Motion verbs in Eastern Old Japanese: A corpus based study

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1.0 Introduction

This paper presents a preliminary investigation of motion verbs attested in Eastern Old Japanese (EOJ, Section 1.1) in order to further our understanding of argument realization for this class of verbs. This study was conducted using the Oxford Corpus of Old Japanese (OCOJ, Section 1.2) to extract all examples of motion verbs in EOJ occurring with at least one overt argument.¹ The arguments of these motion verbs were analyzed to determine which semantic roles and which case particles occur with the arguments of motion verbs. The motion verbs were divided into the following subclasses, based on Levin (1993): verbs of directed movement, e.g., go, come, cross (Section 2.1); verbs of manner of motion, e.g., fall, rise (Section 2.2); verbs of motion using a vehicle, e.g., row, ride (Section 2.3); and transitive verbs of motion, e.g., send away, make approach (Section 2.4). In addition, purposive motion constructions are discussed in Section 3.

1.1 Eastern Old Japanese (EOJ)

Eastern Old Japanese (EOJ) refers to the northern and eastern dialects of 8th century Japan, which are mainly preserved in 240 poems found in books 14 (*Azuma uta*) and 20 (*Sakimori uta*) of the *Man'yōshū*. EOJ consists of several varieties of speech which differ from Central Old Japanese (cOJ), the dialect of the Asuka and Nara regions. While there are a number of studies on EOJ, including Fukuda (1965), Hōjō (1966), Ikier (2006), Kupchik (2011), Mizushima (1972 [originally published in 1950], 1984a, 1984b, and 2003), and Russell (2006, 2008, 2009), a description of verb semantics of EOJ has not yet been presented.

Traditionally, the EOJ poems were divided into three groups (A, B, and C) based on the regions where the dialects were spoken, and since these labels are arbitrary, I refer to them as Northern Eastern Old Japanese (NEOJ) for Area A, Central Eastern Old Japanese (CEOJ) for Area B, and Southern Eastern Old Japanese (SEOJ) for Area C.² I also use the term UEOJ, Unknown Eastern Old Japanese, for those poems which cannot be identified by

^{1.} For this study, motion verbs appearing in verb-verb compounds were excluded, because it is not possible to determine which verb in a compound selects the argument, or which is relevant in semantic role or case assignment. Constructions using verbs of motion are explored in Section 3.

^{2.} NEOJ, CEOJ, and SEOJ should be considered as geographic regions rather than dialect divisions. Ikier (2006), Russell (2006), and Kupchik (2011) each argue for more than three dialect groups, but the data for each region are too few to conclusively draw dialect boundaries without a high degree of speculation.

region. It must be noted that, while EOJ should not be seen as a homogeneous dialect, much of the data cannot be identified by region and the data which can be identified are too few, which makes study of individual dialects and comparison between dialects difficult.³

The classification of poems as EOJ poems is based on three main criteria: 1) phonological differences when compared to cOJ; 2) grammatical differences; and 3) lexical differences, i.e., containing words not found in EOJ. Table 1 presents the number of poems which can be classified as EOJ based on phonological or morphological factors. This classification is based on Mizushima (1972, 1984a, 1984b, 2003), Omodaka (1984a, 1984b), Russell (2006), Vovin (2009), and the Oxford Corpus of Old Japanese (OCOJ).⁴

Area	Region	Attestations	Number of	Word
			poems	count ⁵
NEOJ	Kazusa	MYS.14.3382, 3383; MYS.20.4347, 4348, 4349,	15	5 212
		4350, 4351, 4352, 4353, 4354, 4355, 4356, 4357,		
		4358, 4359		
	Mutsu	MYS.14.3426, 3437	2	2 21
	Shimotsuke	MYS.14.3424, 3425 MYS.20.4373, 4374, 4375,	13	3 178
		4376, 4377, 4378, 4379, 4380, 4381, 4382, 4383		

^{3.} Nearly 43% of the total of EOJ poems and 44% of all the words in the EOJ corpus are classified as UEOJ.

^{4.} This table differs from Russell (2006: 210) as variant poems presented in the *Nihon koten bungaku taikei* are encoded as "a" and "b" versions of the same poem, e.g., MYS.14.3359a and 3359b. These variant poems are now counted as two poems rather than being counted as one.

^{5.} This count represents the number of words, not unique tokens. Complex forms, including verbal compounds and verbs followed by an auxiliary are counted as one word.

		3500, 3501, 3502, 3503, 3504, 3505, 3506, 3509,		
		3487, 3489, 3493a, 3493b, 3494, 3495, 3496, 3499,		
		3478, 3480, 3481, 3482a, 3482b, 3483, 3484, 3485,		
		3468, 3469, 3472, 3473, 3474, 3476a, 3476b, 3477,		
		3452, 3456, 3458, 3460, 3461, 3463, 3465, 3466,		
UEOJ	unknown	MYS.14.3442, 3444, 3445, 3446, 3447, 3448, 3450,	104	1506
	Tōtōmi	MYS.20.4321, 4322, 4323, 4324, 4325, 4326, 4327	7	101
		4340, 4341, 4342, 4343, 4344, 4345, 4346		
	Suruga	MYS.14.3359a, 3359b; MYS.20.4337, 4338, 4339,	12	155
		4402, 4403		
SEOJ	Shinano	MYS.14.3352, 3398, 3399, 3400; MYS.20.4401,	7	96
		4394		
		4386, 4387, 4388, 4389, 4390, 4391, 4392, 4393,		
	Shimōsa	MYS.14.3349, 3384, 3385; MYS.20.4384, 4385,	14	204
		3432; MYS.20.4328, 4329, 4330		
		MYS.14.3361, 3363, 3366, 3368, 3369, 3370, 3431,		
	Sagami		11	165
		4420, 4421, 4422, 4423, 4424		
		MYS.20.4413, 4414, 4415, 4416, 4417, 4418, 4419,		
	Musashi	MYS.14.3374, 3375, 3376a, 3376b, 3379;	17	240
		MYS.20.4405, 4406, 4407		
		3422, 3423, 3434, 3435, 3436; MYS.20.4404		
	1 CZuke	3410, 3412, 3413, 3414, 3415, 3418, 3419, 3420,	25	510
	Kōzuke	4370, 4371, 4372 MYS.14.3402, 3404, 3405a, 3405b, 3408, 3409,	23	316
		MYS.20.4363, 4364, 4365, 4366, 4367, 4368, 4369,		
CEOJ	Hitachi	MYS.14.3351, 3388, 3394, 3395, 3397;	15	233

Table 1: EOJ poems in the Man'yōshū

EOJ texts are written almost entirely phonographically. Mizushima (1972: 43) claims that Book 14 is typically written with one character per syllable, with the exception of place names like 信濃 Shinano, 武蔵 Musashi, etc. Book 20 is almost entirely phonographically

written except for common words like: 白玉 *siratama* 'white jewel, jade', 父 *titi* 'father', 母 *papa* 'mother', 道 *miti* 'road, path, way' (Mizushima, 1972: 43).

Having texts written phonographically is essential for understanding the language as it is thought to have been spoken at the time. However, EOJ texts are written in the same script as cOJ texts and presumably written by scribes from the Nara region, who would have recorded the Eastern dialects as *they* perceived them, which is not necessarily the same as how a native speaker would have perceived them. Thus, our understanding of EOJ phonology is dependent on our understanding of cOJ phonology and on how speakers of one variety of OJ interpreted and recorded speakers of other varieties of OJ. Much has been written about the phonemic correspondences between cOJ and EOJ, and in far greater detail than can be explored here.

1.2 The Oxford Corpus of Old Japanese (OCOJ)

The OCOJ is a corpus created as a research tool for a pre-modern Japanese syntax project at the University of Oxford. The project is entitled Verb Semantics and Argument Realization in Pre-modern Japanese: A Comprehensive Study of the Basic Syntax of Premodern Japanese (abbreviated as 'VSARPJ') and is funded by a grant of almost £1 million from the Arts and Humanities Research Council in the UK. The primary and immediate goal of the VSARPJ project is to investigate argument realization in detail for pre-modern Japanese. Argument realization is a fundamental aspect of the syntax of a language which concerns the ways in which verb meaning determines the number of arguments (e.g., subjects, objects, goals, etc.) in a clause and their morpho-syntactic and semantic properties.

The OCOJ consists of OJ texts which are supplied with a range of information, following the conventions of the Text Encoding Initiative (TEI, http://www.tei-c.org/ index.xml). The texts are romanized in a phonemic transcription⁶ and supplied with information about the original orthography so that it is possible, for example, to search only for those items that were written phonographically. Lexemes and morphemes are given unique identification numbers, so users can easily search for all inflected forms of words; something which is difficult to do with text string searches. Also, words are part-of-speech tagged and inflecting words are supplied with information about morphology. Finally, information about syntactic constituency is encoded, which enables users to search for items based on syntactic structure, for example, all noun phrases (NP) which are associated with a given predicate, all verbs which select clausal arguments, nouns modified by a given predicate, etc.⁷

^{6.} Original script is also retained.

^{7.} More detail on our tagging conventions is presented in Russell and Horn (2012).

2.0 Verbs of motion in EOJ

In order to conduct this study, examples of all verbs of motion with at least one overt argument were extracted from the OCOJ. The verbs of motion are presented below, organized by subcategory.

2.1 Verbs of directed movement

The first subcategory of motion verbs is verbs of directed movement, which include verbs involving movement, or implied movement, from one point to another. The verbs in this group are as follows, with the number of examples containing one or more overt arguments in parentheses: *ide-* 'go out' (3); *ik-* 'go' (1); *ir-* 'enter' (1); *kayup-* 'move across' (1); *ko-* 'come' (10); *kwoye-* ~ *kuye-* 'pass over' (7); *sugwi-* 'pass' (4); *watar-* 'cross' (3); *yor-* 'approach' (1); and *yuk-* 'go' (15). The semantic roles which occur with these verbs are agent/ theme, goal, path, and source.

First, agent/theme is the role assigned to the grammatical subject of the verb; the role is analyzed as agent when the actor has volition over the action, otherwise the role is analyzed as theme. Verbs which occur with this role are: *ide-* 'go out'; *ik-* 'go'; *kayup-* 'move across'; *ko-* 'come'; *kwoye-* 'pass over'; *sugwi-* 'pass'; *yor-* 'approach'; and *yuk-* 'go'. NPs in this role can be marked by genitive *ga* or *no* or unmarked for case as in examples (1-3) below.

(1) 伎美 我 伎麻左奴
 kimi ga ki-masa-nu⁸ lord GEN come-RESP-NEG.ADN
 My lord is not coming.
 (MYS.14.3495, UEOJ)

安受倍 可良 古麻 能 由胡 能須 (2)azupe kara kwoma yukwo no nosu crumbling.cliff.side ABL horse GEN go.ADN COP Like horses going along crumbling cliffs. (MYS.14.3541, UEOJ)

^{8.} Following the conventions of the OCOJ, texts are romanized in a phonemic transcription which reflects the phonology of Old Japanese, using the Frellesvig & Whitman system of transcription. Romanized text is italicized to represent text written phonographically and plain text is used to indicate logographic writing.

(3)	努	由伎	夜麻	由伎	和例	久礼等
	nwo	yuki	yama	yuki	ware	kuredo
	field	go.INF	mountain	go.INF	Ι	come.CONC
	Since	I come going th	nrough fields, g	oing through n	nountair	18.
	(MYS	.20.4344, SEO	J-Suruga)			

Next, the role of goal occurs with *ide-* 'go out', *ir-* 'enter', *ko-* 'come', *yor-* 'approach', and *yuk-* 'go'. The goal argument can be marked by *gari*, dative *na/ni*, or unmarked for case as in examples (4-7). Of these case particles, dative *na* is only found in EOJ; in the example in (5) it marks a goal argument and in MYS.14.3461 it marks a location adjunct.

(4)	和我理	許武	等	伊布
	wa-gari	ko-mu	to	іри
	I-ALL	come-CONJ.CNCL	COMP	say
	He said h	e would come to me .		
	(MYS.14	.3536, UEOJ)		

- (5) 安努奈由可武等
 anwo na yuka-mu to Ano DAT go-CONJ.CNCL CNJ
 Intending to go to Ano.
 (MYS.14.3447, UEOJ)
- (6) 安治可麻 能 可家 能 水奈刀 伊流 思保 乃 爾 adikama no kakye no minatwo ni sipo iru no Adikama GEN Kake GEN port DAT COP enter tide Like the tide that enters the port at Kake in Adikama. (MYS.14.3553, UEOJ)
- (7) 多妣 由久 阿礼 波
 tabi yuku are pa
 travel go.ADN I TOP
 I, who go on a journey.
 (MYS.20.4327, SEOJ-Tōtōmi)

The next semantic role associated with verbs in this subcategory is path, which is found with the following verbs: *kwoye-* ~ *kuye-* 'pass over'; *sugwi-* 'pass'; *watar-* 'cross'; and *yuk-* 'go'. Path NPs can be marked with ablative *kara*, accusative *wo*, ablative *ywo*, or

unmarked for case as shown in (8-11). It is not clear why ablative particles can also be used to mark paths.⁹

- 安受倍 古麻 能 由胡 (8) 可良 能須 kwoma yukwo azupe kara no nosu crumbling.cliff.side ABL horse go.ADN COP GEN Like horses going along crumbling cliffs. (MYS.14.3541, UEOJ)
- 比能具礼 爾 平 古由流 日波 (9) 宇須比乃 夜麻 pinogure ni usupi no kwoyuru yama wo pi pa sunset DAT Usupi GEN mountain ACC cross.ADN day TOP The day, when he crossed Mt. Usupi at sunset. (MYS.14.3402, CEOJ-Kōzuke)
- (10)児呂 我 可奈門 欲 由可久 之 要思母 kwo-ro kanatwo ywo yukaku si ye-si mo ga beloved-DIM GEN metal.gate ABL go.NML FOC good-CNCL FIN It is good going through my beloved's metal gate. (MYS.14.3530, UEOJ)
- 不破 乃 (11)世伎 久江弖 和波 由久 seki kuyete yuku pupa no wa pa I TOP Pupa GEN dam cross.GER go.CNCL I go crossing the Pupa dam. (MYS.20.4372, CEOJ-Hitachi)

Finally, the semantic role source occurs only once with *ko*- 'come'. The source NP occurs with ablative *ywo* as shown in (12).

^{9.} Ablative particles also mark path and source in cOJ, suggesting that "ablative" may not be the best name for these particles. This will be set aside for further research.

(12)志母都家努 安素 乃 河泊良 欲 伊之布麻受 simotukyenwo aswo no kapara ywo isi puma-zu Shimotsuke.field Aso **GEN** river.bed ABL stone step-NEG.INF 与 蘇良 由 登 伎奴 ki-nu swora yu to yo ABL COP come-PERF.CNCL INTJ sky I have come from the Aso riverbed in Shimotsuke without stepping on stones, as if from the sky! (MYS.14.3425, NEOJ-Shimotsuke)

2.1.1 Section summary

Table 2 summarizes the findings for verbs of directed motion, showing which semantic roles and case marking occur with verbs in this subcategory of motion verbs.

Semantic role	Case marking
agent/theme	ga, no, Ø
goal	gari, na, ni, Ø
path	kara, wo, ywo, Ø
source	ужо

Table 2: Semantic role and case marking used with verbs of directed motion

Finally, there are only two examples where there is more than one NP selected by the verb of motion. The two attested examples show the order of "goal theme verb" and "path agent verb". As there are too few examples, it is clearly not possible to say anything about ordering of multiple NP arguments.

2.2 Verbs of manner of motion

The next subcategory of motion verbs is manner of motion. Verbs in this class roughly correspond to Levin's (1993) *roll*-verbs, a subcategory of manner of motion verbs, where the action is non-agentive. In EOJ, the following manner of motion verbs are attested with an overt argument at least once: *oti-* 'fall' (1); *tat-* ~ *tas-* 'rise' (9)¹⁰; and *tirap-* 'scatter' (1). NP arguments selected by these verbs have the semantic role of theme or location.

NP arguments with the semantic role of theme are also the grammatical subjects of the verbs in this group. The verbs which occur with an overt NP theme are tat- $\sim tas$ - 'rise' and tirap- 'scatter'. These NP arguments are always unmarked for case, as in (13).

^{10.} In cOJ, the verb *tat*- can also mean 'set out' and can be used with an agentive subject. The examples in EOJ, however, all involve inanimate subjects.

(13) 乎豆久波 乃 祢呂 爾 都久 多思 wo-dukupa no ne-ro ni tuku tasi DIM-Tukapa GEN peek-DIM DAT moon rise.INF The moon rising on the little peek of little Tukapa. (MYS.14.3395, CEOJ-Hitachi)

Next, NP arguments with the semantic role of location occur with the verbs *oti*- 'fall' and *tat*- \sim *tas*- 'rise'. These NPs are all marked with dative *ni* as shown in (14).

(14)	伊香保呂	能	夜左可	能	為提	鬫	多都
	ikaporo	no	ya-saka	no	wide	ni	tatu
	Ikaporo	GEN	8-shaku ¹¹	COP	weir	DAT	rise.ADN
	努自	能	安良波路	万何	代 母		
	nwozi	no	araparwo	та	de mo		
	rainbow	GEN	appear.AD	N RE	S FIN	Ν	
	Until the r	ainbow,	rising on t	he 8-sh	aku-hi	gh weir	of Ikaporo,
	appears.						
	(MYS.14.3	3414, C	EOJ-Kōzuk	te)			

2.2.1 Section summary

Table 3 summarizes the findings for verbs of manner of motion, showing which semantic roles and case marking occur with verbs in this subcategory of motion verbs.

Semantic role	Case marking
theme	Ø
location	ni

Table 3: Semantic role and case marking used with verbs of manner of motion

Finally, there is only one example where there is more than one NP selected by a verb of motion, shown in (13) above. In this example the order is "location theme verb". Again, as there are too few data, nothing can be said about expected or common ordering of NP arguments.

^{11.} A *shaku* is a unit of measure. Vovin (2012: 106) calculates the height of the dam as 234 cm (approximately 7'8").

2.3 Verbs of motion using a vehicle

The next group is made up of verbs of motion using a vehicle or some other mode of transportation. There are only two verbs in this category in EOJ attested with overt arguments: kog- 'row' (3) and *nor*- 'ride' (3). The semantic roles occurring with verbs in this group are path, which is the only role occurring with kog-, and mode of transportation, which is the only role occurring with *accusative particle wo* and the mode of transportation is marked with either *ni* or is unmarked for case, as shown in (15-17).

之麻加枳乎 己枳爾之布祢乃 他都枳之良須母 (15)simakagi wo kogi-ni-si pune no island.shade ACC row-PERF-SPST.ADN boat **GEN** taduki sira-su то clue know-NEG.CNCL FIN We do not know how the boat had rowed along the shade of the island! (MYS.20.4384, CEOJ-Shimosa)

(16) 己許呂乃緒呂爾 能里弖可奈思母
 kokoro no wo-ro ni norite kanasi mo
 heart GEN cord-DIMDAT ride.GER sad.CNCL FIN
 Her riding on my heart strings is dear to me.
 (MYS.14.3466, UEOJ)

(17) 布奈能里弖

puna-norite
boat-ride.GER
Riding a boat.
(MYS.20.4381, NEOJ-Shimotsuke)

2.3.1 Section summary

Table 4 summarizes the findings for verbs of motion using a vehicle, showing which semantic roles and case marking occur with verbs in this subcategory of motion verbs.

^{12.} There are a few examples where *kog*- modifies *pune*, which has the semantic role of mode of transportation, but NPs with this role do not receive case marking from *kog*-.

Semantic role	Case marking
path	wo
mode of transportation	ni, Ø

Table 4: Semantic role and case marking used with verbs of motion using a vehicle

There are no examples of more than one overt argument with verbs in this group.

2.4 Transitive verbs of motion

The last subcategory of motion verbs are the transitive verbs of motion. The verbs in this group are: *kwos-* 'make cross' (1); *pik-* 'pull' (4); *pirop-* 'pick up' (1); *pur-* 'shake, wave' (3); *tor-* 'take' (1); *yar-* 'send away' (5); and *yose-* 'draw close' (1). The semantic roles attested with verbs in this class are theme (a grammatical object) and goal.

First, theme is the role corresponding to the person or object who is moved or caused to move. NP arguments with this role are found with the verbs *wos*- 'make cross', *pik*- 'pull', *pirop*- 'pick up', *pur*- 'shake', *tor*- 'take', and *yar*- 'send away'. These NPs are either marked with accusative *wo* or not marked for case, as in (18-19).

(18)	和 我	世古	乎	夜麻登	敞	夜利弖
	wa ga	sekwo	wo	yamato	руе	yarite
	I GEN	beloved	ACC	Yamato	ALL	send.away.GER
	Sending n	ny beloved	to Yan	nato.		
	(MYS.14.	3363, CEO	J-Sagar	ni)		
(19)	素弖 毛	布良詞	弐	乎		
	swode ma	o pura-i	пи	wo		
	sleeve T(OP wave-	CONJ.	ADN CNJ		
	Although	I will wave	my sle	eve.		

(MYS.14.3376a, CEOJ-Musashi)

Next, NP goal arguments occur with *pik-* 'pull', *yar-* 'send away', and *yose-* 'draw close'. These arguments can be marked with dative *ni*, allative *pa*, or allative *pye ~ pe*, as shown in (20-22).¹³

^{13.} The allative *pa* occurs only in EOJ. The alternation $pye \sim pe$ occurs in CEOJ, where the distinction between */pye/* and */pe/* has been lost.

- (20)阿之我里乃 安伎奈乃 夜麻 顪 比古 布祢 乃 asigari no akina no ni pikwo yama pune no Asigari GEN Akina GEN mountain DAT pull.ADN boat COP Like the boat which is pulled up Mt. Akina in Asigari. (MYS.14.3431, CEOJ-Sagami)
- 平 (21)和我 世奈 都久志 波 夜利弖 tukusi wa ga se-na wo pa yarite Ι GEN beloved ACC Tukushi ALL send.GER Sending my beloved to Tukushi. (MYS.20.4428, UEOJ)
- 和我 世古 平 敞 夜利弖 (22)夜麻登 wa ga sekwo yamato yarite wo pye ACC Yamato Ι GEN beloved ALL send.away.GER Sending my beloved to Yamato. (MYS.14.3363, CEOJ-Sagami)

2.4.1 Section summary

Table 5 summarizes the findings for verbs of transitive verbs of motion, showing which semantic roles and case marking occur with verbs in this subcategory of motion verbs.

Semantic role	Case marking
theme	wo,Ø
goal	ni, pa, pye~pe

Table 5: Semantic role and case marking used with transitive verbs of motion

There are three examples of more than one overt argument with verbs of motion using a vehicle. The pattern "goal theme verb" is attested once, and "theme goal verb" is attested twice.

3.0 Purposive motion constructions

Purposive motion constructions express that someone goes somewhere in order to do something, e.g., modern Japanese *kaimono ni iku* 'go to shop; go shopping'. There are three examples of purposive motion constructions in EOJ, as shown in (23-25).

- (23)麻可奈思美 佐袮 爾 和波 由久 ma-kanasi-mi sa-ne ni wa pa yuku PFX-dear-ACOP.INF PFX-sleep.INF DAT Ι TOP go.CONC As she is dear, to sleep (with her) I will go. (MYS.14.3366, CEOJ-Sagami)
- 平 (24)伊母 安比美 許思可 許曾 爾 imo wo koso api-mi ni ko-sika beloved ACC FOC meet-see.INF DAT come-SPST.EXCL I came to meet my beloved. (MYS.14.3531, UEOJ)
- 我 那流 美奈刀 能 安之 奈可 (25)minatwo asi naka no ga п aru port GEN GEN middle DAT exist.ADN reed 多麻古須気 己 和我 西古 可利 tamakwosuge kari ko sekwo wa ga jeweled.sedge cut.INF come.IMP Ι GEN beloved Come to cut the jeweled sedges, which are in the middle of reeds in the harbor, my beloved. (MYS.14.3445, UEOJ)

In example (23), the NP argument *wa pa* intervenes between the verbs in the purposive motion construction. In this example the NP argument is an agent. In example (24), a theme argument marked with accusative particle *wo* is present. Finally, in example (25) the purposive motion construction is indicated with the pattern Verb.INF $Verb_{[motion]}$, and not with the more common Verb.INF DAT $Verb_{[motion]}$ construction.¹⁴ The theme NP argument is not marked for case, and the logical subject of the imperative, *wa ga sekwo*, is right dislocated. Other than these observations, the data are too few to present a more clear overview of purposive motion constructions.

4.0 Summary

The above discussion presents a description of motion verbs in EOJ, using available data from the $Man'y\bar{o}sh\bar{u}$ and the search capabilities of the OCOJ. This study presents the semantic roles which occur with each of the four subcategories of motion verbs found in

^{14.} The Verb.INF Verb_[motion] construction is also found in cOJ.

EOJ, verbs of directed movement, verbs of manner of motion, verbs of motion using a vehicle, and transitive verbs of motion, and this is summarized in Table 6.

	agent/ theme (subject)	goal	location	mode	path	source	theme (object)
Verbs of directed movement	X	X			X	X	
Verbs of manner of motion	X		X				
Verbs of motion using a vehicle				Х	X		
Transitive verbs of motion		X					Х

Table 6: Semantic roles occurring with each verb of motion subcategory

The study presented here furthers our understanding of motion verbs and their argument realization patterns for the motion verbs attested in EOJ. The next step is to investigate other classes of verbs to see what can be learned by further examining verb semantics using the available EOJ texts.

Abbreviations

ABL	ablative particle
ACC	accusative particle
ACOP	adjectival copula
ADN	adnominal
ALL	allative particle
CEOJ	Central Eastern Old Japanese
cOJ	central Old Japanese
COMP	complementizer
CONC	concessive
CONJ	conjectural particle
COP	copula
CNJ	conjunctional particle
CNCL	conclusive
DAT	dative particle
DIM	diminutive
GEN	genitive particle
GER	gerund
EXCL	exclamatory
FIN	final particle

FOC	focus particle
INF	infinitive
INTJ	interjectional particle
MYS	Man'yōshū
NEG	negative
NEOJ	Northern Eastern Old Japanese
PERF	perfective
PFX	prefix
RES	restrictive particle
RESP	respect
SEOJ	Southern Eastern Old Japanese
SPST	simple past
ТОР	topic
UEOJ	Unknown Eastern Old Japanese; poems which cannot be identified by region

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