

Subjective Motion in English and Japanese:

A Case Study of Run and Hashiru*

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1. Introduction

As Langacker (1990) observes, English has a type of expression which involves the motion verb run but does not denote any objective movement on the part of the subject. Examples are shown in (1)-(3):

(1) The new highway runs from the valley floor to the senator's mountain lodge. (Langacker 1990:19)

(2) A fence runs round the whole field. (OALD⁵)

Langacker states that sentences like (1) inspire the sense of "movement" which can only be attributed to subjective motion by the conceptualizer (speaker). Talmy (1996) also argues that expressions like (2) have two distinctive properties, "factive" and "fictive". What is factive is that the depicted linear entity in subject position (e.g., fence) is represented as stationary and there is no object traversing the entity. What is fictive is that there is some object moving along the linear entity, which can often be imagined as being our focus of attention. Such motion evoked in the mind of the speaker (conceptualizer) is referred to as subjective motion (Langacker 1986,1987; Honda 1994; Matsumoto 1996a).^{1, 2}

As with the English motion verb run, subjective motion expressions are also observed with the Japanese corresponding verb hashiru, as exemplified in (3) and (4):

(3) Sono koosokudooro wa machi no mannaka o hashitte iru.
the highway TOP city GEN center ACC run ASP
'The highway runs through the center of the city.'

(4) Sono sanmyaku wa nan-boku ni hashitte iru.
the mountain range TOP south-north run ASP
'The mountain range runs from north to south.' (Matsumoto 1996a:199)

As Matsumoto (1996a) notes, sentences like (3) and (4) do not depict any spatial movement of the linear entity in subject position, but denote the movement of the conceptualizer's focal attention.³

In this paper we are concerned with the relationship between the linear entity in subject position and the English motion verb run and the Japanese

corresponding verb hashiru in the subjective motion construction. As is well known, these verbs do not behave differently from each other when they describe a real motion; any objects which can proceed with some speed on a path or a lane are compatible with them:

(5) Several cars/men/animals are running on the road.

(6) Kuruma/hito/doobutu ga dooro o hashitte iru.

car/man/animal NOM road ACC run ASP

'Cars/people/animals are running on the road.'

In this construction, linear entities used with run are not comparable with those used with hashiru. Paths such as highways can occur with both run and hashiru, as seen in (1) and (3), while linear entities like saku 'fence' and hodoo 'walkway' are not compatible with the Japanese motion verb.

Consider the following examples:

(7) a. A fence runs round the whole field. (=2)

b. *Saku ga hatake no mawari o hashitte iru.

fence NOM field GEN round ACC run ASP

'A fence runs round the field.'

(8) a. The walkway runs along the left side of the roadway.

b. ??Hodoo wa shadoo no hidari gawa o hashitte iru.

walkway TOP roadway GEN left side ACC run ASP

'The walkway runs along the left side of the road.'

Although the English sentence and the Japanese counterpart describe the same situation in each pair, only the former is acceptable.

There are some linear entities, on the other hand, which are rejected by both run and hashiru when used with these verbs in this construction.

Consider the following examples:*

(9) ??Lightning runs from east to west.

(10) ??Inazuma ga too-zai ni hasitte iru.

lightning NOM east-west run ASP

'Lightning runs from east to west.'

Then, what is behind the phenomena above? More specifically, the following two questions must be answered to account for these facts: (a) What properties inherent in a linear entity make it possible for the entity to occur with run and hashiru in subjective motion expressions?; and (b) which of the properties invoked by these verbs when they denote a real motion is carried

over in this construction? The present paper is aimed at answering these questions.

In this paper, following Matsumoto (1996a), we will henceforth call a type of linear entity which is intended for human travel (e.g., highway) travellable path and a type of linear entity which is not canonically intended for human travel (e.g., fence and mountain range) untravellable path.⁵

This paper is organized as follows. Section 2 summarizes general properties of subjective motion for the purposes of (a) thoroughly understanding this linguistic phenomenon deeply and (b) claiming that this kind of motion is conceived of as including the sense of motion. Section 3 first outlines Matsumoto's (1996a) argument that subjective motion expressions in English and Japanese are subject to two conditions concerning the configuration of the path and the manner evoked by the motion verb. Then I will point out in contrast to Matsumoto that the expressions including hashiru do not meet the condition referring to the latter. Section 4 examines subjective motion expressions with run in detail, and argues that in this construction, travellable paths and untravellable paths in subject position are under one and the same constraint, which is independent of the real motion the verb denotes. Section 5 argues that hashiru, contrasted with run, carries over in this construction some information related to the real motion denoted by this verb. Section 6 provides concluding remarks.

2. General Properties of Subjective Motion

In this section several properties of subjective motion will be presented to confirm that this type of motion, which includes no objective movement, can be regarded as some sort of motion.

First, as Talmy (1983) and Langacker (1986,1990) point out, subjective motion involves the notion of directionality. Consider the following examples:

- (11) The mountain range runs from Mexico to Canada.
 (12) Sono sanmyaku wa nan-boku ni hashitte iru.
 the mountain range TOP south-north run ASP

'The mountain range runs from north to south.' (= (4))

In (11) the two prepositional phrases, from Mexico and to Canada, function as source and goal. This implies that there is some object moving in a certain direction. The same explanation obtains for the Japanese sentence in (12); the

adverbial phrase nan-boku ni ('from north to south') specifies the direction in which some object proceeds. Since motion in general can be characterized as a change in the location of some object, it can be said that subjective motion involving directionality is some kind of motion.

Secondly, as Matsumoto (1996a) notes, temporality is associated with the process assumed in subjective motion expressions. Consider the following examples:

(13) The highway runs along the coast for a while. (Matsumoto 1996a:186)

(14) Sono koosokudooro wa sibiraku no aida kaigan zoi o hashiru.
 the highway TOP for a while coast along ACC run
 'The highway runs along the coast for a while.'

In (13) the use of the temporal phrase for a while indicates that the moving along the coast continues for a certain length of time, which is also correlated to the length of the relevant section of the highway. Since a motion, in contrast with a state, does not continue permanently, the occurrence of a subjective motion expression like (12) with for a while gives a piece of evidence that this type of motion can also be viewed as a motion. This is true for the Japanese counterpart in (14).

The third point, which is of greater interest here, concerns itself with the moving object related to subjective motion. As mentioned briefly in the previous section, the moving object in this type of motion has a strong bearing on the part of the speaker (conceptualizer). In (1)-(5), (6a), and (7a), for example, it can be regarded as the focal attention of the speaker.

The moving object in question, however, is not limited to such a focus of attention. As Langacker (1987) and Matsumoto (1996a) note, it can be the image of someone actually travelling along the travelable path. The sentences in (15) and (16) below indeed involve the presence of a particular moving object (person):

- (15) a. The highway was entering California when I woke up.
 b. The highway will enter California soon.

(Matsumoto 1996a:207)

- (16) a. Koosokudooro wa watashi ga me o samashi ta toki kariforunia
 highway TOP I NOM eye ACC wake up PAST when California
 ni haitte it-ta.
 to enter PROG PAST

'The highway was entering California when I woke up.'

- b. Koosokudooro wa mamonaku kariforunia ni hairu desyoo.
 highway TOP soon California enter FUTURE

'The highway will enter California soon.'

In (15a) and (16a) the moving object(person) can be immediately identified as the speaker. In (15b) such a person is not expressed explicitly, but we can readily imagine the speaker moving over the path. The same explanation applies to the Japanese sentence in (16b).

It is interesting to notice here that in the case where the moving object is simply a focal attention of the speaker, the motion verb involved is exclusively in the simple present tense in English, as in (1) and (2), and in the -teiru aspectual form of hashiru, which refers to a state in Japanese, as in (3) and (4). In the case where the moving object (person) can be identified, as seen in (15) and (16) above, on the other hand, the motion verb takes the past progressive tense or the future tense in both English and Japanese. This observation suggests that in the former case the sentence has the properties of a stative predicate, while in the latter case the sentence has the properties of a nonstative predicate. Although these aspectual differences are well worth consideration, they are left to future research.⁶

Note in passing that as Matsumoto (1996b) points out, the person moving on the travelable path is prevented from being expressed linguistically as an argument or adjunct of the motion verb. The examples in (17) confirm this:

- (17) a. *The road ran from Los Angeles to New York by drivers.
 b. *The highway will enter California soon by us.

(Matsumoto 1996b:363)

3. Path and Manner

In this section we will first look over Matsumoto (1996a) with respect to the properties of motion verbs in subjective motion expressions in English and Japanese. Then I will point out that his claim is not sufficient to explain the expressions produced by the motion verb hashiru.

3.1 Matsumoto (1996a)

Matsumoto (1996a) is, as far as I know, the only paper that comparatively examines subjective motion expressions in English and Japanese. Matsumoto distinguishes between two types of motion verbs. The first type, which

encodes some information about the manner of motion, is called the manner-of-motion verb type. Included are run, walk, creep, jog. The second type is referred to as the path-of-motion verb type. This type of verbs encodes some information about the path involved, into which descend, ascend, and curve are categorized.

On the basis of this division, Matsumoto (p.194) gives the following conditions to which subjective motion expressions in both English and Japanese are subject:

- (18) a. The path condition: Some property of the path of motion must be expressed.
 b. The manner condition: No property of the manner of motion can be expressed unless it is used to represent some correlated property of the path.

To explicate the condition in (18a), let us consider the following examples:

- (19) a. John began to run.
 b. *The road began to run.
 c. The road began to run {straight/along the shore} .
- (20) a. Taro wa hashitte iru.
 Taro TOP run ASP
 'Taro is running.'
 b. *Sono michi wa hashitte iru.
 the road TOP run ASP
 'The road runs.'
 c. Sono michi wa {massugu/kaigan ni sotto } hashitte iru.
 the road TOP straight/shore along run ASP
 'The road runs {straight/along the shore} .'

(Matsumoto 1996a:195)

Sentence (19a) shows that the verb run does not require any prepositional or adverbial phrase describing some aspect of the path when it represents a real motion. (19b) and (19c), in contrast, demonstrate that this verb calls for such a phrase when it represents a subjective motion. The examples in (20) show that the same is true for the Japanese motion verb hashiru.

Condition (18a) correctly predicts that verbs which encode some property of the path of motion do not require any adverbial or prepositional phrases when they describe a subjective motion, nor when they denote a real motion.

Consider the following examples, where the path-of-motion verbs ascend, descend, and curve, and the Japanese corresponding verbs noboru, kudaru, and magaru are used:

- (21) a. The road began to {ascend/descend/curve} .
 b. Sono michi wa {nobori-/kudari-/magari- } hajime-ta.
 the road TOP go.up/go.down/curve begin-PAST
 'The road began to {ascend/descend/curve} .

(Matsumoto 1996a:195)

Since each of these motion verbs implies certain information about the configuration of the road, they do not need further information related to the path for the description of a subjective motion. Hence they are workable as they are.

Therefore the path condition in (18a) can be regarded as a condition which is met by both English and Japanese subjective motion expressions.

Let us turn to the manner condition in (18b). On closer examination, we find that this condition encounters some problems. Before going into a discussion on them, we will first sketch Matsumoto's argument on this condition.

Matsumoto claims that verbs with a manner component in their semantic structures cannot occur in this construction, except when they serve to identify the shape of the path. He illustrates this with the following examples:

- (22) *The road {walks/speeds/hurries/strides} through the park. (ibid.:196)
 (23) *Sono michi wa kooen no mannaka o aruite-iru.
 the road TOP park GEN center ACC walk ASP
 'The road walked through the center of the park.'

(24) The path {rambles/roams/wanders } through the forest. (ibid.:196)
 Manner-of-motion verbs such as walk, speed, hurry, stride, and aruku 'walk' cannot represent a subjective motion, as shown in (22) and (23). The verbs of the manner-of-motion type in (24), on the other hand, can be used to describe a subjective motion. This is because the manner encoded in them is related to a certain path feature. The motion of roaming, for example, implies that the configuration of the path involved is not steep but gentle.

3.2 Problems

The manner condition in (18b), however, cannot account for the behavior of run and hashiru in this construction. Although these verbs are categorized

into the manner-of-motion type and do not serve to identify the shape of the path involved, as the verbs in (24) do, they can both occur in this construction, as seen in (1) and (4). This fact is inconsistent with the manner condition. According to Matsumoto, however, these verbs do not convey any information about the manner of motion when used to represent a subjective motion; such information is "suppressed"(p.200). As a result, they can be used in this construction.

This claim raises a problem. If the information of the manner of motion invoked by run and hashiru is completely suppressed, as Matsumoto says, how can we explain the contrast between (25a) and (25b):

(25) a. The walkway runs along the left side of the roadway.

b. ??Hodoo wa shadoo no hidari gawa o hasitte iru.

walkway TOP roadway GEN left side ACC run ASP

'The walkway runs along the left side of the road.' (=8)

Sentence (25b) implies that some property invoked by walkway is incompatible with some property invoked by the real motion hashiru denotes. More specifically, some manner information about this motion has to do with such incompatibility.

Also problematic with the manner condition in (18b) is Matsumoto's claim that motion verbs which serve to identify the shape of the path can occur in this construction. Since this condition must be met by both English and Japanese subjective motion expressions, as stated above, it predicts that the Japanese verbs equivalent to the English verbs in (24) can also occur in the construction. However this is not the case. Compare the following examples:

(26) The path {rambles/roams/wanders } through the forest. (=24)

(27) *Sono michi wa mori o {buratsuite/aruki-mawatte/samayotte iru} .

the path TOP forest ACC ramble/roam/wander ASP

'The path rambles/roams/wanders through the forest.'

To summarize the discussion above, the manner condition in (18b) is not only insufficient to capture the properties of the subjective motion expressions with hashiru, but also incorrectly predicts that in Japanese, motion verbs which cannot satisfy the purpose of identifying the configuration of the path could occur in this construction, as the English motion verbs in (26) can.

In the rest of this section, we will discuss the way Matsumoto deals with

untravellable paths (e.g., fence and mountain range) in his framework. Matsumoto notices that some untravellable paths such as mountain ranges and wires can be described in terms of subjective motion in English and Japanese, as in (28) and (29), while other untravellable paths like fences can only be used with run, as seen in (7)(here as (30)):

- (28) a. The wire runs along the river.
 b. Sono densen wa heeya no mannaka o hashitte iru.
 the wire TOP plain GEN center ACC run ASP
 'The wire runs in the center of the plain.'
- (29) a. The mountain range runs from Mexico to Canada. (=11))
 b. Sono sanmyaku wa nan-boku ni hashitte iru.
 the mountain range TOP south-north run ASP
 'The mountain range runs from north to south.' (=12))
- (30) a. A fence runs round the whole field. (=7))
 b. *Saku ga hatake no mawari o hashitte iru.
 fence NOM field GEN round ACC run ASP
 'A fence runs round the field.'

Matsumoto ascribes the difference in acceptability between (28) and (29), and (30) only to the lexical differences between run and hashiru: The lexical properties of these motion verbs impose some constraints on this contrast.

However, as Matsumoto does not give a further discussion on those constraints, the distributional difference among untravellable paths seen above is not fully elucidated yet. Furthermore, if such a claim were accepted, there would be no systematic rule to dictate whether or not some untravellable path could occur with these verbs in this construction. In the present paper I would like to reject such a makeshift claim. I will argue instead that the apparently unsystematic phenomena observed above are also under systematic semantic rules of the relevant language. A detailed discussion on this matter will be presented in sections 4 and 5.

4. Run

In this section we are concerned with the constraint imposed on travellable and untravellable paths when they occur with run in subjective motion expressions. I will argue that these two types of paths are under one and the same constraint, which is independent of the information proper to the

real motion indicated by this verb. Let us first consider the constraint of travellable paths.

Typical linear entities which are constructed for human travel are rather long ones like roads. Such entities are all compatible with run in the subjective motion construction. Consider (31):

- (31) a. This road runs past the factory. (Talmy 1983:236)
 b. The walkway runs along the left side of the road. (=25)
 c. The new subway runs under the park.

Shorter travellable paths like stairs are also permitted in this construction, as illustrated in (32) below:

- (32) a. A railway tunnel runs through that mountain.
 b. A bridge runs across the river at Sioux City. (English Collocations)
 d. The stairs run to the basement.

Hence, any travellable path can be described by run in terms of subjective motion.

Let us go into a discussion on the constraint of the other type of path. With run, most untravellable paths can be allowed to occur in this construction. Consider the following examples, where untravellable paths are set horizontally or vertically:

- (33) a. A fence runs round the whole field. (=30a)
 b. The ditch/gutter runs straight along the left side of the road.
 c. The border runs between England and Mexico.
 d. A veranda runs around the house.
 e. The wire runs from the TV to the wall. (Matsumoto 1996a:215)
 f. A rope runs straight between two trees.
 g. The mountain range runs from north to south. (=29a)
- (34) a. Shelves run from floor to ceiling.
 b. The drapes run from the ceiling to the floor.
 c. The pillar runs from the second floor to the first floor.

A noticeable point here is that the configuration of the linear entity in subject position does not exclusively form a straight line; it can be a curved line, as (33a) and (33d) indicate.

Untravellable paths which are not fastened firmly to some place are excluded from occurring in this construction. In (35) below, many books are just piled:

(35) *Many books run from floor to ceiling.

This sentence is upgraded if those books are stacked into a shelf:

(36) Many books in a shelf run from floor to ceiling.

This observation suggests that in this construction, run requires untravellable paths, whether straight or curved, to be fixed in some way.

The untravellable path under consideration is not limited to a genuine linear entity, as seen in (33), (34) and (36) above. A sequence of distinct objects can also be conceived of as a linear entity in English, so that it becomes a possible candidate for the subject NP in this construction. Look at (37):

(37) a. Vines run straight along the sides of the road.

b. Telephone poles run along the right side of the road.

In addition to the pseudo linear entities fixed on the ground above, floating objects which form a linear entity or a pseudo linear entity are also licensed to occur with run in this type of expression:

(38) a. A constellation runs from south to west.

b. A contrail runs across the sky.

c. The rainbow runs from Hishi to Ashikaga.⁷

These sentences represent the entities which can be seen in the sky when we look up, and then they are out of sight after some duration of time.

Let us contrast these floating linear entities with those which come into view but disappear in a very short time:

(39) ??Lightening runs from east to west. (= (9))

The difference between this natural phenomenon and those in (38) (which include an artificial phenomenon) resides in temporality: the former appears instantaneously, while those in (38) appear for a certain length of time or during the night when the sky is clear.

Note that the notion of the duration of time may be reduced to the notion of the fixedness discussed above or vice versa: When something is fixed in some place, it is positioned there for at least some duration of time; something cannot appear for some duration of time unless it is fixed to some place in some way.

To conclude from the discussion above, I argue that the following constraint is imposed on untravellable paths when used with run in the subjective motion construction:

- (40) Untravellable paths must be fixed or appear for some duration of time.

Recall that with run, any travellable path can be described in terms of subjective motion. Travellable paths are, as they stand, fixed constructions for human travel which are usually built with the purpose of people's using them for a long time span. Hence, this type of path can fulfil the condition on untravellable paths in (40). Thus, linear entities, whether travellable paths or untravellable ones, must abide by the following constraint when they occur with run in this construction:

- (41) Linear entities must be fixed or appear for some duration of time.

In section 1 we have raised two questions about the compatibility between the linear entity in subject position and the motion verbs run and hashiru in this construction: (a) What properties inherent in a linear entity make it possible for the entity to occur with run and hashiru in subjective motion expressions?; and (b) which of the properties invoked by these verbs when they denote a real motion is carried over in this construction? Since constraint (41) is an answer to the first question, we must then give an answer to the second question.

The real motion of running is composed of various kinds of information. Among them are the information about the configuration of the path and the manner information in which motor vehicles and/or people proceed on the path. A typical linear entity on which running is executed is a long straight road which is fixed on the ground. This means that the property of fixedness is not exclusive to such an entity; ditches and even houses, for example, are endowed with a property of the kind. Put differently, an entity that is just fixed cannot be called path or road. Therefore whether or not some linear entity can be used with this verb in this construction is independent of the path information originated in the real motion of running. The manner information about this real motion, such as moving with speed (with moving one's limbs fast), is also suppressed in this construction, because this information is correlated with some object's proceeding on a path or road; the motion of running cannot be performed on a linear entity characterized only by its fixedness. Thus, I argue that manner and path information proper to the real motion of running has nothing to do with the choice of linear entity in subject position of this construction.

5. Hashiru

In this section we will argue that in the case of hashiru, the constraint on travellable paths is distinct from the constraint on untravellable paths, and that some information about the real motion denoted by this verb is carried over in this construction.

5.1 Travellable Paths

To specify the relevant information involved in this verb, let us consider the following examples:

- (42) a. Sono koosoku dooro wa machi no mannaka o hashitte iru.
 the highway TOP city GEN center ACC run ASP
 'The highway runs through the center of the city.' (=(16b))
- b. Sono michi wa machi no mannaka o hashitte iru.
 the road TOP CITY GEN CENTER ACC run ASP
 'The road runs in the center of the city.'
- (43) a. *Hodoo wa shadoo no hidari gawa o hashitte iru.
 walkway TOP roadway GEN left side ACC run ASP
 'The walkway runs along the left side of the road.' (=(8b))
- b. *Sono kaidan wa chikashitu made hashitte iru.
 the stairs TOP basement GOAL run ASP
 'The stairs run to the basement.'

Travellable paths like hodoo 'walkway' and kaidan 'stairs' are in general used for people's walking, while travellable paths like koosokudooro 'highway' and michi 'road' are typically those on which motor vehicles move with some speed. The contrast between (42) and (43) thus leads us to assume that hashiru carries over in this construction the manner information related to speed which is typically and primarily evoked by the real motion it denotes, and that this information is a crucial factor influencing the determination of the travellable path in subject position. We will hereafter call such information RAPIDITY. The manner information RAPIDITY, which motivates the expressions in (42), also prevents the sentences in (43), since hodoo 'walkway' and kaidan 'stairs' do not generally bring such information into our mind.

To conclude, the following constraint is imposed on travellable paths when used with hashiru in subjective motion expressions:

- (44) Travellable paths must primarily imply the manner information RAPIDITY.

Note that the manner information RAPIDITY is not the only information evoked by the real motion of hashiru. Other manner information about this verb, for example, never having both legs on the ground at the same time, may also be evoked by the verb, but in fact, such information is not carried over in this construction. Therefore I argue that among many pieces of manner information having to do with the real motion of this verb, only RAPIDITY is transferred to subjective motion expressions.

5.2 Untravellable Paths

Japanese imposes severe restrictions on the occurrence of untravellable paths with hashiru in this construction. Sanmyaku 'mountain range', densen 'wire', keeburu 'cable', and kokkyoo 'border' in (45) below and only a limited few (like koomyaku 'vein of ore') are permitted:

- (45) a. Sono sanmyaku wa nan-boku ni hashitte iru.
 The mountain range TOP south-north run ASP
 'The mountain range runs from north to south.' (=(29b))
- b. Densen ga dooro ni sotte hashitte iru.
 wire NOM road along run ASP
 'A wire runs along the road.'
- c. Kaiteikeeburu ga nihon to amerika no aida o
 the bottom of the sea cable NOM Japan and America GEN between ACC
 hashitte iru.
 run ASP
 'A cable runs between Japan and America.'
- d. Amerika to kanada no kokkyoosen ga too-zai ni hashitte iru.
 America and Canada GEN border NOM east-west run ASP
 'The border between America and Canada runs from east to west.'

In contrast, a large number of untravellable paths, such as saku 'fence', kabe 'wall', and mizo 'ditch', do not occur with hashiru in this construction. Consider the following examples:

- (46) a. *Saku ga hatake no mawari o hashitte iru.
 fence NOM field GEN round ACC run ASP
 'A fence runs round the field.'
- b. *Kabe ga dooro ni sotte hashitte iru.
 wall NOM road along run ASP
 'A wall runs along the road.'

c. *Mizo ga dooro no hidari gawa o hashite iru.
 ditch NOM road GEN left side ACC run ASP

'A ditch runs along the left side of the road.'

An untravellable path like kabe 'wall', as in (46b), however, may be upgraded if it refers to a rather long linear entity like the Great Wall of China:

(47) a. ?Banri no choojoo wa chuugoku hokubu o too-zai ni hashitte
 The Great Wall TOP China north part ACC east-west run
 iru.

ASP

'The Great Wall runs from east to west in the north part of China.'

b. ?Berurin no kabe ga too-zai ni hashitte iru.

Berlin Wall NOM east-west run ASP

'Berlin Wall runs from east to west.'

The sentences in (47) are rather natural, for example, in a context in which the speaker reads a world map. This observation suggests that relatively long untravellable paths like those in (47) and (45) are compatible with hashiru in subjective motion expressions.

As Matsumoto (1996a) suggests, the notion of straight may also be a necessary characteristic of the untravellable path under consideration. Curved ones like niji 'rainbow' are not permitted. Consider the contrast between (48) and (49):

(48) ??Niji ga futatsu no yama no aida o hashitte iru.
 rainbow two GEN mountain between ACC run ASP

'A rainbow runs between two mountains.'

(49) Hikookigumo ga too-zai ni hashitte iru.

contrail NOM east-west run ASP

'A contrail runs from east to west.'

Also excluded from the subjective motion construction are the untravellable paths which present themselves but momentarily:

(50) ??Inazuma ga too-zai ni hashitte iru. (= (10))

lightning NOM east-west run ASP

'Lightning runs from east to west.'

Moreover, a pseudo linear entity like a sequence of trees cannot be considered as a suitable subject NP in Japanese, contrary to the English

examples in (37):

- (37) a. Vines run straight along the sides of the road.
 b. Telephone poles run along the right side of the road.
 (51)??Matsunamiki ga dooro ni sotto hashitte iru. ⁸
 pine GEN tree NOM road along run ASP
 'Pine trees run along the road.'

Considering these facts, I advocate the following constraint on the untravellable path in subject position of this construction:

- (52) Untravellable paths must be straight linear entities which are fixed and relatively long.

This constraint seems to be a little rough in the sense that the notion relatively long is not clearly defined. However this may well be adequate to the task of pointing out that it is distinguished from the constraint of untravellable paths in English, expressed in (40)(=41)).

With the properties of untravellable paths in (52) in mind, let us consider the possibility that some information about the real motion denoted by hashiru is carried over in this construction. Typical roads and highways on which cars and/or people run are genuine linear entities which are relatively long and straight. Therefore these properties can be treated on a parallel level with those in (52). Thus, it can be said that with untravellable paths, the path information typically evoked by the real motion of hashiru is surely carried over in this construction.

To conclude from the discussion in this section, I argue that with hashiru, linear entities, whether travellable paths or untravellable paths, reflect in this construction some information related to the real motion denoted by this verb.

6. Concluding Remarks

In this paper I have first pointed out that with hashiru, some property of manner related to the real motion denoted by this verb plays a crucial role in determining the subject NP in the subjective motion construction.

I have argued that subjective motion expressions involving run and hashiru are under distinct semantic constraints. In the case of run, fixed linear entities are all the possible subject NPs and any information pertinent to the real motion of running is not carried over in this construction. In the case

of hashiru, travellable paths and untravellable paths abide by respective semantic rules. Travellable paths which evoke information about the manner of motion RAPIDITY are allowed to occur in this construction and untravellable paths which are fixed, relatively long, and straight only are permitted. I have also argued that with hashiru, untravellable paths, as well as travellable paths, reflect in this construction some information related to the real motion of this verb.

Notes

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¹ Subjective motion is also called "extension" in Jackendoff (1983), "abstract motion" in Langacker (1986), and "fictive motion" in Talmy (1996).

² Talmy (1996) gives a further division of "fictive motion" expressions. He calls the type discussed in the present paper coverage path.

³ The sentence in (i) is often treated in terms of subjective motion. This type of expression, which is beyond the scope of this paper, is distinguished from the type we are concerned with in that the former does not involve a motion verb as the latter does.

(i) Vanessa is sitting across the table from Veroria. (Honda 1994:197)

⁴ (9) and (10) would be acceptable if lightning and inazuma were construed as the entities extending themselves in the sky. In this reading, the moving object is the subject NP itself.

⁵ It is possible to walk on a linear entity like a wall, if we try. However such a case is out of consideration in the present paper. It is in this sense that the adverb canonically is used here.

⁶ For the detailed information about the aspectual meaning of the -teiru form, see Teramura (1984).

⁷ One of my informants suggests to me that the sentence in (i) is preferred to (38c) when the situation described is the same.

(i) There is a rainbow running from Hishi to Ashikaga.

^a There are some Japanese speakers who accept (51).

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