TEMPORALITY IN *MANYŌSHŪ*

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Abstract: Using the *Manyōshū* corpus, the paper argues that conceptual metaphor theory imposes limitations on the diversity of linguistic facts, particularly those concerning the speaker or the poet who is communicating. The paper offers explanations of the nature of time by drawing upon the inference operating within "basic sign structure", specifically, indexicality and iconicity, both of which are at the heart of human semiotic activity.

Keywords: basic sign structure, iconicity, indexicality, Japanese, *Manyōshū* (Collection of Ten Thousand Leaves), space-time metaphor, temporality.

1. Introduction

Manyōshū, or 万葉集 in Japanese characters, is one of three extant written documents from the eighth century A.D., an era of Japanese history that marked a surge in historical and literary works (Konishi 1984: 633-634). (1) below shows the titles of these three works, the English translation of their titles, and the years in which they were completed.

(1) a. 古事記 *Kojiki* [*Records of Ancient Matters*] (711-712)

b. 日本書紀 *Nihonshoki* [*The Chronicle of Japan*] (720)

c. 万葉集 *Manyōshū* [*Collection of Ten Thousand Leaves*] (712-759)

The composition of these works was a part of the political and cultural development fostered by the new government established in 710. This flourishing era, called the

Nara period (奈良時代), continued until 794 and is widely identified as the period of Old Japanese (Okimori 2010: 23; Traugott & Dasher 2002: xiv;Tsujimura 1971: 8-9), that is, as the first historical stage of the Japanese language (A.D. 710-800).[1] The present paper describes and explains the nature of "time", that is, the rise, origin, and development of the concept, with respect to five temporal terms: *ahida* ("during, interval"), *ato* ("trace, consequence"), *ku* ("to come"), *noti* ("later, after"), and *saki* ("tip, before, prior to"), as they occur in the 20 books of *Manyōshū*.[2] It is important to indicate at the outset that analysis of this anthology tells us that the poets were sufficiently familiar, probably subconsciously, with such notions as "succession" and "duration" (Fraisse 1963), "temporal arrangement" (Black 1962), and "causality" (Keller 1998) to conceive of temporality.

I manually collected examples from all 4,516 poems in *Manyōshū*. While all occurrences of *ku* (702) in the current corpus, which we refer to as *Manyōshū* Corpus (hereafter, *Man*Corpus), have been identified, examples of the other four terms has been randomly selected. By "random selection" we mean that examples were collected only once.[3] Despite this incomplete data set, we consider that randomly selected examples deserve attention as they complement our understanding of *ku* and strengthen the argument we develop in this paper. Table 1 provides a bird's-eye view of the distribution of *ku* in the *Man*Corpus. Note that the main focus in this paper will be the simplex forms of fictive usage.

Table 1: Overview of the distribution of *ku* in *Manyōshū*

	simplex	simplex: fictive	compound	compound: aspect	total
frequency	324	44	299	35	702
%	46.1	6.3	42.6	5.0	100

The 702 examples of *ku* are categorized by four criteria. The simplex form, in which *ku* appears with the moving subject, occurs 324 times (46.1%) (e.g., *My lover has*

arrived). By contrast, fictive usage (e.g., *Spring has arrived*) occurs only 44 times (6.3%). There is a strong tendency for *ku* to appear in compounds: it does so 299 times (42.6%). Some compounds (35 tokens, 5.0%) lose *ku*'s motional sense and turn it into an aspectual marker. For the reader's reference, the two examples from the *Man*Corpus below show how *ku* appeared in compounds. In (2) *ku* is a motion verb, while in (3) it is an auxiliary carrying the perfective aspect.

(2) 白たへの　衣の袖を　麻久良我よ　海人漕ぎ<u>来</u>見ゆ　波たつな

sirotahe　　no　koromo　no　sode　wo　makuraga　　yo

pillow.word　GEN　cloth　　GEN　sleeve　ACC　place.name　　PEMPH

ama　kogi-**ku**　miyu　　name　tatu-na

fisher　row-come　see　　waves　run.high-NEG

"[I] roll my sleeves of my cloth. [I] see a fisher rowing a boat and **coming** from Makuraga. I wish the waves won't run high".

(Book XIV: poem 3449)

(3) 相模嶺の　小峰見そくし　忘れ<u>来る</u>　妹が名呼びて　我を音し泣くな

sagamune　　no　womine　mi-soku-si　wasure-**kuru**　imo

place.name　GEN　omine　　see-depart-do　forget-ASPECT　wife

ga　na　yobi-te　　a　wo　nesi-naku-na

GEN　name　call-CONJPART　I　ACC　articulate-cry-NEG

"As [I] was departing with Omine Mountain of Sagamine to my back, I thoughtlessly called my wife's name, which I **had long** forgot**ten**. Don't make me cry [*ku* without motion]".

(Book XIV: poem 3362)

The methodology of this study is qualitative, requiring careful annotation of examples for analysis, an immersive process which offers the researcher the opportunity to gain a deeper understanding of temporal terms. The sample of this study corresponds to what Vaughan and Clancy (2013) characterized as a "small" corpus; in large corpora,

frequency information is central to analysis, while it is secondary in the analysis of small corpora. The advantage of a small corpus is that, as Bublitz and Norrick (2011: 5) aptly note, it can represent "specific contexts for careful qualitative analysis". With this in mind, we had two objectives in investigating the *Man*Corpus. One was to describe how temporality arose and how it was manifested in the five terms identified above. The other was to assess, in the light of the description of the historical data, the provocative space-time metaphor first proposed by Lakoff and Johnson (1980; 1999) and developed by their associates. While conceptual metaphor has created controversy across different disciplines (Engberg-Pedersen 1998; Ruiz de Mendoza Ibáñez & Hernández 2011; Stocker 2014; Sullivan & Bui 2015), it has acted as a theoretical starting point for contemporary studies on space and time, in both the West and the East. For Japanese, Shinohara devoted herself to Lakoffian/Johnsonian conceptual metaphor analysis using synchronic data (e.g., Shinohara 2008; Shinohara & Pardeshi 2011). Unlike Shinohara, in their study of East Asian languages, among them Japanese, Izutsu and Izutsu (2016) do not agree completely with the conceptual metaphor structure. Their notion of "temporal scenery", however, retains the movement of time and observer as the key concept. Kunihiro's (1997) earlier study on space and time in present-day Japanese proposes perceptual constructs such as motion, sequence, and speaker point of view to elaborate upon the link between spatial and temporal terms. To the best of our knowledge, contemporary studies in this field have focused primarily on synchronic data, showing no real interest in diachrony.

Given the above, the present paper begins by describing the temporal terms found in the *Man*Corpus whose inspection allows us to challenge the conceptual metaphor approach. The research question of this paper is threefold: How did temporality arise and how was it manifested in *ahida*, *ato*, *ku*, *noti*, and *saki*? Are conceptual metaphor and recent proposals on spatialized time adequate to explain the historical data? If the space-time metaphor approach is inadequate, what is the alternative?

The paper is organized as follows. Section 2 summarizes the core of conceptual metaphor (Lakoff & Johnson 1999) and proposals on spatialized time put forward by Radden (2011) and Moore (2013), followed by Wallington's (2012) critique of spatialized time and his suggestion of inferencing. Section 3 answers the first and second research questions by demonstrating 12 select examples culled from the *Man*Corpus. By answering "no" to the second research question, Section 4 answers the third research question and offers a semiotic account as a preliminary alternative. The final section, Section 5, concludes the paper.

2. Space-time metaphor

2.1 Lakoff and Johnson (1999)

Lakoff and Johnson (1999: 45) define conceptual metaphor as a cognitive mechanism as it combines two distinct conceptual domains by which a human being, speaker or hearer, conceptualizes abstract concepts such as time based on a concrete, tangible concept such as space. While some scholars have questioned the metaphorical status of space and time (most recently, Stocker 2014; Wallington 2012), one reason scholars have supported the stance that space serves as a source domain may lie in its uniquely frequent presence in temporal expressions across languages (Haspelmath 1997; Radden 2011; Yu 1998, among others). This perspective has also been adopted by mainstream scholars of historical linguistics (Heine, Claudi & Hünnemeyer 1991; Traugott & Dasher 2002). Under the metaphor thesis, speaker and hearer conceptualize time by experiencing tangible elements constituting space. We recognize that space is concrete because we can experience the location of objects directly using our sensorimotor capacity (e.g. seeing, hearing, touching), but time is not composed of such elements and can therefore be experienced only subjectively or solely in our imagination (see also Engberg-Pedersen 1998: 144). This conception of time is agreed upon by scholars in diverse disciplines, particularly psychologists: Nelson (1996: 262) writes that "[t]ime may be represented in imagery or symbolic form, but it cannot be directly sensed"; Ornstein (1997: 15) adds that "[w]e continuously experience it but we

cannot taste it, see it, smell it, hear it or touch it". Lakoff and Johnson (1999: 139-140) take a position, which is worth quoting:

> Yet time, in English and in other languages is, for the most part, not conceptualized and talked about on its own terms. Very little of our understanding of time is purely temporal. Most of our understanding of time is a metaphorical version of our understanding of motion in space ... Motion appears to be primary and time is metaphorically conceptualized in terms of motion.

The usefulness of space or, more precisely, motion in space, in understanding time resonates with a long-standing philosophical conception of time, that of "tying time to the physical world" (Friedman 1990: 5). While psychologists discern time's subjectivity, as noted above, their method of analysing it does not rest on this philosophical tradition. They have long regarded time as a phenomenon that one perceives independently of space (Fraisse 1963; Stuart 1925).

Lakoff and Johnson (1999: 140) declare that conceptual metaphors are represented by "complex" mappings and, as a rule, are derived from primary metaphors, which are further stated to be "universal" in the sense that they belong to "primary experiences", namely, "bodily experiences" (Kövecses 2005: 3; Yu 2008: 247-249). When languages differ, that is, when there is variation in metaphor, Kövecses continues (2005: 3-4), it arises from the way in which abstract domains are formed from source domains in complex, not primary, metaphors. To take an example, the complex metaphor LIFE IS A JOURNEY is formed by primary metaphors such as PURPOSES ARE DESTINATIONS and ACTIONS ARE MOTIONS (Lakoff & Johnson 1999: 61). This metaphor is composed of four domain-to-domain mappings such as A PURPOSEFUL LIFE IS A JOURNEY, A PERSON LIVING A LIFE IS A TRAVELLER, LIFE GOALS ARE DESTINATIONS, and A LIFE PLAN IS AN ITINERARY (Lakoff & Johnson 1999: 61; 66). The kernel of the mechanism is that conceptual metaphors impose the inference structure of the source concept onto another inference structure, that of the target concept. These two inference patterns are mapped unidirectionally, that is, from source to target only.

As for space-time relations, Lakoff and Johnson (1999: 140) first proposed the most fundamental metaphor, the Time Orientation Metaphor (hereafter TOM), whose role

is to orient time in accordance with the observer's spatial position and the two areas in front of and behind him. These three spatial locations correspond to three positions in time, present, future, and past, respectively. TOM is defined as a complex metaphor but stated to be "a common way of orienting time in the world's languages" (Lakoff & Johnson 1999: 140). TOM further subsumes Moving Observer and Moving Time metaphors, which are differentiated, first of all, by whether the observer moves or remains stationary. Table 2 shows how three elements in the source domain are mapped onto three different times in the target domain.

Table 2. Time Orientation Metaphor (Lakoff & Johnson 1999: 140)

	Space		time
1	The location of the observer		the present
2	The space in front of the observer	maps onto	the future
3	The space behind the observer		the past

Tables 3 and 4 equally consist of three elements in the source and target domains.

Table 3. Moving Time Metaphor (Lakoff & Johnson 1999: 141-142)

	Space		time
4	Objects		times
5	The motion of objects past the observer	maps onto	the passage of time
6	The distance moved by the observer		the amount of time passed

Table 4. Moving Observer Metaphor (Lakoff & Johnson 1999: 146)

	Space		time
7	Locations on observer's path of motion		times
8	The motion of the observer	maps onto	the passage of time
9	The distance moved by the observer		the amount of time

The source domain describes a typical motion event in space corresponding to a typical temporal event. The domains of space and time are both considered deictic entities,

placing the observer at the centre of the scene. In Moving Time Metaphor, objects, motion, and distance relative to the observer in events are highlighted. In Moving Observer Metaphor, locations, motion, and distance relative to the observer are the factors that characterize events. The crucial factor differentiating the two metaphors is the direction of motion; that is, whether the observer moves towards the future or future time moves towards the observer. Importantly, although the direction of motion changes, TOM remains unchanged; the observer always faces the future and keeps the past behind him. What underlies the three metaphors is the directionality of space and time, which is integral to the construction of conceptual metaphor. This assumption is equally central to Radden's (Section 2.2) and Moore's models (Section 2.3).

In short, the nine items (1-9) in the left-hand column of the three tables refer to tangible elements in space based on which time is realized through mapping. Just as space has a sequence of locations, time has a succession of temporal positions. Examples in (4) to (6) display representative examples extracted from Lakoff and Johnson (1999).

(4) Time Orientation Metaphor (TOM)

    a. We're looking **ahead** to the future.

    b. He has a great future **in front of** him.

    c. That's all **behind** us now.

       (Lakoff & Johnson 1999: 140)

(5) Moving Time Metaphor

    a. The deadline is **approaching**.

    b. The time for action has **arrived**.

    c. Thanksgiving is **coming up on** us.

       (Lakoff & Johnson 1999: 143)

(6) Moving Observer Metaphor

    a. We're **coming up on** Christmas.

    b. We're **getting close** to Christmas.

    c. We **passed** the deadline.

(Lakoff & Johnson 1999: 146)

2.2 Radden (2011)

Radden (2011) refers to East Asian languages, among them Japanese. Although his approach towards temporality does not rest on rigid source-to-target mapping (p. 2), it shares the same principle as Lakoff and Johnson's model; that is, "spatialized time". Spatialized time dictates that time has points in its linearity much as locations in space (see Section 2.1). And both space and time have an observer who is either deictic (motional) or non-deictic (sequential). In what follows, I take up an aspect of Radden's framework which seeks to explain the behaviour of the Japanese temporal expressions *saki* and *ato* using what he calls the "ego-divided sequence" (2011: 24-27).

The ego-divided sequence is proposed to account for East Asian languages, which use *back* expression for the future and *front* expression for the past. As Radden says, the literature (e.g., Núñez & Sweetser 2006) has previously explained this puzzling phenomenon, rare in Western languages, by locating the past in front of the observer and the future behind him; in other words, by slightly modifying the structure of Lakoff and Johnson's TOM. Radden insists that the observer should always face the future, keeping the past behind him (Section 2.1). He therefore proposes the notion of a sequence, which is organized independently from the observer and accommodates the direction heading from the future into the past. Thus, the model integrates two important criteria. One is that a sequence has a head and a tail; the other is that the observer is neither opposed to the sequence nor aligned with it; his perspective is neutral and he is therefore static. Radden further states that although the observer is non-deictic, he plays a role in dividing the sequence of time (p. 21) into head and tail. His location marks the point at which this separation is made. Head and tail correspond, respectively, to the past and the future. When the front is interpreted as the past, it functions as the head of the sequence; when the back is interpreted as the future, it functions as the tail of the sequence. The idea illustrated in this model resembles

Moore's (2006) SEQUENCE IS A RELATIVE POSITION ON A PATH metaphor somewhat because both ideas appear to be consistent with the basic hypothesis (Traugott 1978) that regards sequence as a spatio-temporal relation without an observer. It goes without saying that the fundamental ideas in Radden's model are the non-deicticality of the observer and the directionality of the sequence. In present-day Japanese, *saki* means "ahead" in space but when it occurs in the compound *sakigoro* ("the other day"), it refers to the past. In a similar vein, *ato* means "back" in space but when it occurs in the reduplicated form *atoato* ("later"), it refers to the future. Introducing the notion of the ego-divided sequence, Radden tried to solve the apparently illogical space-time association of *sakigoro* and *atoato* without changing the principle of Lakoff and Johnson's TOM. However, as Radden himself notes (p. 24), this solution cannot resolve another empirical fact: that *saki* itself has both past and future interpretations. Consistent with the principle that time is explicable by means of spatial configurations, Radden offers a solution for this puzzle drawing upon *saki*'s spatial meaning. He says that *saki* was used to mean "everywhere", a wider sense that encompassed both past and future.[4]

2.3 Moore (2013)

Moore's proposal for spatio-temporal relations is compliant with Lakoff and Johnson's conceptual metaphor. In his 2013 article "Frames and the experiential basis of the Moving Time metaphor", he proposes three types of frames, Expectation, Arrival, and Spatial Deixis, to elaborate upon space-time mapping. The reason for proposing frames in place of domains consists in what he calls "paradox". This paradox dictates that the Moving Time metaphor (Table 3, Section 2.1) is conceptually impossible in that the future arrives in the present, whereby mover and observer correspond respectively to future event and present time. When the mover moves forwards in space, time naturally moves forwards and gets later. In other words, the future cannot arrive at the present precisely because temporal interpretation, which is ego-centred, is based on physical motion. This argument virtually rejects the application of conceptual metaphor to the

scenario in which an observer facing forwards expects a future event (e.g., Christmas) to arrive at his proximity and to travel further, into the past. Moore's solution to this paradox is to deny the direct correspondence between physical motion and time, proposing instead a frame-based correspondence between space and time. To illustrate, *Christmas is coming* is interpreted based on the correspondence between spatial and temporal frames, not domains. The idea is that when the mover moves towards the goal (= observer) it reduces the distance between the two, the point being that the goal's expectation of the mover's arrival is also shortened. Crucially, in Moore's system, expectation is presented in stages, in alignment with Lakoff and Johnson's conceptual metaphor, demonstrating temporal configurations. To reiterate, correspondence no longer operates over spatial and temporal domains because such a correspondence is characterized only by locations in space, as we saw in Tables 2-4. For Moore, expectation is taken as a pervasive human experience that "motivates" (p. 91) the observer to perceive time. By contrast, distance and spatial deixis (mover's distal and proximal relationship to the observer, respectively) represent spatial property. Due to their "pervasiveness in everyday life", the three frames of Expectation, Arrival, and Spatial Deixis form the building blocks of Moore's model. The *Man*Corpus shows that expectation occurs both in spatial and temporal expressions (Section 4.2). This empirical fact may weaken the correspondence among the three frames.

2.4 Wallington (2012)

Wallington's approach departs from that of conceptual metaphor, particularly the idea of direct space-to-time mapping, yet he retains the basic idea of the metaphor. He considers cases in which the future is expressed by *behind*, whose spatial sense is the back, as exemplified in (7). On the basis of Google search, he finds plenty of cases in which expressions such as *Christmas* or *semester* are not always typically viewed as being ahead of the observer, but comes up behind him.

(7) 1st semester is just about done, and 2nd semester is creeping up **behind** us. I think I'm ready to move on.

(Wallington 2012, (example 8), p. 93; emphasis added)

Unlike Radden and Moore, who elaborated on the structures of spatial and temporal schema, Wallington suggests that what gives rise to the temporality of a spatial term (such as *behind*) is the role of inference. In this approach, there is no mapping or correspondence between space and time but aspects of the source allow specific types of information to be inferred. While Wallington does not neglect the presence of metaphor, particularly "basic metaphors" such as KNOWING IS SEEING, his main claim concerning space-time relations is to justify the validity of what he calls "epistemic metaphors", metaphors that come into existence through the observer's inference derived from his epistemic knowledge – that is, "common sense knowledge" (2012: 97) – about the situation the speaker discerns. Turning back to (7), this example encodes a sense of uncertainty that may well derive from our epistemic knowledge that a future event correlates with the speaker's fear or worry because no proper plans have been made. The use of *behind*, rather than *in front of*, is a reflection of this anxiety (see example (4b) in Section 2.1). As Wallington observes, the connotations of the verb *creeping up*, which implies something unpleasant about to happen, may also contribute to this negative inference (2012: 93). Thus, the speaker's act of inference shows that it does not make sense to seek a direct mapping between source and target. Wallington makes the point that in oft-discussed examples such as *Christmas is coming* and *Christmas is ahead* (see examples in (2) to (4) in Section 2.1), taken as proof of conceptual metaphor, uncertainty and certainty are not an issue (2012: 94). To recapitulate, the speaker infers uncertainty (more precisely, an emotional state of worry or fear in (7)) about an upcoming future event and this inference is manifest in the use of *behind*. A corollary is that the presence of the speaker-oriented inference highly disadvantages the principle of conceptual metaphor.

3. Temporality in *Manyōshū*

This section deals with the first and second research questions. Let us repeat them here:

(i) How did temporality arise and how was it manifested in the usage of five words: *noti* ("after, later"), *ahida* ("during, interval"), *ku* ("to come"), *ato* ("trace, consequence"), and *saki* ("tip, before, prior to")?

(ii) Are space-time metaphor and recent proposals adequate to account for the historical data?

This section is organized into five subsections relating to the temporal terms identified and demonstrates that three major factors gave rise to temporality: (i) succession and duration (Sections 3.1 and 3.2); (ii) motion accompanied by periodic or cyclic events as the subject (Section 3.3); (iii) causality (Sections 3.4 and 3.5). With the exception of *noti*, all the terms developed spatial meaning. The discussion reveals that it is hard to establish Lakoff and Johnson's spatialized time in the Japanese historical data despite their affirmation that conceptual metaphor is central to the conceptualization of time and is operational across languages (see Yu's (2008) strong support of the theory for Chinese). Moore's and Radden's proposals will be assessed in Sections 3.3 and 3.5, respectively.

3.1 Noti ("after, later")

Noti, meaning "after, later", was regularly found in successive events. Because it did not develop a spatial sense, its temporal sense was not grounded in the structure of the spatial domain. As shown in (8), *noti* was used as a temporal marker to express the succession of two consecutive events. Psychologists have asserted that succession is one of two basic properties in terms of which time is described (Fraisse 1963: 1; Nelson 1996: 261). In this example, the first event is putting a fence around a pine tree and the second is to continue to maintain it for an uninterrupted period.

(8) 標結ひて 我が 定めてし 住吉の 浜の小松は 後も我が松 [1]

     sime   yuhi-te   waga   sadame-te-si   suminoe   no

fence   put.up-CONJPART   I   decide-PERF-EMPH   place.name   GEN

hama   no   komatu   ha   **noti**   mo   waga   matu

shore   GEN   pine.tree   TOP   later   too   I   pine.tree

"The pine tree around which I decided to put up a fence on the Suminoe shore will still be my own pine tree **later**".

(Book III: poem 394)

3.2 Ahida ("during, interval")

Duration is another element constituting the basic properties of time (Fraisse 1963; Nelson 1996). In the *Man*Corpus, duration is realized by *ahida*, whose original meaning was "an interval", which had two connotations. One referred to the time during which an event such as waiting took place, as illustrated in (9); the other referred to intervals of time, as illustrated in (10). Accompanied by the negation morpheme *naku*, the adverbial compound *ahida-naku* (間なく) describes an event that occurs uninterruptedly or continuously.

(9)   ま袖もち　床打ち払ひ　君待つと　居りし<u>間</u>に　月傾きぬ

ma-sode   moti   toko   utiharahi   kimi   matu   to   wori-si

both-sleeves   hold   bed   brush.off   you   await   PURP   stay-PAST

ahida   ni   tuki   katabuki-nu

interval   LOC   moon   sink-PERF

"**While** with sleeves I sweep the bed and sit up, lonely, awaiting you, the moon has sunk". (translation from PFM: 301)

(Book XI: poem 2667)

(10)   大伴の　三津の白波　<u>間</u>なく　我が恋ふらくを　人の知らなく

ohotomo   no   mitu   no   sira-nami   **ahida**-naku

[pillow.word]   GEN   place.name   GEN   white-wave   interval-NEG

aga   kohuraku   wo   hito   no   sira-naku

I   love.dearly   ACC   one   NOM   know-NEG

"White waves in Mitsu are **ceaseless**. [Like these waves,] no one would know I am deeply in love [with someone]".

(Book XI: poem 2737)

In contrast to *noti*, *ahida* had a spatial meaning, "between [two objects]". We have discovered five instances of *ahida* in the *Man*Corpus: there is only one example of spatial usage (Book XI: poem 2448), the other four are all temporal.

(11) 白玉の 間開けつつ 貫ける緒も くくり寄すれば またも合ふ ものを

siratama	no	**ahida**	ake-tutu	nuke-ru	wo	mo
white.ball	GEN	interval	open-while	pierce-CONT	string	also

kukuri-yosure-ba	mata	mo	ahu	monowo
bind-pull-COND	again	also	get.together	EMPH

"While there is a space between white balls through which a string passes, [we] may meet again when they are bound and pulled together".

(Book XI: poem 2448)

The KGDCJ (1982: 113), an authoritative dictionary of Classical Japanese, states that during the Old Japanese period, *ahida* was used both spatially and temporally but before the Heian Period (794-1185), which corresponds with the Late Old Japanese period, temporal usage was more common than spatial usage. Looking closely at *ahida*'s spatial and temporal meanings, as in (9) and (11), what we notice is that the latter retains the sense of the presence of two objects, while the former lacks it. What *ahida* in (9) refers to is merely the duration of the wait without specifying the beginning or end of the action. (11) is quite different in that *ahida* specifies two objects in space and it refers to the interval created by their separation. These two perspectives indicate that space was not integral to temporal meaning, which undermines the fundamentals of Lakoff and Johnson's conceptual metaphor.

3.3 Ku ("to come")

The *Man*Corpus exhibits cases in which a temporal event such as the arrival of a new season (e.g. spring, summer) or part of a day (e.g. evening, night) appears as the subject in a motion sentence headed by the verb *ku* "to come". Since all these subjects were inanimate, they expressed fictive motion. As shown by Table 5, these temporal events were all truly cyclic or periodic. It is interesting that seasonal terms were predominant, particularly "spring". Throughout the *Man*Corpus, the prototypical scenario is that the poet either expected a season to arrive (= near future) or stated that it had already arrived in his proximity (= recent past/past). Table 5 illustrates nine types of *ku*-related subject found in the *Man*Corpus (44 tokens in total).

Table 5. Overview of the subjects used in fictive motion events headed by *ku*

	season	day	other
春 spring	30		
夏 summer	2		
秋 autumn	2		
夕 evening		2	
夜 night		1	
月 month			1
潮 tide			1
時 time			3
世 life/world			2

Example (12) illustrates a case in which spring has already arrived, and (13) is another in which the poet expects spring to arrive soon. (14) is a spatial counterpart to (12) and (13) in that the subject is a human being who will come to visit the poet.

(12) 冬過ぎて　春し<u>来</u>たれば　年月は　新たなれども　人は古り行く

　　　 fuyu　sugi-te　haru　si　**ki**-tare-ba　　tosi-tuki　wa

winter pass-and spring EMPH come-PERF-COND year-month TOP

aratanare-domo hito ha huri-yuku

become.new-CONC person TOP old-go

"When winter is gone and spring **comes**, new is the year, and new the month; but man grows old". (translation by PfM: 294)

(Book X: poem 1884)

(13) 佐保川の　岸のつかさの　柴な刈りそね　ありつつも　春し<u>来</u>らば 立ち隠るがね

saho-gaha no kisi no tukasa no siba na kari-sone

saho-river GEN side GEN height GEN miscellaneous.trees PROH cut-PROH

ari-tutu-mo haru-si **ki**-tara-ba tatikakuru-gane

exist-cont-WISH spring-EMPH come-PERF-COND hide-CONJ

"Please don't cut the trees at the height of the Saho River. Let them be. When spring **comes**, I can probably meet [my lover] while hiding myself [behind the trees]".

(Book IV: poem 529)

(14) 天の川　相向き立ちて　我が恋ひし　君<u>来</u>ますなり　紐解き設けな

amanogaha ahimuki tati-te aga kohi-si kimi

The.Milky.Way face.each.other stand-and I love-do you

ki-masu-nari himo toki-make-na

come-HON-HEARS string untie-prepare-INT

"I stand facing the Milky Way and will wait for my lover. I've heard you [= the lover] will be **coming** and I shall untie the strings to prepare for bed".

(Book VIII: poem 1518)

Although Moore has rejected the Time-Moving metaphor in that physical motion from the future cannot arrive at the present time, which is further directed towards the past (Section 2.3), it is interesting that in (12) the poet talks about the winter that has already passed and the spring that is now present with him. This can be interpreted as indicating

that the poet had in mind two events at the same time. This picture may run counter to Moore's model as it does not allow the present to correlate with the past. Although Moore correctly claims that a scenario containing motion from the future towards the past is impossible due to the assumption that time is isotropic (measurable through space), (12) shows that this scenario is possible in the poet's mind. We can propose that the motion illustrated in (12) should be understood as subjective rather than metaphorical. Adopting Langacker's (2008: 525) definition of subjectivity, it refers to the speaker's disengagement from immediate, direct, bodily experience. When the speaker is disengaged, he is no longer engaged in physical motion but can mentally simulate a new experience on the basis of it (Langacker 2008: 536). What the poet simulates in (12) is the co-existence of winter and spring, over which he also sentimentalizes. The idea of subjectivity may overlap with Black's (1962: 192-193) "temporal arrangement" (Section 1). According to Black, temporal sequence can be reversed in some circumstances. His celebrated example is the prisoner. A normal sequence is that the prisoner first eats a hearty breakfast and is hanged, but this sequence can be reflected on in reverse. In Black's (1962: 192) original phrasing, "[f]rom another point of view, equally legitimate, it would be true to say that he was first hanged, and then ate a hearty breakfast, one can only hope that this reflection is a consolation to the corpse". What is at stake here is subjectivity.

3.4 *Ato* ("trace, consequence")

Temporal terms (e.g. *ato*, *saki*) originally devoid of motion may not easily fit metaphorical patterns accounting for their emergence. Let us first look at *ato*. *Ato* originally meant "foot", first attested in *Nihonshoki*, in 720 (see Yamaguchi 2012: 80), and was extended to "footprint" in the same century, as illustrated in (15). Footprints are associated with "something left behind", which logically refers to the past but Japanese emphasizes the effect rather than the cause and thus *ato* came to be used to designate a later occurrence (see also Kunihiro 1997: 190). Indeed, many instances of *ato*, not only in the *Man*Corpus but also in other writings (Yamaguchi 2012),

demonstrate a variety of meanings representing a later occurrence (e.g. a letter, ruins, the bereaved). In (16), the poet expresses deep sorrow over his lover's death, for he now realizes gravely that he has nothing left. Similarly, in (17) *ato* is used figuratively to refer to a lover's whereabouts; if there is no trace, there is no clue to help find her. In the face of this empirical evidence, it is hardly possible to say that the "later" interpretation arose from the structure of space (Section 2). It would be more rational to suggest that "later" emerged from the cause and effect relationship, which was so natural and basic that the poets in ancient Japan could perceive it easily.

(15) ももしきの　大宮人の　踏みし<u>跡</u>所　沖つ波　来寄せざりせば　失
　　　せざらましを

momosiki　　no　Ohomiya-hito　　　　　　no　　humi-si

[pillow-word]　GEN　Ōmiya (place name)-person　　GEN　　step-PAST

ato-tokoro　　　oki-tu-nami　　　ki-yose-zari-seba

footprint-place　　offing-GEN-wave　　come-come.near-NEG-SCOND

use-zara-masi　　wo

lose-NEG-CONJ　　　PEMPH

"If there had been no waves from the sea, the **footprints**, the proof that people from Ōmiya had visited, would not have disappeared [but they have]".

(Book VII: poem 1267)

(16)…行く水の反えぬごとく　吹く風の見えぬがごとく　<u>跡</u>もなき　世の
　　　人にして　別れにし　妹が着せてし　なれ衣　袖片敷きて
　　　ひとりかも寝む

yuku　mizu　no　kahera-nu-gotoku　huku　kaze　no

go　　water　GEN　return-NEG-as.if　　　blow　wind　GEN

mie-nu-ga-gotoku　　**ato**　mo　naki　　　yo　　no　　hito　　nisite

see-neg-CONJPART-RESEM　trace　too　non.existent　world　GEN　person　as

wakare-nisi　imo　ga　kisete-si　naregoromo　sodekatasiki-te

separate-PERF　wife　NOM　wear-PAST　old.clothes　　spread.one.sleeve-CONJPART

hitori-kamo　　ne-mu

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alone-PQUES   sleep-CONJ

"As the stream that flows never returns, and as the wind that blows is never seen, my wife, of this world, has left me and is gone completely (without leaving a **trace**). So here, on one of the sleeves of the old clothes spread [on the bed] she used to have me wear, do I now sleep all alone?" (see also translation from PfM: 95)

(Book XV: poem 3625)

(17) 秋の野を　朝行く鹿の　<u>跡</u>もなく　思ひし君に　逢へる　今夜か

aki   no   no   wo   asa   yuku   sika   no   **ato**   mo

autumn GEN field ACC morning go deer GEN footprint too

naku   omohi-si   kimi ni   ah-e-ru   koyohi ka

not.existent think-PERF you DAT meet-POT-PRES tonight PEMP

"Although there was no deer's **footprint** crossing an autumn field (I had no idea where you were), I am thinking of you, hoping to see you tonight".

(Book VIII: poem 1613)

3.5 *Saki* ("tip, before, prior to")

Another example of causality is attested in uses of *saki*. *Saki* originally meant the tip of something long and narrow (e.g., a pencil or a leaf) (see Kunihiro 1997: 249-251). As early as Kojiki (711-712), *saki* was used to refer to a cape. Both types of *saki* had the same etymological root (CDJJ 1967). Consider (18), in which *saki* is conceived of as a geographically projecting area, translated as "corner". The corner in this example incorporated the area leading to the corner and these two parts constitute a unity. The idea the poet would have had in mind is that when one passes an area, one naturally comes to its end. This imagery was certainly motivated by the original physical form of the cape. Another idea is that when one crosses the corner, one won't be able to look back across the area through which one has just passed. In the poet's mind, the area behind him comes to overlap with his lover, whom he has left behind. Following this, the relationship between the long, narrow area and its terminal point can be seen as a

causal chain, similar but not identical to the cases in (15) to (17). The physical form of the cape is important in shaping the meaning of *saki*, but what is more important is that its interpretation depends on the poet's subjectivity (Section 3.3) or, put differently, his "cultural experience" (Section 5). The way we have analysed the meaning of the poem in (18) does not correlate, in any important way, with the concept of motion in Lakoff and Johnson's conceptual metaphor, although, admittedly, causality is apparently prompted by the poet's movement.

> (18) … 道に出で立ち　岡の<u>岬</u>　い廻むるごとに　万度　顧みしつつ
>
> はろはろに　別れし来れば　思ふそら　安くもあらず …
>
> miti　ni　idetati　woka　no　**saki**　i-tamu-ru-goto　　　　ni
>
> road　LOC　depart　hill　GEN　tip　EMPH-go.round-PERF-act　LOC
>
> yorozutabi　kaherimi-si-tutu　　haroharoni
>
> many.times　look.back-EMPH-while　far-away
>
> wakare-si-ku-re-ba　　　omohu-sora　yasuku　mo　ara-zu
>
> separate-EMPH-come-PERF-as　think-heart　be.calm　also　exist-NEG
>
> "I started out on the road, looking back many times from the **corner** of each hill. As I was separated from my dear ones [who were] far behind, my mind knew no rest at all …". (see also translation in PfM: 177)
>
> (Book XX: poem 4408)

Another aspect of *saki* is illustrated in (19), in which it is given the temporal meaning of "before, prior to". This usage is still valid in present-day Japanese, and Radden dealt with it using his ego-divided sequence (Section 2.2). One experiences the tip (roughly corresponding to Radden's "head") earlier than the rest of an object when one is in motion, physically or mentally (see above in this section). This situation may fit Radden's conception of sequence. That two events are juxtaposed in the poem, one (death) prior to the other (falling in love), also adds further evidence of sequence. However, there is one crucial element that does not meet Radden's criteria: the observer (the poet) is verbalized with the first person singular pronoun *waga* ("I"). One can also

perceive that by using *saki* in his saddened reflection, the poet gives "priority" to the choice of death over that of love. In this interpretation, *saki* is not only a temporal marker but also a marker conveying the poet's emotion; put differently, it is part of his subjectivity, along the line discussed earlier (Section 3.3). All the features comprising the semantics of *saki* may not ultimately make Radden's framework any easier to adopt.

(19) 何せむに 命継ぎけむ　我妹子に　恋ひせぬ　<u>先</u>に　死なましものを

nanisemuni   inoti   tugi-kemu   wagi-moko[6] ni   kohi-se-nu

how.come   life   continue-PCONJ   I-lover   DIR   love-do-NEG

saki-ni   sina-masi-monowo

before-TEMPART   die-SCONJ-SPEMPH

"What have I lived for? I wish I had died **before** I fell in love with my dearest love [but I am alive]".

(Book XI: Poem 2377)

Based on our analysis in this section, particularly of *ku*, *ato*, and *saki* (Sections 3.3 to 3.5), what appears to be relevant to the construction of temporality is the message the poet "communicates". As we continue the discussion in Section 4, our proposal will revolve around this notion and will be that this communication is found to be conducted effectively through two semiotic mechanisms.

4. Basic sign structure

The description of historical data in Section 3 leads us to the third research question:

(iii)   If the metaphor approach is inadequate, what is the alternative?

Our answer is that an alternative account is sought in basic sign structure. It is plain to see that analysis drawing on the metaphorical structure of space and time imposes limitations on the diversity of linguistic facts. It particularly diminishes the facts surrounding the speaker, equivalent of the poet in the *Man*Corpus, whose role is to communicate a message to the addressee. More than 50 years ago, Fraisse (1963: 149), a psychologist and one of the early pioneers of research on time in the last century, had

already claimed that the notion of time arises from our awareness of change; humans make use of change to organize events in succession and perceive the duration between two successive events (Section 3.1). Although as a psychologist Fraisse was not concerned with the role of a speaker, its importance was tacit in his writing. He would have said that it is the speaker (and the hearer) who reconstitutes succession and duration based on changes he perceives. This essential property of time was realized by *noti* and *ahida* (Sections 3.1 and 3.2) but this was not the only requisite for the rise of temporality when motion and causality came into play (Sections 3.3 to 3.5). In this regard, Wallington's laudable reference to inference (Section 2.4) deserves attention. While Wallington based his account of inference on the speaker's epistemic knowledge, we seek to advance this notion by resorting to the so-called "basic sign structure", the structure that exercises semiotic ways of inferencing. In a preliminary fashion, we employ two notions of inferencing, namely, "indexicality" and "iconicity". Both notions, first introduced by Peirce (1960 [1932]), were considered to be "the essence of language" by Jakobson (1971). Jakobson (1971: 350-351) further opined that they could be called "universalistic propensity" but, in practice, we must agree that they have not been popular means of explaining language in modern linguistic research. Nevertheless, besides Jakobson's application of indexicality on shifters (1971), iconicity was later adopted by Haiman's (1985) edited volume, and Langacker (1985) devoted a chapter to it in which subjectivity was conceived of as an indicator of iconicity. Fisher and Nänny's (2001) edited volume on iconicity in language should be considered another contribution. Our conception of the semiotic structure of linguistic signs owes much to Keller's (1998) sign theory, in which he explicitly states, more so than Peirce, that signs are an aspect not only of meaning but also of communication. They not only express their sense or denotation (p. 101) but, more importantly, serve as "an aid for inferring something not directly perceptible from something that is" (p. 99). In what follows, we analyse *ku*, *ato*, and *saki* once again from this semiotic perspective.

4.1 Indexicality

Given that indexicality is a natural, or symptomatic, relationship between a sign, namely, an index, and the object it refers to, the interpreter is permitted to make an inference based on this relationship. An oft-quoted example is smoke. When an interpreter uses smoke, our "probabilistic knowledge" leads us, naturally, to infer the existence of a fire. As Jakobson notes (1971: 347), Robinson Crusoe found an index when he saw a footprint in the sand, and his interpretive inference was that this indicated the presence of another human being on his island. Smoke and footprint exist posterior to fire and a human presence, respectively, both of which are not present as the sign but serve as the cause of the effect. In his sign theory, Keller (1998: 105) uses a different nomenclature, symptom, in place of index. In his view, when we see a man with a fishing rod standing near the lake, our "rational" inference, to adopt Keller's notion, is that he will catch fish. Unlike the previous examples, catching fish is a presumptive future event (not the effect of the cause), an event that can also be called a rational action (Keller 1998: 178). Thus, there is a palpable difference between Robinson Crusoe finding a footprint standing for the presence of a human being and a man with a fishing rod going to catch fish. It is interesting that in the *Man*Corpus the cause-effect scenario actually focuses more on the effect (Section 3.4), as exemplified by (12) to (14). In this respect, cause-and-effect comes closer to another causal event identified by Keller as "means-to-end", the term applied to the aforementioned case of catching fish. Means-to-end describes a case in which a means (holding a fishing rod) serves to attain a plausible end (catching fish). Such a desired end is set by the speaker, who brings the hearer to make a rational, default, or firm assumption. Keller adds (1998: 178) that we cling to this assumption until there seems to be a reason not to. When the lake is artificial or there is no water in it, this act with that desired end ceases to be rational. The utility of indexicality is for Jakobson a way to "attract someone's attention" (1971: 347), and for Keller a way to "[bring] our addressee to recognize something" (1998: 7), something that is "not directly perceivable from something that is" (1998: 99). I ascribe cause-and-effect to *ato*, and means-to-end to *saki*, both of

which designate fine-grained conceptual differences between two subtypes of causality. This semiotic analysis is an alternative account of *saki* and *ato* that can replace Radden's ego-divided sequence (Section 2.2). Although *ato* did not develop a proper temporal sense in the eighth century A.D., emphasis on later occurrence, as we have seen, guarantees the speaker's interest in the effect. In a similar vein, *saki* did not develop a fully-fledged future reading in the eighth century. The speaker's interest in the desired end, leaving the old behind (see example (18)), may be the reason for *saki*'s acquisition of the future interpretation at a later date. As briefly noted earlier (Section 3.5), the involvement of motion may have nurtured the connection between means and end.

When it comes to *saki*'s past interpretation (e.g., <u>saki</u> *no yo* "previous life/world"), we may need to mention what Nelson (1996: 260-261) called "natural time". People in ancient Japan prioritized cyclicity in their perception of time, as Tanaka (1975) explained at great length. Nelson (1996: 260) proposed the term "natural time" on the grounds that it relies on "the cycles of the natural world by which humans have attempted to track time". If the world is "natural", it has biological cycles, which are characterized by their biorhythmic and recurrent nature, and such cyclicity automatically brings the perceiver back to the starting point of the cycle; there is no interest in the future. When people possessed the "cyclic awareness of time" (循環的時間意識), following Tanaka (1975: 5; 111-115), they were neither oriented towards social events nor the means-to-end. The fact that *saki*'s past reading is not found in the *Man*Corpus, but in later literature (eleventh century in my collection), might indicate that *saki*'s future and past interpretations emerged independently. This assumption can be illuminated once again by Nelson (1996: 261), who distinguishes natural time from "personal experiential time". While the former is biological, as explained above, the latter is eventful and includes social orientations (eating, working, playing, etc.) to track time. Suffice it to say that this distinction, biorhythmic versus social, may correspond to *saki*'s past and future interpretations, rather than directionality, as noted

above. Although this solution can be fleshed out in a later study, the *Man*Corpus does not presently provide any more solid answer.

4.2 Iconicity

De Cuypere and Willems (2006: 257) stated that iconicity comes into play when a sign, namely, an icon, and an object are interpreted as similar (they are not necessarily similar by nature). The speaker and the addressee use an icon to convey a special message. In social life, this similarity is produced by imitation. In order to convey the message of boredom in the context of a lecture hall, student A may imitate yawing in a somewhat exaggerated manner, through which student B understands that student A is neither sleepy nor tired but finds the lecture boring (Keller 1998: 144-145). The point here is that when the motion verb *ku* co-occurs with a subject that is essentially unmovable (Section 3.3), the method of communication between speaker and addressee is iconic. When the sign is interpreted iconically, there is always an additional message and when it is repeated several times, the message becomes conventionalized, that is, symbolic (Keller 1998). In the context of a motional scenario, the poet intended to express the coming of a new season that he longed for. The poet created a similar scenario as the one for yawing in that he employed *ku* as an iconic sign and replaced the human agent with the non-human agent as a way of importing exaggeration. The iconic relationship is now established between physical motion and subjective motion. The speaker is seen as subjective as he incorporates his emotion into his use of *ku*. The speaker's subjective participation in the utterance can also be proven by (20). While Old Japanese did not develop a special marker, present-day Japanese possesses the morpheme *yatte-* attached to *kuru* "to come",[7] thereby intensifying the feeling of expectation. Although expectation is, socioculturally speaking, present in both physical and mental motion, it does not need to be linguistically coded when the subject (e.g. bus) is a physical object. This difference between (20a) and (20b) can be taken as further evidence for an iconic relationship between the two motion scenarios.

(20) a. クリスマスがやってきます

kurisumasu   ga   yatte-ki-ma-su

Christmas   NOM   EMP-come-POL-PRES

"Christmas is coming".

b. バスがきます (?やってきます)

basu ga   ki-ma-su (?yatte-kimasu)

bus   NOM   come-POL-PRES

"The bus is coming".

Another piece of evidence for the presence of an iconic relationship might be that seasons (especially spring, see Table 5) co-occur with *ku*. Although we have not yet found supporting examples in the *Man*Corpus, figurative use of *kuru* "to come" in present-day Japanese might serve as such for present-day Japanese is more comfortable with expressions that clearly incorporate periodicity overtly in the syntax of the utterance, as in (21a): *kimatu* means "the end of a term". In other words, *kuru* does not co-occur with an event comfortably, as in (21b), when a test does not incorporate periodicity (unless special context is provided in discourse). More precisely, *siken* ("test, exam") alone cannot indicate temporality as much as *kimatu-siken* ("final exam"). This serves as another piece of evidence that the spatial structure in its own right cannot be transported to time. This synchronic aspect of contemporary Japanese in effect tallies with the historical fact that all the non-human items that appear with *ku* encode cyclicity or periodicity, as we have observed in the *Man*Corpus (Table 5).

(21) a. 期末試験がやってきます

kimatu-siken   ga   yatte-ki-ma-su

end.of.term-test   NOM   EMPH-come-POL-PRES

"A final exam is approaching".

b. ?試験がやってきます

siken ga   yatte-ki-ma-su

test   NOM EMPH-come-POL-PRES

"A test is approaching".

The iconic approach may be more robust than Moore's frame-based metaphor approach (Section 2.3) to the extent that it justifies the presence of inference associated with the usage of *ku* and can also corroborate why inferencing was and is natural and relevant in the emergence of temporality.

4. Conclusion

This paper has dealt with three research questions. First, we have demonstrated how the concept of time emerged and how it was related to space based on 14 examples from the *Man*Corpus. Second, we have maintained that the space-time metaphor account is untenable from a historical perspective, the reason being that the explanation based on "motion in space" is too limited to account for a wide range of functions associated with space-time relations. Third, we have lent support to Wallington (2012), who articulated that space-to-time relations are characterized by inference, and we advanced this idea by resorting to basic sign structure, particularly, indexicality and iconicity, and offered an alternative account in place of the metaphorical one.

There are two issues that have not been clarified in the above discussions but that can be briefly commented on in this final section. One is the difference between our semiotic inference and Wallington's epistemic inference. The other is the issue of culture. Concerning the first, we suggest that Wallington's examples, such as (5), may not be germane to the basic sign structure. The reason is that the question of certainty belongs to the issue of modality, as Wallington (2012: 94) himself declares, and his examples may mean, in our judgement, that epistemic metaphors may well occur in pragmatic contexts. By contrast, indexicality is a causal relationship referring to "the only one [relationship] necessary" (Keller 1998: 106) for the sign's interpretation. Imagine that a man holding a fishing rod near a lake is actually coerced to do so and he is internally restless with worry and fear; semiotic inference will lead to the same end. When *behind* evokes uncertainty, it may not come from "what *behind* necessarily does", that is, its original, denotative meaning of being at the back, but from the use of

behind in context, implying that uncertainty is cancellable in some other contexts. Although an icon is used and matures in context, it is not fully evident whether there is an iconic motivation between *behind* and uncertainty.

Concerning the second issue, we have mentioned culture in passing. We discussed the scenario that underlay the development of *saki*'s meaning (Section 3.5), namely, that it highlighted two parties, one leaving, moving forwards, or embarking on a journey and the other, typically wives and children or lovers, being left behind at home. Although *ato* was designated as an index incorporating cause-and-effect, while *saki* was an index with means-to-end, this scenario of two contrasting parties may also have contributed to the construction of *ato*'s meaning (see (15) to (17)). Compiling the *Man*Corpus helped us identify this cultural scenario, and its applicability to different expressions[8] suggests that this scenario was probably what ancient people shared and valued, and that it was integral to people's cultural experience.

A final word: this study has revealed that five temporal Japanese terms cannot be understood fully without recourse to their history. As McMahon (1994: 10) stated, they resemble trees whose growth cannot be described separately from their past; the trees' rings are indicative of their age. Contemporary scholars on space and time tend to develop their theories based solely on the synchronic aspects of their present-day language and this method appears to have created some puzzles and problems. Space-time relations is a genuinely rich and multifaceted subject, and it is probably obligatory to look first at a single language in as much detail as possible. In this respect, we hope that this study has paved the way for future work that will resolve all remaining questions and problems.

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Abbreviations

ACC = accusative; CONC = concessive; COND = conditional; CONJ = conjecture; CONJPART = conjunctive particle; CONT = continuative; DAT = dative; EMPH = emphatic; GEN = genitive; HEARS = hearsay; HON = honorific; INT = intentional; LOC = locative; NOM = nominative; PCONJ = past conjecture; PEMPH = poetic emphasis; PERF = perfective; POL = politeness; PQUES = poetic question; PRES = present; PROH = prohibition; PURP = purposive; RESEM = resemblance; SCOND = subjunctive conditional; SCONJ = subjunctive conjecture; SPEMPH = subjunctive poetic emphasis; TEMPART = temporal particle; TOM = Time Orientation Metaphor; TOP = topic.

CDJJ – Comprehensive dictionary of Japanese after historical periods: Jōdai period (Jidai-betsu Kkokugo Dai-jiten: Jōdai-hen).

DCJCT – A dictionary of Classical Japanese with complete translation (Zenyaku kogo jiten).

GDJL – Great dictionary of Japanese language (Nihon kokugo dai-jiten).

KGDCJ – Kadokawa Great Dictionary of Classical Japanese (Kadokawa Kogo Dai-jiten).

PfM – 1000 poems from the Manyōshū: The complete Nippon Gakujutsu Shinkokai translation.

Notes:

1. As the *Chronicle of Japan* (720) and Chinese chronicles (Bleed 1996: 23) indicate, Japanese was spoken in Japan much earlier, but there is no written record of the language predating the eighth century. The eighth century is virtually the earliest period that offers reliable material for a diachronic study of the Japanese language.

2. Consult the Introduction of *1,000 poems from the Manyōshū* (2005: xiii-ixxx) for a detailed description of the anthology.

3. To create a corpus, all the books of the anthology were gone through at least twice to ensure that no word had been overlooked.

4. To the best of my knowledge, *saki* has never been assigned the meaning of "everywhere".

5. The original poems were written in *manyōgana* (万葉仮名), an ancient writing system using Chinese characters, but this paper has adopted the modern version for the sake of simplicity and readability. In addition, the phonology of Old Japanese is quite different from that of other historical periods. However, we adopt the so-called "historical" spelling, as presented in Komai and Rohlich (1990: 8), since pronunciation is not the main issue in this paper.

6. The first element in *wagimoko*, *wagi*, is equivalent of its original form *waga* ("I") after sound change from /a/ to /i/. *Wagimoko* is used by men to point to their dearest lover informally. This form apparently often appeared in the *Manyōshū* (DCJCT: 1468-1469).

7. The verb *yaru* originally possessed several meanings, such as "to let go, to send", "to let someone escape", or "to dispel the gloom" (GDJL), but it began to be attached to other verbs to create different meanings. In (17) and (18), *yatte-* does not carry any particular lexical meaning. Because of its emotional addition, I treated it as a bound morpheme attached to the main verb *kuru*, "to come". GDJL (Vol.13, 146) treats this complex verb as a single entry.

8. Other words such as *sirihe* ("behind") (e.g., Book VI: poem 4385) and *okureiru* ("remain behind") (e.g. Book XIX: 4258), which we did not consider in this paper, also belong to this group.

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Toshiko Yamaguchi, PhD, associate professor, Department of English Language, University of Malaya, Pantai Valley, Kuala Lumpur 50603 Malaysia e-mail: tyamag@um.edu.my toshiko.yamaguchi@gmail.com		Historical semantics/ pragmatics, cognitive linguistics, functional linguistics, variety of English.

Résumé in English

The main purpose of this study is to investigate temporality in the earliest extant poetic work in Japanese, *Manyōshū* (Collection of Ten Thousand Leaves). This anthology comprises 4,516 poems composed during the period A.D. 712-759. For this study, the author manually compiled a small corpus, referred to as the *Man*Corpus, containing examples of five temporal terms (*ahida*, *ato*, *ku*, *noti*, and *saki*). This qualitative paper has two objectives. The first is to describe how temporality arose and was manifested in the aforementioned five temporal terms. The second is to assess, in the light of the description of historical data, the Lakoffian/Johnsonian space-time metaphor. The corpus was utilized to understand specific contexts, in which temporal terms were employed. After summarizing two recent works, which support the thesis of "spatial

construal of time", the paper claims that these accounts impose limitations on the diversity of linguistic facts, especially the context in which the speaker finds himself. Contrary to this approach, the paper is aligned with another recent study that does not promote a direct correspondence between space and time but argues that the aspects of the source prompt the speaker to infer information about the target. While this paper supports the notion of inferencing, it proposes inferencing operating within "basic sign structure", more precisely, indexicality and iconicity. Iconic inferencing incorporated the speaker's internal emotions, but indexical inferencing was typically independent of such emotions and/or pragmatic information. Our conception of the semiotic structure of linguistic signs owes much to Kellerian sign theory. We argue that while *noti* and *ahida* expressed the basic properties of temporality, namely, succession and duration, in their own right, *ato* and *saki*, and *ku* utilized indexicality and iconicity, respectively, to yield temporality in Japan of the eighth century.

Résumé in German

Hauptaufgabe der vorhandenen Untersuchung ist es, den Zeitbegriff in der ältesten japanischen Gedichtsammlung, *Manyōshū* (Sammlung der zehntausend Blätter), zu untersuchen. Die Anthologie *Manyōshū* umfasst 4516 Gedichte, die von 712 bis 759 unserer Zeit verfasst wurden. Für die vorhandene Untersuchung hat die Autorin ein kleines Korpus zusammengestellt, das als das *Man*Corpus bezeichnet wird und fünf Zeitbegriffe umfasst (*ahida*, *ato*, *ku*, *noti* und *saki*). Der Artikel hat eine doppelte Zielsetzung. Erstens geht es darum zu beschreiben, wie der Zeitbegriff entstand und wie er sich in den fünf genannten zeitbezeichnenden Begriffen manifestiert. Zweitens geht es darum, anhand der Beschreibung historischer Daten, die Raum-Zeit-Metapher von Lakoff und Johnson zu überprüfen. Auf das Korpus wurde zurückgegriffen, um die spezifischen Kontexte zu verstehen, in denen die Zeitbegriffe verwendet wurden.

Nach dem Zusammenfassen zweier neuer Studien, die die These der "räumlichen Zeitentstehung" unterstützen, wird nun in unserer Arbeit festgestellt, dass eine solche Deutung eine Einschränkung unterschiedlicher linguistischer Tatsachen bedeuten würde, insbesondere des Kontextes, in welchem der Sprecher sich befindet. Im Gegensatz dazu knüpft unsere Untersuchung an eine andere neue Untersuchung an, in welcher eine direkte Verbindung zwischen Raum und Zeit nicht hervorgehoben wird, sondern argumentiert wird, dass aus der Quelldomäne stammende Elemente den Sprecher dazu bewegen, Informationen über die Zieldomäne einzuholen. Unsere Untersuchung unterstützt den Begriff Inferenz ("Folgerung, Ableitung"), argumentiert aber, dass es sich um Inferenz innerhalb der "Grundzeichenstruktur" handelt, genauer gesagt um Index und Ikon. Eine solche Inferenz ist charakteristischerweise von den inneren Emotionen und/oder pragmatischen Informationen des Sprechers unabhängig. Unser Begriff der semiotischen Struktur linguistischer Zeichen verdankt in dieser Hinsicht viel der Zeichentheorie Kellers. Während *noti* und *ahida* die Grundeigenschaften von Zeit ausdrücken, d. h. Nachfolge und Dauer, benutzen *ato*, *saki* und *ku* Index und Ikon, um den Zeitbegriff im Japan des achten Jahrhunderts zum Ausdruck zu bringen.

Stichwörter: Grundzeichenstruktur, Ikon, Index, Japanisch, *Manyōshū* (Sammlung der zehntausend Blätter), Raum-Zeit-Metapher, Zeitbegriff.

Résumé in French

L'objectif principal de la présente recherche est de réaliser une enquête sur la temporalité dans le plus ancien corpus de poèmes existant en langue japonaise, le *Manyōshū* (Collection de Dix Mille Feuilles). Cette anthologie comprend 4.516 poèmes composés pendant la période 712-750 ap. J.C. Pour la présente recherche, l'auteur a compilé manuellement un corpus restreint auquel on se référera sous le nom de *Man*Corpus, contenant des exemples des cinq termes temporels (*ahida*, *ato*, *ku*, *noti* et *saki*). Cette recherche qualitative a deux objectifs. Le premier est de décrire comment

la temporalité est apparue et s'est manifestée dans les cinq termes temporels en question. Le second est d'évaluer, à la lumière de la description des données historiques, la métaphore de l'espace-temps au sens que lui ont donné Lakoff et Johnson. Nous nous sommes servis du corpus pour comprendre des contextes spécifiques dans lesquels les termes temporels ont été utilisés. Après avoir résumé deux ouvrages récents qui soutiennent la thèse de "l'interprétation spatiale du temps", nous avançons que ces travaux imposent des limites à la diversité des faits linguistiques et en particulier le contexte dans lequel se trouve le locuteur. A l'opposé de cette approche, la présente recherche s'aligne sur une autre étude récente qui ne défend pas la correspondance directe entre l'espace et le temps mais qui soutient que les aspects de la source poussent le locuteur à induire de l'information sur la cible. Cette recherche soutient la notion d'inférence et propose que l'inférence opère au sein "d'une structure de base du signe", plus précisément, l'indexicalité et l'iconicité. Ce type d'inférence était typiquement indépendant des émotions ressenties par le locuteur et/ou de l'information pragmatique. Notre conception de la structure sémiotique des signes linguistiques doit beaucoup à la théorie du signe de Keller. Nous avançons qu'alors que noti et ahida exprimaient les propriétés de base de la temporalité, notamment la succession et la durée, *ato* et *saki*, et *ku* ont respectivement utilisé l'indexicalité et l'iconicité afin de marquer la temporalité au Japon du VIIIème siècle.

Mots-clés: structure du signe de base, iconicité, indexicalité, japonais, *Manyōshū* (Collection de Dix Mille Feuilles), métaphore de l'espace-temps, temporalité.

Résumé in Russian

Главная цель данного исследования состоит в изучении темпоральности самого раннего сохранившегося до наших дней поэтического произведения на японском языке, *Manyōshū* (Собрание Десяти Тысяч Листьев). Эта антология включает 4,516 стихотворений, сочинённых в период 712-759 до н.э. Для настоящего исследования автор вручную создал небольшой корпус, который называется

*Man*Corpus, включающий примеры из пяти темпоральных терминов (*ahida*, *ato*, *ku*, *noti*, и *saki*). Эта работа имеет две цели. Первая – описать, как возникла и проявилась темпоральность в вышеупомянутых пяти терминах. Вторая цель – оценить в свете описания исторических данных пространственно-временные метафоры Лакофа и Джонсона. Выборка была использована для того, чтобы понять специфические контексты, в которых были использованы темпоральные термины. Обобщив две последние работы, поддерживающие тезис о "пространственной интерпретации времени", автор статьи считает, что данные, представленные в этих работах, налагают ограничения на разнообразие лингвистических фактов, особенно на контекст, в котором находится говорящий. В отличие от этого подхода, данная статья основывается на другом последнем исследовании, которое не предлагает прямое соответствие между пространством и временем, но аргументирует, что аспекты источника подсказывают говорящему, как получить информацию о цели. В то время, как статья поддерживает понятие логического вывода, она предлагает гипотезу, оперирующую в рамках "основной структуры знака", а точнее, индексальности и иконичности. Иконичный вывод вытекает из внутренних эмоций говорящего, в то время как индексальный вывод был обычно независим от эмоций и/или прагматической информации. Наша концепция семиотической структуры лингвистического знака в значительной степени обязана знаковой теории Келлера. По нашему мнению, в то время, как, *noti* и *ahida* выражали основные свойства темпоральности, в частности, последовательность и длительность, и делали это по-своему, *ato*, *saki*, и *ku* использовали индексальность и иконичность, соответственно, уступая темпоральности в японском языке восьмого века.

Ключевые слова: основная знаковая структура, иконичность, индексальность, японский язык, *Manyōshū* (Собрание Десяти Тысяч Листьев), пространственно-временная метафора, темпоральность.

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