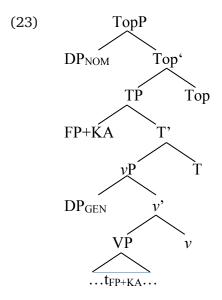
⁸ See Whitman (2001) for another proposal that OJ had wh-movement to [Spec, CP].



An obvious problem with this proposal is that the basis for positing movement into the left periphery is the assumption that genitive subjects occupy [Spec, TP]. This assumption may arise from the fact that the genitive marker ga was reanalyzed in Late Middle Japanese as nominative and functions as the nominative case marker in modern standard Japanese. But, as discussed above, OJ ga was clearly genitive. Furthermore, as touched upon in section 1, a nominative subject must precede the focused constituent.

(22) 保等登藝須 奈尔加 伎奈可奴 (MYS 4053) Pototogisu nani=ka ki-naka-nu? cuckoo.NOM what=KA come-cry-NEG.RT 'Why does the cuckoo not come and sing?'

Kuroda (2007) acknowledges that OJ ga was genitive case and assumes that subjects bearing this case are located in their base positions in [Spec, ν P]. The focused constituent then moves out of ν P to [Spec, TP], which he analyzes as a focus position in KM constructions. This requires him to stipulate, however, that nominative subjects occupy [Spec, TP] in non-focus contexts but must move to the left periphery in focus constructions, where they have the status of topics.



 $^{^{9}}$ Aldridge (2009) similarly criticizes Watanabe's (2002; 2005) *wh*-movement analysis and proposes focus movement to a clause-medial position between T and ν P.

The approach I take in this paper is similar to Kuroda's proposal in analyzing the nominative subject as occupying [Spec, CP], while focused constituents move to [Spec, TP]. However, my analysis eliminates some stipulations inherent in Kuroda's approach. First, Kuroda's analysis does not provide an explanation for why the subject must move to [Spec, CP] in focus constructions. It is also not clear in Kuroda's analysis how the subject is licensed in this position. Finally, Kuroda does not provide a principled reason for why [Spec, TP] is the focus position. In the next section, I address these and other questions regarding the positions and licensing of nominative subjects and focused constituents within the framework of C-T Inheritance.

3 C-T Inheritance and the licensing of nominative case and focus in OJ

This section develops the C-T Inheritance analysis that I propose for licensing constituents in the left periphery in OJ. First I adopt Richards' (2007; 2012) justification for C-T inheritance as necessary in order to ensure the simultaneity of feature valuation and transfer. Once unvalued features are valued, they become indistinguishable from valued and interpretable features. For example, T's unvalued feature [\phi:] becomes [\phi:3SG] after undergoing Agree with a subject bearing an inherently valued [\$\phi\$:3SG] feature. If these features are not deleted as soon as they are valued, the uninterpretable ones will be incorrectly transferred to the interfaces. Conversely, they also cannot be deleted before Spell Out, because valued features often have a pronounced reflex, as is the case of ϕ -feature agreement on T in many languages. If these features are deleted before Spell Out, then they will not be targed by Vocabulary Insertion in the Morphological Component. Consequently, feature valuation and Transfer must take place simultaneously to ensure that newly valued features are deleted upon Transfer to the C-I (Conceptual-intensional) interface but survive to the SM (Sensorymotor) interface. This is accomplished if unvalued features are inherited into the domain of the phase head. The phase domain is spelled out immediately following feature valuation, ensuring that feature deletion takes place immediately following valuation.¹⁰

I also propose that uninterpretable features come in two types, those which seek a value and those which do not (see also Pesetsky & Torrego 2007; Bošković 2011 for other proposals distinguishing between unvalued and uninterpretable features). Uninterpretable features which do not require valuation are those which drive movement to the edge of a phase, such as [uFoc], [uWH], probes responsible for deriving V2 word order in Germanic languages, etc. Because these features do not seek a value and consequently do not have a phonetic reflex, they do not need to be transferred at the time they are checked. The uninterpretable feature need only be deleted, but the constituent originally bearing this feature need not be spelled out immediately and can reside in the edge of a phase until the completion of the next pase. Inherent in my proposal is the standard assumption since Chomsky (1993) that all uninterpretable features must be deleted for convergence. 11

¹¹ This proposal may appear to be in disagreement with Preminger (2014), who argues that the failure to value unvalued features does not cause the derivation to crash in all cases. On the other hand, my proposal does not necessarily conflict with Preminger's analysis, since he assumes Agree to be an "obligatory opera-

 $^{^{10}}$ An anonymous reviewer suggests that languages with complementizer agreement may be counterexamples to the claim that newly valued ϕ -features must be spelled out in the domain of a phase head, since these features appear on a complementizer. In-depth consideration of this question is beyond the scope of this paper, but complementizer agreement could also be accounted for on my analysis if the ϕ -features in question were in fact inherited by a head that is spelled out within the domain of the CP phase. For example, West Germanic complementizer agreement could be accounted for if the $[\phi:]$ realized on T and the one realized on C both probed simultaneously and were then spelled out as soon as they were valued. As shown by Fuß (2008) and van Koppen (2012), at least some West Germanic dialects do not allow anything to intervene between the agreeing complementizer and the subject. One possible explanation for this fact is that both ϕ -probes need to find values and be spelled out before any other operations target the CP layer.

Consequently, all uninterpretable features serve as probes and begin seeking goals as soon as they enter the derivation.

- (24) Feature type and inheritance
 - a. Uninterpretable features probe as soon as they enter the derivation.
 - b. Unvalued features must be spelled out in the phase where they are valued.

Returning to C-T Inheritance, the preceding proposals ensure the following ordering among features entering the derivation on a given phase head. Unvalued features like [ϕ :] must be valued first and be spelled out in the domain of C, i.e. TP. Other uninterpretable features which do not need to be valued can simply be checked and deleted and consequently do not need to be spelled out as soon as they are checked. But since these features are uninterpretable, they will act as probes and consequently be checked before any interpretable features establish relationships in the edge of the phase. This ensures the following order among constituents in the left edge of a clause.

$$(25) \quad [F] \quad > \quad [uF] \quad > \quad [uF: \]$$

$$\quad TOP \quad FOC \quad SUBJ$$

In OJ KM constructions, however, a bare nominative subject precedes a focused constituent.

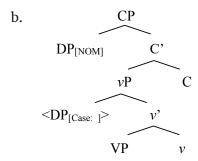
- (26) a. 保等登藝須 奈尔加 伎奈可奴 (MYS 4053)
 Pototogisu nani = ka ki-naka-nu?
 cuckoo.NOM what = KA come-cry-NEG.RT
 'Why does the cuckoo not come and sing?'
 - b. 志藝誰 田尓加 須牟 (MYS 4141)
 ... sigi ta-ga ta=ni=ka sum-u?
 snipe who-GEN field=DAT=KA live-RT
 'In whose field lives the snipe who ...?'

To account for the high position of the subject, I adopt a recent proposal by Saito (2016) that C/T in Japanese lacks $[\phi:]$, and nominative case is valued simply as a result of the subject DP being located in a position where it can value its case feature. In Saito's analysis, this position is [Spec, TP]. However, according to (24), this position must be [Spec, CP], because movement of the subject is not driven by a probe on C/T and C-T Inheritance is not forced. Consequently, the subject moves directly to [Spec, CP] in order to value its case feature. Once the DP is located in [Spec, CP], the unvalued case feature on the DP functions as a probe in order to receive a value from C.

(27) a. 我期大王 國所知良之 (MYS 933) [Wa-ga opo-kimi] kuni sirasu ras-i. 1SG-GEN great-lord.NOM country rule seem-ss 'My great lord seems to rule the country.'

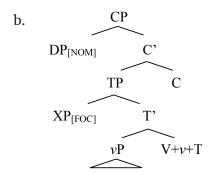
tion" (Preminger 2014: 9–11). Whether or not the operation results in successful valuation, it still needs to take place. In my analysis, the obligatoriness of Agree will still ensure that the unvalued probe is inherited by a head in the phase domain and spelled out before the other types of features.

¹² This analysis is in turn based on Bošković's (2007) proposal that DP movement to [Spec, TP] is not driven by a probe at the landing site but rather in order for the DP to value its case feature, because not valuing this feature by the end of the phase will result in the derivation crashing.



In the remainder of this section, I show how my proposal accounts for the distribution of constituents in the left periphery of an OJ clause. To account for the relative positions of the nominative subject and a focused constituent in a KM construction, I propose that focus movement is motivated by an unvalued feature [Foc:] at the landing site. According to (24), this feature must be inherited by a head in the domain of the phase head C. I assume that this probe is unvalued because of the concord relation between the focus particle and the verbal inflection discussed in section 2. I propose that the verb moves to T and undergoes agreement with T's specifier. The verb must carry IZ inflection when the particle is *koso*, while RT registers agreement with the other focus particles.

(28) a. 保等登藝須 奈尔加 伎奈可奴 (MYS 4053)
Pototogisu nani = ka ki-naka-nu?
cuckoo.NOM what = KA come-cry-NEG.RT
'Why does the cuckoo not come and sing?'



As in (27), the subject moves to [Spec, CP], because its movement is not driven by an unvalued probe at the landing site, so it can move to the edge of the CP phase rather than a position in the domain. Let me note at this point, however, that movement to [Spec, CP] above the focus position does not entail that the subject in OJ KM constructions should be analyzed as a topic, as has been assumed by Kuroda (2007) and Yanagida and Whitman (2009). There is a growing body of literature taking the C-T Inheritance model to its logical conclusion that if subject licensing features enter the derivation on C, then it is possible that under certain circumstances they may remain there, with the consequence that [Spec, CP] can be the licensing position for the subject (Ouali 2006; Gallego 2014; Legate 2014; Martinović 2015; van Urk 2015; Erlewine 2016; and Aldridge 2017). Note further that the subjects in (26) do not have the discourse properties of topics. They are neither given in the pevious context; nor are they contrastive.

I proposed above that subject movement is not motivated by an uninterpretable probe on C/T. Evidence for this comes from the alternation between nominative and genitive case for subjects in KM constructions. As discussed in section 2, RT and IZ^{13} inflections on the verb make genitive case available in the νP for subjects in KM constructions. Consequently, the subject can be assigned genitive case, obviating the need to raise to [Spec, CP] and value nominative case. This provides support for my analysis that case is not valued as a consequence of an Agree relation with a probe on C/T like [ϕ :], because the derivation would crash if such an unvalued feature failed to be valued.¹⁴

(29) 何処従鹿 妹之入来而 夢所見鶴 (MYS 3117)
Iduku=yu=ka imwo=ga iri-ki-te ime=ni mi-ye-tu-ru?
where=through=KA dear=GEN enter-come-CONJ dream=DAT see-PASS-PRV-RT
'From where did my dearest come and appear in my dream?'

Additional evidence for the existence of a case position in the left periphery comes from the fronting of other constituents, particularly bare (non-overtly case marked) objects. First note that adjuncts are free to precede the nominative subject, as shown in (30a, b). These also precede the focused constituent, as shown in (30b, c). I assume that these are base merged in the left periphery, adjoined to CP.

- (30) a. 情無 此渚埼未介 多津鳴倍思哉 (MYS 71)
 [Kokoro na-ku] [kono susakimi=ni] **tadu** naku-bes-i ya?
 feeling lack-ADV this sandbar=LOC crane cry-MOD-SS Q
 'Should a crane be crying without feeling on the sandbar?'
 - b. 我屋<戸>前乃 花橘尔 霍公鳥 今社鳴米 (MYS 1481)
 Wa-ga yadwo=no pana tatipana=ni pototogisu ima=koso
 1sG-GEN house=GEN flower orange=LOC cuckoo.NOM now=KOSO
 ki-naka-me.
 come-cry-MOD.IZ
 'The cuckoo will now come to sing at the flowering orange blossoms of my
 - c. 秋野尔波 伊麻己曽 由可米 (MYS 4317) Aki nwo=ni=pa ima=koso yuka-me. fall field=DAT=TOP now=KOSO go-MOD.IZ 'Now I will go to the autumn field.'

A dislocated object can also precede the subject, but it must be overtly case-marked in the presence of a nominative subject, showing that the object has already valued its case feature. I also assume that these are adjoined in the left periphery above the subject.

- (31) a. 許乃久礼能 之氣伎乎乃倍乎 保等登藝須 奈伎弖 故由奈利 (MYS 4305)
 [Ko=no kure=no sige-ki wo=no pe]=wo pototogisu
 tree=GEN darkness=GEN dense-RT ridge=GEN over=ACC cuckoo.NOM
 naki-te kwoyu-nar-i.
 cry-CONJ cross-be-SS
 'The cuckoo seems to cry as it passes over the ridge draped in the darkness
 of the trees.'

¹³ As noted in section 2, irrealis inflection is also built on an adnominal base, so I assume that it is the adnominal morphology which is responsible for genitive case assignment.

¹⁴ I thank an anonymous reviewer for suggesting this argument.

Incidentally, dislocated objects with overt case marking can also precede a focused constituent.

(32) a. 五月之 花橘乎 為君 珠尔社 貫 (MYS 1502)
Satukwi=no pana tatibana=wo kimi=ga tame tama=ni=koso
May=GEN flower orange=ACC lord=GEN for bead=DAT=KOSO
nuk-e.
thread-IZ
'It is through beads that I thread the orange blossoms of May for you.'

b. 吾待君乎 誰 留流 (MYS 2617)
Wa-ga mat-u kimi=wo tare=ka todomu-ru?
1SG-GEN wait-RT lover=ACC who=KA stop-RT
'Who is it who detains the lover I await?'

What is interesting for the purposes of the argumentation here is the existence of fronted bare objects. This is possible only in the absence of a bare nominative subject. If the subject receives inherent case, then a bare object is free to move to clause-initial position. The subject in (33a) is overt and clearly has genitive case. The subject in (33b) is *pro*, but I assume that the null subject occupies its base position and receives inherent case.

- (33) a. 梅柳 誰与共可 吾縵可牟 (MYS 4238)
 Ume yanagi tare=to tomo=ni=ka wa-ga kaduraka-mu?
 plum willow who=with together=DAT=KA 1sG-GEN adorn.hair-MOD.RT
 'With whom shall I put plums and willows in my hair?'
 - b. ... 心何所可将寄 (MYS 480) ... kokoro iduku=ka yos-e-mu? heart where=KA send-MZ-MOD.RT 'where shall I send my heart?'

As proposed in section 2.1, fronted objects must value structural case, which is typically accusative *wo*. But the fronted objects in (33) are not marked with accusative case. I propose instead that they move to [Spec, CP] and value nominative case. This is possible because the subject is licensed in its base position with genitive case, so [Spec, CP] is available to the object. The fact that a bare DP can surface in the left periphery of the clause only when it needs to value structural case, and nominative case is available for it, is another reason not to analyze bare nominative DPs as topics.

This section has introduced and developed my proposal for when C-T Inheritance takes place and shown how it derives the relative ordering of subject and focus in OJ KM constructions. Specifically, this analysis accounts for the fact that the focused constituent in a KM construction follows the nominative subject, because focus movement is driven by an uninterpretable (and unvalued) feature, which must be inherited by T. In contrast, movement of the subject for nominative case licensing is not driven by a probe at the landing site, so the subject moves to the higher [Spec, CP] position. In the next section, I offer additional arguments for this analysis by examining the broader distribution of subject positions in OJ.

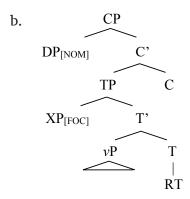
4 Other subject positions in OJ

In the previous section, I proposed that focused constituents in KM constructions are attracted to [Spec, TP] by an unvalued focus feature, while subjects undergo agnostic movement to [Spec, CP] to value nominative case. The proposal is based in part on Saito's (2016) analysis of case in modern Japanese, specifically his adoption of Bošković (2007) analysis of subject movement motivated by the need of the DP to value its case feature

rather than being attracted by a probe on T. In this section, I provide additional support for this proposal by showing that subjects can appear in positions other than [Spec, CP] only when other mechanisms are available to license them. The distribution of subjects in relative clauses additionally provides evidence that the nominative subject position is [Spec, CP].

To recap the discussion in the preceding section, I showed how my analysis accounts for the fact that a bare nominative subject in OJ always precedes a focused constituent in a KM construction. The focused constituent moves to [Spec, TP] to value the focus feature there, while the subject moves over it to [Spec, CP] to value nominative case.

(34) a. 保等登藝須 奈尔加 伎奈可奴 (MYS 4053)
Pototogisu nani = ka ki-naka-nu?
cuckoo.NOM what = KA come-cry-NEG.RT
'Why does the cuckoo not come and sing?'



However, there are also examples in which a subject follows a focused constituent in a KM construction. As discussed above, this is the case when the subject has genitive case. (35) repeats (33a) from section 3. Assuming with Yanagida (2006), Yanagida and Whitman (2009), and Yanagida (2012) that these subjects receive inherent genitive case in their base positions in [Spec, ν P], there is no need for them to move to [Spec, CP].

(35) 梅柳 誰与共可 吾縵可牟 (MYS 4238)
Ume yanagi tare=to tomo=ni=ka wa-ga kaduraka-mu?
plum willow.NOM who=with together=DAT=KA 1sG-GEN adorn.hair-MOD.RT
'With whom shall I put plums and willows in my hair?'

Another interesting example is the case of a topicalized nominative subject following a focused constituent. These subjects are marked with the topic marker pa, the historical antecedent of modern Japanese wa.

- a. 三嶋江之 入江之薦乎 苅尔社 吾乎婆公者 念有来 (MYS 2766)
 Misimae=no irie=no komo=wo kar-i=ni=koso
 Misima=GEN estuary=GEN straw=ACC cut-CONJ=DAT=KOSO
 ware=wo=ba kimi=pa omopi-tari-kyer-e.
 1SG=ACC=TOP you=TOP think-PRV-PAST-IZ
 'It was when you went to the Misima estuary to cut straw that you were you thinking of me.'
 - b. 時自久曽 人者飲云 (MYS 3260)
 Toki-ji-ku=**so** pito=**pa** nomu to ip-u.
 time-NEG-ADV=SO person=TOP drink C say-RT
 '(They) say that people drink at the wrong times.'

I assume that these subjects also value genitive case with ν , but the genitive marking is not pronounced when the DP is marked as a topic. Note that the same alternation between ga and topic marking is observed in modern Japanese. The case marker ga is dropped when the subject is followed by the topic marker wa.

- (37) a. Hanako = **ga** kuruma = o kat-ta. Hanako = NOM car = ACC buy-PAST 'Hanako bought a car.'
 - b. Hanako = wa kuruma = o kat-ta. Hanako = TOP car = ACC buy-PAST 'As for Hanako, she bought a car.'

Another such case is when the subject is focused in a KM construction. (38) shows a focused subject in clause-initial position. My analysis predicts that the focused subject should move to [Spec, TP] and not [Spec, CP], because agreement needs to take place between the focus particle and T in order for the correct verbal inflection to be spelled out.

(38) 福何有人香 黑髪之 白成左右 妻之音乎聞 (MYS 1411)
[Sakipapi=no ika nar-u] pito]=ka kurwo kami=no sirwo-ku nar-u fortune=GEN how be-RT person=KA black hair=GEN white-ADV be-RT made imwo=no kowe=wo kik-u?
until wife=GEN voice=ACC hear-RT
'A man who is how fortunate will hear his wife's voice until his black hair has turned white?'

Evidence that a focused subject occupies [Spec, TP] rather than [Spec, CP] comes from the fact that a bare object can precede it. Since the object must value case, it has to move to [Spec, CP], so we can conclude that the focused subject occupies the lower [Spec, TP] focus position.

- (39) a. 烏梅能波奈 多礼可有可倍志 (MYS 840)
 [Ume=no pana] tare=ka ukabe-si?
 plum=GEN flower.NOM who=KA float-PAST.RT
 'Who floated the plum blossom?'
 - b. ... 秋去衣 孰取見 (MYS 2034)
 ... akisari koromo tare=ka tori-mi-mu?
 autumn kimono.NOM who=KA take-see-MOD.RT
 'who will pick up and look at the autumn kimono that ...?'

The question then arises as to how the case feature on the subject is valued. I propose that these subjects also value nominative case. This is because in the C-T Inheritance model, T can be viewed as an extension of C, so I assume that T also has the ability to license nominative case.

Thus far, I have discussed subjects which are licensed by genitive case in [Spec, ν P] or by nominative case in [Spec, CP] or [Spec, TP]. Internal argument subjects in unaccusative constructions can also surface in the verb's complement position, where they are not overtly marked. (40) is an existential construction. The subject follows a focused constituent, so it clearly has not moved to [Spec, CP]. If we assume that partitive case is available to all internal arguments which remain in VP, then such examples are easily accounted for. Note that Kuroda (2007) also assumes that internal argument subjects can be licensed in the same way as transitive objects that are not accusatively marked with wo.

(40) 木道尔社 妹山在云 (MYS 1098)
Ki-di=ni=**koso** imwo yama ari to ip-u.
Ki-road=DAT=KOSO Imwo Mt. be C say-RT
'They say that there is a "Mt. Imwo" on the road to Ki.'

The distribution of subjects inside relative clauses provides further evidence for my proposal that the nominative subject typically values case in [Spec, CP]. The subject itself can be extracted, as in (41).

(41) 後心乎知人 (MYS 222)
noti=no kokoro=wo sir-u pito
after=GEN heart=ACC know-RT person
'a person who knows how he will feel afterward'

But a bare nominative subject cannot surface inside a relative clause. An external argument subject in a relative clause must have genitive case, as in (42a). Internal argument subjects are also often found with genitive case, as in (42b). Note that this genitive is *no* and not *ga*. Yanagida and Whitman (2009) show that *ga*-marked subjects are always external arguments. Internal argument subjects must be bare or take *no* genitive case. I assume that *no* is freely assigned within the nominalized ν P, while *ga* is assigned to external arguments in [Spec, ν P]. (42c) shows a bare internal argument subject.

- (42) a. 隱口乃 泊瀬越女我 手二纒在 玉 (MYS 424)
 komoriku=no patuse wotomye-ga te=ni mak-ye-ru tama
 secluded=GEN Patuse girl-GEN hand=DAT wind-PAST-RT bead
 'the beads that the maiden of the secluded Patuse wound around her wrist'
 - b. 白雲乃 棚引山 (MYS 287) sira kumwo=no tanabik-u yama white cloud=GEN hang-RT mountain 'the mountain that white clouds hang over'
 - c. 奥波 来依荒礒乎 (MYS 222)
 oki-tu nami kiyor-u ar-iso=wo
 offing-GEN wave approach-RT desolate-shore=ACC
 'the desolate shore washed by the sea's waves'

The analysis I have developed in this paper accounts straightforwardly for the preceding pattern. A nominative subject can act as the head of a relative clause by moving to [Spec, CP], where it is both licensed with nominative case and also identified as the head of the relative clause, as in (41). Genitive case is available for a subject from the adnominal ν in the relative clause, as in (42a, b). But a subject cannot occupy [Spec, CP] when another constituent needs to access this position in order to be interpreted as the head, thereby accounting for the fact that a bare nominative subject is not permitted in a relative clause unless it is the head of the construction. Turning to internal argument subjects like the one in (42c), these can receive partitive case in their base positions in VP.

Note that it is also not possible for an adjunct or scrambled object to occupy a position above the nominative subject and be interpreted as the head of the relative clause. ¹⁵ This is because the head of the relative clause needs to be bare. For example, Kayne (1994) proposes that this category is a bare NP, while Bianchi (2000), Bhatt (2002), and others take it to be a nonreferential DP. And a bare nominal in clause-initial position in OJ must occupy [Spec, CP] in order to be case licensed, as discussed in section 3.

 $^{^{\}rm 15}$ I thank an anonymous reviewer for posing this question.

Given this analysis, the following example may seem like a counterexample, since it contains an external argument subject not marked with genitive case. The subject in the relative clause is marked with the particle *mo* 'also'.

the thing that the seven sages of antiquity also wanted'

(MYS 340)

[[inisipye=no nana=no sakasi-ki pito-domo]=**mo** hori-se-si] mono past=GEN 7=GEN wise-RT person-PL=also want-do-PAST.RT thing 'the thing that the seven sages of antiquity also wanted'

However, this subject can also be licensed in [Spec, ν P] with genitive case. As in the case of the topic-marked subjects in (36) and (37), the case marker ga is also dropped when a nominal is marked by mo, as shown by the modern Japanese examples below.

- (44) a. Hanako = **ga** kuruma = o kat-ta. Hanako = NOM car = ACC buy-PAST 'Hanako bought a car.'
 - b. Hanako = **mo** kuruma = o kat-ta. Hanako = also car = ACC buy-PAST 'Hanako also bought a car.'

Finally, it bears mentioning that a nominative subject is predicted on my analysis to be able to surface in a gapless relative clause.¹⁶ This is because the head nominal is not construed with a constituent inside the clause, so [Spec, CP] continues to be available to a nominative subject. This prediction is borne out, as shown by the following example.

(45) 海未通女 塩焼炎 (MYS 366) **ama wotomye** sipo yak-u keburi fisher maiden salt burn-RT smoke 'the smoke of the fisherwomen burning salt'

In this section, I have provided additional evidence for my proposal that subjects in OJ typically move to [Spec, CP] in order to value nominative case. This was primarily demonstrated by the fact that nominative subjects are not permitted in relative clauses when a subject would compete with the gap construed with the head nominal of the relative clause. Indirect support was also offered by showing that subjects can appear in positions other than [Spec, CP] only when they can be licensed though other means, for example by genitive case in [Spec, ν P] or partitive case from the lexical verb.

5 Conclusion

In this paper, I have proposed an analysis of movement to the left periphery in Old Japanese within the framework of C-T Inheritance. Focused constituents in *kakari-musubi* constructions move to [Spec, TP] in order to value the focus feature on T. In contrast to this, subjects move to [Spec, CP] to value nominative case. I proposed that this surprising reversal of the relative positions of subject and focus is the result of the nature of the features involved in these respective operations. TP is the locus of focus feature checking, because focus is an unvalued feature and consequently must be inherited from C to a lower head. In contrast to this, movement of subjects is not driven by a probe on C, because this language lacks subject/verb agreement. Rather, the subject undergoes move-

¹⁶ See Matsumoto (1989), Murasugi (1991), Grosu and Hoshi (2016), and others for analyses of how the construal between the modifying clause and the head nominal is obtained in the absence of a gap inside the clause. What is important for my purposes is simply the fact that the clause does not contain a gap.

ment agnostically in order to value its own case. Since there is no probe on C driving this movement, inheritance does not take place, and the subject moves to [Spec, CP].

Abbreviations

1 = first person, 3 = third person, ACC = accusative, ADV = adverbial, C = complementizer, CL = classifier, COND = conditional, CONJ = conjunction, DAT = dative, FOC = focus, GEN = genitive, HON = honorific, IZ = izen 'realis' inflection, KM = kakari-musubi, LOC = locative, MOD = modal, MZ = mizen 'irrealis' inflection, MYS = musubi, NEG = musubi negation, NOM = musubi nominative, OBJ = object, OJ = Old Japanese, PART = musubi particle, PASS = musubi 'adnominal' inflection, SG = musubi 'conclusive' inflection, SUBJ = musubi 'conclusive' inflection, SUBJ = musubi 'conclusive' inflection, SUBJ = musubi 'conclusive' inflection,

Competing Interests

The author has no competing interests to declare.

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