Diachrony or Synchrony? Accounting for the Old Japanese Particle -tu

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Abstract

This paper investigates the Old Japanese (OJ) postposition *-tu*, a problematic morpheme with both genitive-like and numeral usages, and proposes a diachronic account of its distribution that eschews the traditional 'locative-genitive' analysis in favor of reconstructing pre-OJ *tu as a dual 'allative / instrumental' postposition. I show that both genitive and attributive uses of OJ *-tu* can be seen as developments out of a pre-OJ allative or directional sense, and show that reconstructing a pre-OJ allative can account for why OJ *-tu* is mostly found in locative expressions. I also propose that the use of OJ *-tu* in counting could reflect an original instrumental sense developing via a distributive, functions notably lacking among pre-OJ postpositions. Not only does this resolve syntactic problems in synchronic genitive analyses attempting to unify these two usages, it also explains why both bare numeral expressions and numerals suffixed with *-tu* are attested in Old Japanese. Reconstructing pre-OJ *tu as a dual 'allative / instrumental' reveals a striking match with the Middle Korean allative / instrumental particle *-lwo*, from which I reconstruct proto-Korean-Japanese *two via well-attested sound correspondences between Japanese and Korean. Unlike many of the synchronic analyses proposed thus far, this diachronic look at OJ *-tu* offers a unified analysis of its attestations that accounts for its locative distribution and even reveals a cognate with Korean. At a time when synchronic approaches predominate in our fields, this analysis helps highlight the value of diachronic approaches towards understanding distributions.

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1 Introduction

This study investigates the Old Japanese (~700 C.E.) particle (postposition) *-tu*, a morpheme traditionally labeled "genitive" or "locative genitive" by scholars of Japanese. This particle has perplexed historians of the Japanese language. Previous studies such as Martin (1987; 1990) and Hirata (2001) have sought to understand its unique distribution as extensions of a genitive. However, proposals for understanding the distribution of *-tu* synchronically fail to capture important facts. In this paper, I propose a purely diachronic account as opposed to the traditional, synchronic genitive analysis, instead reconstructing pre-OJ *tu as an 'allative / instrumental' postposition that can fully explain its usages and distribution in Old Japanese. This diachronic analysis also reveals a hitherto unrecognized match with the Middle Korean particle *-lwo* 'allative / instrumental', which I propose is a cognate morpheme.

Section 2 discusses the usages and distribution of Old Japanese *-tu*, and addresses some previous attempts to account for it as a synchronic "genitive". In Section 3, I introduce my proposal that pre-OJ *tu was an allative / instrumental particle, and trace the semantic developments leading to the distribution of *-tu* attested in Old Japanese. In Section 4, I offer counter-arguments against the popular theory that Old Japanese *-tu* is cognate with the Middle Korean genitive particle *-s*. In Section 5, I then show how Old Japanese *-tu* constitutes a phonological and semantic match with the Middle Korean particle *-lwo* 'allative / instrumental'. Finally, in Section 6, I summarize the findings of this paper, and conclude with possible avenues for future research.

2 Old Japanese *-tu*

OJ *-tu* is found predominantly in clauses involving places or locative expressions; Frellesvig (2010) refers to OJ *-tu* as a "locative genitive," though it may be better termed an "associative". This postposition is attested in OJ with a genitive-like sense (Hirata 2001):

1)	*topo*	*-tu*	*kuni*	'far-off land' (*Manyoshu*)
	far	GEN?	land	
2)	*kuni*	*-tu*	*kamwi*	'god of the land' (*Manyoshu*)
	land	GEN?	god	
3)	*kami*	*-tu*	*kenwo*	'Upper Keno' (*Manyoshu*)
	upper	GEN?	Keno	

However, Hirata (2001) points out that it is also attested in a more complex attributive sense beyond a simple genitive:

4)	*siko*	*-tu*	*wokina*	'a stupid old man' (*Manyoshu*)
	stupid	GEN?	old man	

A particle *-tu* in Old Japanese (generally thought to be the same morpheme) is found suffixed onto numerals post-nominally in counting (in much the same way as a numeral quantifier in Modern Japanese):

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5)	*asi*	*pito*	*-tu*		'one leg' (*Nihon Shoki*)
	leg	one	QUANT?		
6)	*u-wo*		*ya-tu*	*kaduk-e*	'dunking 8 cormorants' (*Manyoshu*)
	cormorant-OBJ		eight-QUANT?	dunk-INF	

However, bare numerals without a suffixed *-tu* are also attested in Old Japanese to express quantities of nouns, which means that whatever function *-tu* carried, its use was not obligatory:

7)	*puta*	*tose*			'two years' (*Manyoshu*)
	two	year			
8)	*pito*	*pi*	*pito*	*yo*	'one day and one night' (*Manyoshu*)
	one	day	one	night	
9)	*mi*	*pe*			'Mie (three layers; place name)'
	three	layer			

Hirata (2001) rightly notes problems in calling OJ *-tu* a "locative-genitive," given its use in complex attribution and in counting. Moreover, the productive locative/allative of OJ is *-ni*; *-tu* is never observed as a true locative. However, *-tu* is not observed as a straightforward possessive either in Old Japanese, which is also troubling, since we expect genitives to express such constructions. This makes an analysis of OJ *-tu* as 'genitive' similarly problematic.

2.1 Previous Accounts

The problem of analyzing OJ *-tu* can be summed up by saying that its distribution in Old Japanese seems synchronically opaque. Ono et al. (1974) claim that numeral *-tu* is a numeral classifier, presumably from OJ *-tu* 'genitive,' but this is a synchronic description, not an explanatory account of how it came to be, nor does it tell us anything about the relationship of numeral *-tu* to genitive *-tu*. Martin (1987:367) claims that OJ *-tu* in numeral expressions is a specialized use of GEN *-tu*, but once again, this does little more than restate what synchronically could be case (if numeral *-tu* is indeed related to genitive *-tu*), and has little explanatory power to account for how and why OJ *-tu* is attested in such a usage. Martin (1990) later claims that *-tu* in numerals is a kind of nominalization identical to GEN *-tu*, but does not explain how the nominalization relates to counting. Arguably one of the most thorough attempts to explain the uses and distribution of OJ *-tu* is Hirata (2001), who claims that OJ *-tu* derives from a genitive with possessive meaning. Hirata (2001:70) defends this by arguing that "Possessive is one of the most basic and productive functions of the genitive, and it is likely to precede complex uses". Hirata further argues that numerical *-tu* is a bound pronominal (Bd-Pro) derived from this genitive *-tu*. Although his proposals do provide a framework for understanding how attestations of *-tu* might be understood in the context of Old Japanese, Hirata's account is problematic for three important reasons. First, as mentioned earlier, OJ *-tu* is not found in expressions indicating straightforward possession. Second, Hirata himself notes that attributive usages of OJ *-tu* would be unexpected, and yet are nevertheless attested in Old Japanese. Finally, Hirata must assume that the appearance of OJ *-tu* as a genitive in mostly spatial relationships is "simply because we do not observe its possessive use, which makes its locative use salient as a result". In other words, he provides no explanation for *-tu* as a "locative-genitive" other than mere textual happenstance, despite this being the observation that arguably most demands an explanation. More broadly, Hirata's (2001) account provides a framework for understanding the distribution of *-tu* within the synchronic context of its usage in Old Japanese as a genitive-like particle, but he rejects the possibility that a synchronic description of *-tu* in Old Japanese (as "genitive-like") may not lead us to the right diachronic account of where usages of OJ *-tu* actually come from[1]. This paper seeks to show that we can better explain the distribution of OJ *-tu* as the result of diachronic shift, as opposed to deriving its usages synchronically from a genitive.

[1]Hirata (2001) considers some competing theories that OJ *-tu* is a reflex of the same morpheme giving rise to the deictic marker *so* 'that,' but ultimately concludes that *-tu* must be a genitive.

A final word on some previous accounts of *-tu*. Both Martin (1987; 1990) and Hirata (2001) assume that OJ *-tu* must be a cognate morpheme with the Middle Korean particle *-s*, which is in fact a true genitive (this morpheme is also known as *sai sios* or 'the connecting *s*'). This assumption figures prominently in their reconstructions of Old Japanese *-tu* as a true genitive, and has predisposed some of the literature on *-tu* towards a genitive account. However, I will show in Section 4 that there are reasons for thinking that this is incorrect, and I believe that abandoning this weak comparison may help to clear up some of the confusion surrounding OJ *-tu*.

3 Proposal: pre-OJ *tu 'allative / instrumental'

In this section, I propose that the distribution of OJ *-tu* can be best explained by reconstructing pre-OJ *tu as a dual allative / instrumental postposition, which is cognate with the Middle Korean allative / instrumental postposition *-lwo*. First, I show how genitive-like and attributive uses of OJ *-tu* developed out of a pre-OJ allative particle, and give cross-linguistic evidence for such developments. Second, I show how uses of OJ *-tu* with numerals to express counting could have developed out of a pre-OJ instrumental sense via its use as a numeral distributive, citing similar developments in English and Russian. I then discuss the advantages of my proposal, and show how this diachronic reconstruction can resolve many of the problems associated with traditional analyses of OJ *-tu*.

3.1 Allative > Associative-Genitive

Instead of seeking to unify the usages of OJ *-tu* under a single synchronic analysis for Old Japanese, I propose that its distribution can be best understood as the result of diachronic shift, with genitive-like or associative meanings of *-tu* originating from a pre-OJ allative particle. Across languages, we see a relationship between semantic association and directionality. In French, the allative preposition *à* is used to indicate a possessive sense via association:

10) *le livre* *est* *à moi*
the book is to me
'the book is to me' = 'the book is mine'; (allative) = (possessive by association)

Note also the use of the dative case in Latin to indicate possession and association:

11) *mihi* *nomen*
me-DAT name
'the name to me' = 'my name'; (dative) = (possessive by association)

Similarly, we see that in Russian, spatial association through the use of the preposition *u* 'at' is used to denote personal possession through common spatial association:

12) *u menya* *est'* *kniga*
at me-GEN[2] is book-NOM
'there is a book at/by me' = 'I have a book'; (locative) = (possessive by association)

These possessive, genitive-like expressions developed from directional expressions through association, and this development occurs in many languages across the world. We can generalize a pathway from direction to a associative or possessive meaning in the following way:

13) N1 to (direction) N2 > N1 (associated) to N2 > N1 associated with N2 > N1 of N2

[2]The use of genitive case here is governed by the preposition and unrelated to possession.

Although both Russian *u menya kniga* and Latin *mihi nomen* express a genitive-like meaning, this meaning is derived from the figurative use of a spatial relationship to associate two nouns. This gives us a strong basis for arguing that if OJ *-tu* was a pre-Old Japanese allative particle, it could have developed into a genitive-like particle that appears to express possession:

2′) *kuni-tu kamwi* pre-OJ *‘god to the land’ >
‘god (associated) to/with the land’ > ‘god associated with the land’ > OJ ‘god of the land’

This accounts for genitive-like usages of *-tu* in Old Japanese by showing how the synchronic appearance of modification need not entail that *-tu* be derived from a true genitive. Only this account explains why OJ *-tu* is a “locative-genitive” (as will be explained in Section 3.5).

3.2 Allative > Attributive

Hirata (2001) claims that the existence of complex attributive interpretations marked with *-tu*, such as OJ *siko-tu wokina* ‘stupid old man,’ are problematic. Here, I show that attributive meanings are entirely expected in such developments. Some utterances initially expressing a direction cross-linguistically develop into a more general attributive meaning. For example, a limited set of attributive expressions in French take the directional/locative preposition *à* ‘to’:

14) *la fille* *aux cheveux de lin*
the girl to the hairs of flaxen

In this example, we can see that *cheveux de lin* ‘flaxen hairs’ is treated not merely as an associated physical object, but as a property modifying *la fille* ‘the girl’, because it is obligatorily preceded by the definite article *les* ‘the’ (*aux* is a fusion of *à* ‘to’ + *les* ‘plural definite article’). ‘Flaxen hairs’ is abstracted as a property, which is then associated with ‘the girl’ by the use of *à* ‘to’[3]. *Cheveux de lin* ‘flaxen hair’ has come to modify *la fille* ‘the girl’ in complex attribution, but this meaning has developed from the use of an allative preposition, and not from a genitive or an attributive. I propose that instances of *-tu* expressing complex attribution also derive from a pre-OJ allative sense, with modification arising from figurative association:

4′) *siko-tu wokina* pre-OJ *‘an old man to stupidity (property)’ >
‘an old man (associated with/to) stupidity (property)’ >
‘an old man associated with stupidity (property)’ > OJ ‘a stupid old man’

Note that the difference between attributive and genitive interpretations of *-tu* lies in the nature of the relationship between the two nouns. The modificatory relationship arises from a figurative association; associating a noun with a quality will naturally give rise to an attributive sense. In this way, contrary to what Hirata (2001) argues, we expect both attributive and genitive meanings to arise from association. This gives us a strong basis for thinking that if pre-OJ *-tu is an allative, we would expect that it would additionally develop into complex attributive expressions.

3.3 Instrumental > Distributive > Counter

I propose that the use of OJ *-tu* in counting derives not from a genitive, but from a distinct instrumental sense (via a distributive) through the following hypothetical developments:

5′) *pito-tu* ‘one (of something)’
pre-OJ *‘by means of one’ > *‘(counting) by one(s)’ > OJ *pito-tu* ‘one (of something)'

[3]Tellingly, Japanese now uses the copular *-no* in such expressions: *ryokugan no onna* ‘the girl of/with green eyes’, *amairo no kami no otome* ‘the girl of/with the flaxen hair’.

I propose that OJ *-tu*, when suffixed on numerals, originally expressed a distributive meaning; to count *pito-tu* is to count 'by one/ones', *puta-tu* is to count 'by twos', etc. This proposal can explain the syntactic behavior of OJ *-tu*, namely that it occurs post-nominally and not pre-nominally as would be expected of a genitive, and accounts for why OJ *-tu* is only optionally suffixed onto numerals. Hirata (2001: 71-72) points out that numerals suffixed with OJ *-tu* "usually occur alone as pronominals" and "cannot … directly modify nouns as modifiers". If *-tu* was really a genitive particle, it should be able to directly precede a noun as a modifier[4]. Instead, we can safely account for syntactic discrepancies between numeral *-tu* and modification by positing that bare numeral expressions (such as *puta tose* 'two-years') expressed direct modification within the head noun phrase, while a numeral suffixed with *-tu* expressed a distributive sense contained in a separate NP. Bare numerals could directly modify a noun (just as Korean bare numerals can directly precede the noun they modify: *han salam* 'one-person' vs. *salam han-myeng* 'person-one-QUANT'), whereas the distributive sense highlighted the manner in which the noun was being counted. Cross-linguistic evidence for the use of an instrumental in counting (via a distributive) can be found in English, where 'by' can be used to indicate numerical distributive, as in 'counting by ones,' 'one by one,' and can also be found in Russian, where temporal distributives are expressed with the instrumental case.

This reconstruction is considerably more speculative, but is supported by several observations. Old Japanese notably lacks a dedicated instrumental particle; OJ *-nite*, which is used instrumentally, is clearly an innovation formed from the OJ copular infinitive *ni* + the gerund suffix *-te*, meaning 'being' or 'as'. A transparent innovation in Old Japanese suggests the possibility that an older instrumental *tu may have been replaced by a copular expression, with only the numeral *-tu* (now semantically distinct) surviving this suppletion. In addition, some scholars believe that the closest hypothesized genetic relatives of Japanese are Korean and/or Tungusic languages such as Manchu (Unger 2009). Both Korean and Manchu have instrumental particles; if either of these languages are related to Japanese, it is typologically reasonable to suppose that proto-Japanese may have had an instrumental particle as well[5]. Finally, there is the striking comparison of OJ *-tu* to Middle Korean *-lwo* 'allative / instrumental'. The aforementioned cross-linguistic evidence from English and Russian shows that instrumentals can express distributives and become used in counting; if the precursor to Old Japanese did possess an instrumental particle, then it is reasonable to think that its reflex may lie in a numeral usage. Since we can already reconstruct pre-OJ *tu as 'allative,' and since numeral *-tu* can be reasonably accounted for by proposing pre-OJ *tu 'instrumental,' the comparison with MK *-lwo* completes the picture and suggests that such a reconstruction could be correct.

3.4 Reconstructing Pre-Old Japanese *tu 'allative / instrumental'

Below, 15) describes the general pathway by which directionality developed into both associative-genitive and attributive meanings, and 16) shows how instrumentality developed into a quantifier usage:

15) Allative > Associative-Genitive

N1-tu N2 >	'N2 to N1'
N1-tu N2 >	'N2 (associated) to N1'
N1-tu N2 >	'N2 associated with N1'
N1-tu N2	'N2 of N1'

16) Instrumental > Numerical Distributive > Quantifier

[4]Hirata's (2001) proposal that OJ *-tu* functioned as a bound pronominal is worth considering, but still does not resolve the problem of why OJ *-tu* is not used possessively if it was ever a real genitive.

[5]The relationship of Japanese to either Korean or Manchu remains in dispute (see Vovin 2010 for a critique of Japanese-Korean), but Unger (2009) argues that such hypotheses are valid starting points for comparative inquiry, and Lee and Ramsey (2011) concur that Korean is likely related to Japanese. The approach of this paper is not to assume that Japanese and Korean are related, but to show how informed comparative hypotheses can shed light on opaque internal developments, which in turn support the theory.

N1 … #-tu >	‘N1 by (#)’
N1... #-tu >	‘counting N1 by (#)’
N1... #-tu	‘(#) of N1’

3.5 Discussion

I have now separately reconstructed pre-OJ *tu as both *'allative' (developing into genitive and attributive usages) and *'instrumental' (developing into a counting usage via *distributive). I therefore propose reconstructing a particle with a dual meaning: pre-OJ *tu 'allative / instrumental'. In addition to accounting for the relevant data, this proposal accounts for why OJ *-tu* is not attested as a basic possessive. It also explains three puzzling observations for OJ *-tu*.

First, this reconstruction can provide a truly explanatory account for why OJ *-tu* is used mostly in locative expressions. In order for an allative meaning to develop into modification via metonymy, there must be two objects involved that share a spatial relationship: an object that functions as the direction or goal, and an object that undergoes an implied motion towards that direction or goal. OJ *-tu* developed into a genitive-like construction only in clauses where two nouns had a spatial relationship where that spatial relationship resulted in common association. This is why OJ *-tu* is found mostly in phrases expressing a location, since locating objects is one of the most prototypical ways of expressing a spatial relationship.

Second, contrary to Hirata (2001), it is not a problem for this hypothesis that some isolated cases exist where OJ *-tu* seems to express not just a spatial association but more general attribution. We can account for complex attributive relations expressed by OJ *-tu* by noting how the French preposition *à* is used to ascribe properties embodied by one noun onto another noun through association. This example from French demonstrates how an allative/locative particle can assume an attributive meaning that appears more complex than a spatial association.

Third, this hypothesis can help to explain the idiosyncratic attestations of OJ *-tu*. I posit that during the development to Old Japanese, the particle *-ni* replaces *-tu* as a means of expressing directionality, and *-tu* ceases to be productively used as an allative particle. Allative *-ni* entirely supplants pre-OJ allative *-tu*, but does not replace *-tu* everywhere; we see only those *-tu* that had developed a genitive-like or attributive meaning, because all other productive *-tu* were replaced by *-ni*. This helps to explain why we are left with only a limited number of OJ *-tu* attestations, and why they all appear to be related to location but are used in genitive and attributive ways.

4 A Critique of Middle Korean GEN *-s* ~ Old Japanese *-tu*

As mentioned in Section 2, some scholars have assumed that *-tu* is cognate with the Middle Korean genitive particle *-s*, which in turn has led many to believe that OJ *-tu* should be reconstructed as a genitive as well. In this section, I seek to show that OJ *-tu* is a weak cognate match with MK -s, and that this theory should likely be discarded, which in turn allows us to reconstruct OJ *-tu* as a non-genitive postposition. Furthermore, I tentatively propose that MK genitive *-s* forms a better fit with the Old Japanese suffix *-si*, which is an attributive/conclusive marker for adjectives that originally suffixed onto nominal roots.

Late Middle Korean (c. 15th century, hereafter referred to as Middle Korean or MK) has a genitive particle that is written as *-s*. This particle is also sometimes written *-t* before *s* or *c* [ts]: *nwun-t cozo* = *nwun-s cozo* (Martin 1992: 787). Hirata (2001) follows Whitman (1985) in claiming us OJ *-tu* is related to this MK GEN *-s*; if this is so, OJ *-tu* must also be derived from a genitive particle. Hirata (2001) cites two Old Japanese transcriptions of peninsular toponyms in the *Nihonshoki* to show how OJ *-tu* is used similar to how MK GEN *-s* is used:

17) *oko-si tari* ‘upper Tari’	~ OJ *kami-tu kenwo* ‘Upper Keno’
18) *aru-si tari* ‘lower Tari’	~ OJ *shimo-tu kenwo* ‘Lower Keno’

If *-si* in *okosi, arusi* is a genitive suffix, this evidence suggests that MK GEN *-s* goes back to Old Korean *si, not *-t. This is problematic, since as Unger (1980) correctly notes, the correspondence

of MK *s* to OJ *t* in Martin (1966) is actually a correspondence going back to final *s, not medial *s; in other words, these toponyms attest to a final vowel for the Old Korean form of what shows up in Middle Korean as GEN -*s*, which undermines the case that MK GEN -*s* is cognate with OJ -*tu*. Of Martin's (1966) 8 proposed cognates supporting a correspondence of MK *s* ~ OJ *t*, 4 of them ('bundle', 'dew', 'husband', 'one') are dubious; 2 of them ('hatchet', 'mouth') are in fact also attested with a final -*t* in Middle Korean ('hatchet' *nat/nas* 낟/낫, 'mouth' *kwut/kwus* 굳/굿) that is almost certainly the original form; and one of them ('break') is not only controverted by Martin's other correspondences but is also rejected by Whitman (1985) and Unger (1980). Without more evidence for this correspondence, it is difficult to justify this comparison.

Finally, the fact that GEN -*s* appears to be represented as -*si* with final [i] in these toponyms suggests that the Old Korean form of Middle Korean GEN -*s* might be reconstructed as *si. This is further supported by Old Korean transcriptions of the genitive particle using the phonograms 師 or 叱,, the phonetic interpretations of which are debatable but which both could be reconstructed with the vowel *i (Ramsey and Lee 2011: 70). This becomes even more problematic for a comparison of MK GEN -*s* with Japanese -*tu*, which Hirata (2001) reconstructs as *to, since neither Whitman (1985) nor Martin (1966) provide correspondences where Korean *i* matches Japanese *o* or *u*. These are problems with the hypothesis that MK GEN -*s* is related to OJ -*tu*.

4.1 Phonetic Stop Epenthesis in Middle Korean

Martin (1992) notes that MK GEN -s had an allomorph -*t* before *s* or *c*, and Hirata offers this as evidence that GEN -*s* is cognate with OJ -*tu*. However, there may be a generalization here that has escaped Martin and Hirata. In every example that Martin (1992: 787) gives in support of an -s/-t alternation for GEN -s, the particle is not only followed by -c or -s, but also preceded by -n:

	Attested Form		Underlying Form
19)	*nwun t si ' Gwu 'l ol* 'edge of the eyelid'	=	*nwun s si ' Gwu 'l ol*
20)	*nwun t co 'zo* 'the pupil of the eye'	=	*nwun s co 'zo*

But there is evidence beyond GEN -*s* of a similar alternation (Ramsey and Lee 2011):

21)	*swon-cwo* 'by hand; personally'	=	*swon-zwo*

This begs an explanation, and examining other languages for similar trends helps reveal why this sound change occurs. We see a clear parallel in English, where /s/ has a surface allomorph [ts] when preceded by a stop:

22) ANSWER: /ænsɚ/ → [ænt̲sɚ]

What is actually happening is the epenthesis of a surface stop following a nasal and before a fricative; in English, [t] after [n]; inserting a voiceless, oral stop bridges the sharp articulatory contrast between the nasal stop and the voiceless fricative. The parallel here between this epenthesis in English and the alternation of [s] and [t] in Middle Korean is striking. Middle Korean -t appears for GEN -*s* only when it is preceded by the nasal [n] and followed by *s* or *c* [ts], both of which contain the fricative element [s]; this is identical to the environment in which English speakers epenthesize [t]. The alternation of MK *s* and *t* in GEN -*s* (and other words) is likely due to the same factors motivating stop epenthesis in English, namely for ease of articulation in complex clusters. This means that we have a phonetically motivated, cross-linguistic reason for thinking that this alternation in Middle Korean has nothing to do with an underlying or historical form *t for GEN -s, but instead reflects a phonetic pronunciation that was coded in Hangul at a time when

spellings were not yet standardized, and phonemic spellings that characterize modern Hangul was not yet the norm.

4.2 Proposal: MK GEN -s ~ OJ -si 'attributive'

I tentatively propose that MK GEN -*s* goes back to an Old Korean suffix *-si, attested here in the trasncriptions *oko-si* and *aru-si*, a suffix that is cognate not with OJ -*tu*, but with an Old Japanese adnominal/conclusive suffix -*si*. The OJ suffix -*si* is found in the Early Middle Japanese (Classical Japanese) adjectival paradigm as a conclusive form, e.g., *utuku-si* '(subj) is beautiful.' However, Frellesvig (2010: 83) notes that this same adjectival ending -*si* is sometimes attested in OJ as an adnominal (or attributive) form used to directly modify a noun: *yo-si nwo* 'Yoshino (the good field; place name)'. Note that this morpheme -*si* attaches directly to the root *yo-* 'good'; given that Old Japanese adjectives all appear to be based on nominal roots, we can reconstruct a nominal suffix of the shape -*si* that indicated nominal modification. This suffix -*si* on nouns is thus strongly reminiscent of a genitive, and forms a perfect phonological fit with MK genitive -*s* and possibly Old Korean *-si.

5 Proto-Korean-Japanese *two 'allative / instrumental'

In Section 3, I explained and defended my proposal that the distribution of OJ -*tu* can be explained by reconstructing a pre-OJ particle *tu with a dual allative / instrumental meaning, and in section 4, I showed that the claim that OJ -*tu* is cognate with the Middle Korean genitive -*s* is weak. I now propose that pre-OJ allative / instrumental *tu is cognate with the Middle Korean allative / instrumental particle -*lwo*, proto-Korean-Japanese *two. I reconstruct the phonological development of pKJ ***two** 'allative / instrumental' as follows:

23) proto-Japanese *two >
***to** (loss of distinctive glide *w) >
***tu** (Mid-Vowel Raising; Frellesvig, 2010) >
OJ -*tu* 'genitive/attributive; counter'
proto-Korean *two >
***lwo** (consonant lenition; Martin 1996) >
***lo** [lo] (semivowel /w/ → labial vowels)
MK -*lwo* 'allative / instrumental'

The vowel correspondence of OJ *u* ~ MK *wo* is supported in both Martin (1966) and Whitman (1985) and is well attested in other potential cognates. The consonant correspondence between (non-initial) OJ *t* ~ MK *l* is slightly more controversial; it is endorsed by Martin (1966) and rejected by Whitman (1985), but there are Korean-internal reasons that we cannot ignore for thinking that some Middle Korean /l/ may go back to proto-Korean *d or *t[6] (see Martin, 1996, for discussion; he adopts the position that Korean did not have distinctive voicing). In short, the forms present a phonological match. Here, I have chosen to reconstruct pKJ *t as the segment whose reflex is OJ *t* in non-initial position and MK *l* in non-initial position by lenition. Reconstructing pre-OJ *tu as an allative / instrumental particle matches the use of Middle Korean -*lwo* as both an allative particle and an instrumental particle:

24) *mul* -*lwo* 'by/with water'
water INSTR
25) *nalah-o*[7] -*lwo* 'to the country' (*Worin sokpo*; Ramsey and Lee 2011:190)

[6]A prime example of why Korean /l/ may descend from proto-Korean *t is the existence of the irregular *T*-stems, which alternate between -*t*- and -*l*- in their conjugated forms (Martin 1992: 234). That some Middle Korean /l/ are descended from *t or *d is widely accepted.

[7]When preceded by a consonant, a minimal *o/u* is obligatorily inserted before MK -*lwo*.

country ALLATIVE

Is it problematic to reconstruct an 'allative / instrumental' particle with two distinct meanings for proto-Korean-Japanese? Should we not be searching for a more elementary analysis? I do not think so. The Uniformitarian hypothesis in historical linguistics means that reconstructed languages (such as proto-Korean-Japanese) should be typologically no different from the kinds of languages we see today. Given that linguistic reconstruction almost always involves complex, creative derivations, there is a somewhat understandable tendency among some linguists towards reductionism, seeking to understand vast swaths of a language's grammar in minimalist terms. This tendency should be tempered with the knowledge that reconstructed languages are also natural languages, and should adhere to the same kinds of typologies and constraints that we observe in natural languages today. Clearly, speakers of modern languages tolerate polysemy and morphological opacity in their lexica, with Korean *-lwo* 'allative / instrumental' being an example of how words can have separate meanings that need not be analyzed as synchronically derived. In the same way, there is nothing unreasonable in the idea that speakers of proto-Korean-Japanese would have done the same; indeed, there is a kind parsimony in a reconstruction that analyzes polysemy found in the modern language as an inheritance from an ancestor possessing that same polysemy. In short, while it is conceivable that both allative and instrumental meanings of *two may have been originally derived from some single (synchronic) form in the language predating proto-Korean-Japanese ("pre-proto-Korean-Japanese"), no such analysis is necessary to understand how OJ *-tu* and MK *-lwo* could be cognate morphemes. Instead, I believe that reconstructing a pKJ *allative / instrumental particle is actually a parsimonious theory, as it does no more than project back what we know is a diachronic fact about Korean.

6 Discussion

In this paper, I have argued that the distribution of OJ *-tu* is best explained by a purely diachronic analysis. I do not take the synchronic appearance of OJ *-tu* as a "genitive" to be any direct indication of its provenance, and instead show that a reconstruction of pre-OJ *tu 'allative / instrumental' best accounts for the distribution of OJ *-tu*, and reveals a phonological match with Korean *-lwo* 'id.'. The idea that Japanese and Korean could be related languages is of course controversial, but possible Korean-Japanese etymologies can actually help us to uncover important facts about the Japanese language by suggesting avenues of research that later shed light on internal developments. This paper has not argued for any reconstruction of OJ *-tu* that cannot be internally justified, and the match to Korean *-lwo* further strengthens this proposal. Indeed, the closeness of the match, and the fact that both the Japanese and Korean forms can be reconstructed with the same two distinct meanings, can arguably be said to constitute a particular fact about the two languages (Antoine Meillet's *fait particulier*), a correspondence too unique to be mere coincidence. Future study may shed more light on the validity of this proposed cognate.

More broadly, this study highlights the importance of diachronic analyses in understanding synchronically opaque distributions. Many attempts to resolve the problem of *-tu* have rested on the assumption that its synchronic appearance in Old Japanese reflects its diachronic origins, that a synchronic description of *-tu* is in some way an explanatory account of its distribution. The idea that a unified account of *-tu* necessarily involves deriving all of its usages from a "genitive" is already a theoretical assumption, one that can be deceptive when attempting to understand how distributions develop. It is only after deconstructing this assumption and de-coupling synchrony from diachrony that we can consider alternative hypotheses. A single etymon coming to have multiple reflexes in a synchronic description is not at all surprising, and we do well to avoid equating a description of synchronic facts with the explanation of how those facts came to be. At a time when synchronic analyses predominate in our fields, this analysis helps highlight the value of diachronic analyses in understanding distributions.

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