

Path Coercion and Compositionality:  
A Comparative Study of Motion Expressions in English and Japanese

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# Chapter 1

## Introduction

### 1.1. Aim

Languages vary widely with respect to how they encode directed motion events. Variation in the lexical encoding of spatial goals has particularly attracted the attention of many scholars (Noonan (2010); Slobin (1996, 2006); Svenonius (2006, 2007, 2008, 2010), Talmy (1975, 1985, 1991, 2000), inter alia). In an early study of the typology of directed motion expressions, Talmy (1975, 1985) formulated a distinction between path languages and manner languages, based on whether directed motion can be encoded by manner-of-motion verbs with adpositional goal phrases. The two patterns are contrasted in (1a) and (1b): the former is from Spanish, classified into path languages, and the latter from English, classified into manner languages.

- (1) a. Entro                      corriendo/volando/nadando a la cueva.  
          enter.3SG.PAST. running/flying/swimming    to the cave
- b. He ran/flew/swam into the cave.

(Talmy (1985:111))

In English, but not in Spanish, manner-of-motion verbs combine with prepositional phrases denoting goals of motion. In Spanish, the manner of motion can only be specified by an adverbial or gerundive phrase, and an additional path verb must be used as the main verb. Talmy explains this contrast by appealing to a difference in



lexicalization patterns of motion verbs. In manner languages, motion verbs conflate the fact of motion and the manner of motion, while in path languages, verbs can only conflate the fact of motion and the path of motion.

The distinction between path languages and manner languages roughly corresponds to a difference in the inventory of resources for distinguishing goals from static locations that are available in a given language (Aska (1989), Slobin (1996), Song (1997), Song and Levin (1998), Beavers et al. (2010), among others). Only some languages have specialized linguistic resources defined as “satellite” by Talmy (1991, 2000), such as particles, adpositions, or case markers, which can encode directional meaning. Such languages typically behave as manner languages and allow the manner-of-motion verbs to be expressed with goals of motion.

- (2) a. An owl popped out. [English]  
b. ... wei da eine Eule plotzlich raus-flattert. [German]  
... because there an owl suddenly out-flaps  
'... because an owl suddenly flaps out.'

(Beavers et al. (2010:339))

In contrast, languages lacking any specialized satellites for goal expressions rely on the use of path verbs that encode directional meaning, such as *entró* ‘entered’ in (1a) from Spanish. As a result, in such languages only a subset of motion verbs can be used in directed motion expressions. This subset of specialized path verbs typically excludes manner-of-motion verbs, which results in the pattern observed in path languages, as shown in (3).

- (3) a. ??J'ai boité à la librairie. [French]  
 I-have limped to the bookstore  
 'I limped to the bookstore.'
- b. ??La botella flotò a la cueva. [Spanish]  
 the bottle floated to the cave  
 'The bottle floated to the cave.'
- c. ??John-wa kisi-ni oyoida. [Japanese]  
 John-TOP shore-to swam  
 'John swam to the shore.'

(Beavers et al. (2010:341-342))

When French *à*, Spanish *a*, and Japanese *-ni* occur with a path verb, the directional interpretation is attributed to the verb, but when they occur with a manner verb, the adposition or case marker alone is unable to predicate a result location and therefore the sentences are judged to be infelicitous.

Nikitina (2008) approaches the problem of expressing directed motion from a slightly different perspective, treating the two patterns introduced by Talmy not as language types but rather as descriptions of alternative encoding strategies, which do co-exist within a single language (see also Aske (1989), Gehrke (2007), Kopecka (2006), Beavers et al. (2010)). One strategy is to encode directional meaning in a specialized satellite, when such a satellite is available in the language. A goal expressed in this way can then combine with any verb, including manner verbs, as shown in (1b) and (2a) from English. The other strategy, preferred by languages lacking satellites like French, Spanish, and Japanese, is to encode directional meaning in a path verb. English, which is classified into manner languages, can also express directed motion in this strategy, as

shown in (4).

- (4) a. The bottle entered the cave, floating.
- b. John reached the shore, swimming.

Nikitina (2008:176) states that “the fact that only some languages have satellites for goals of motion and can rely on the first strategy creates the illusion of a division between path languages and manner languages. The two strategies, however, may be used in a single language when competing options for describing the same event.”

It should be noticed here that the two language types introduced by Talmy and the two strategies proposed by Nikitina are both based on the assumption that directional meaning, that is to say, the path the moving entity takes, is necessarily encoded in a linguistic resource, because it is an indispensable part of motion events, as defined by linguists. As Nikitina (2008) points out, however, there is a third option of describing directed motion, which is widely used cross-linguistically and which is often ignored in studies of motion expressions. Consider the following example:

- (5) a. John walked in the room.
- b. Kim jumped on the bed.

(Beavers et al. (2010:363))

In the examples above, the path of motion is neither encoded in a satellite nor contributed by a path verb. However, the locative prepositional phrases receive goal interpretations in certain contexts where John is standing just outside the room, and where Kim is standing next to the bed. In other words, the sentences in (5) express

directed motion regardless of the absence of directional expressions. Nikitina calls the third option of describing directed motion “zero” encoding strategy, in the sense that directional meaning is not expressed overtly. Interestingly enough, this strategy is available even in path languages like French, Spanish, and Japanese. This is illustrated in (6).

- (6) a. Allez, courons dans la maison! [French]  
 go.2PL, run.1PL in the house  
 ‘Come on, let’s run in the house!’
- b. ... deslizándose a las habitaciones de las bailarinas... [Spanish]  
 slipping to the rooms of the dancers  
 ‘... slipping into the dancers’ rooms ...’
- c. Akira-wa umi-no-naka-ni hasitta. [Japanese]  
 Akira-TOP sea-GEN-inside-to ran  
 ‘Akira ran into the sea.’

(Beavers et al. (2010:364-365))

As Pourcel and Kopecka (2006) and Stringer (2003) point out, in French the location marker *dans* can receive a goal-marking interpretation in the right context, as shown in (6a). According to Stringer, in the context where a mother shouts to her children it is actually more natural-sounding than the equivalent canonical motion expression of the same meaning. Likewise, Fábregas (2007) notes that *a* is found with a directional interpretation precisely with manner-of-motion verbs which imply displacement, despite path languages’ status of Spanish. In addition, Stringer (2003, 2006) points out similar data in colloquial Japanese, also involving manner-of-motion verbs that implicate

displacement, although he notes that the judgments are variable.

With these points in mind, I address the following questions:

- (7) I. What makes the zero encoding strategy available in a given language?
- II. Are the conditions for the zero encoding strategy shared among languages?
- III. How can we explain the similarity and/or difference in the conditions for the zero encoding strategy among languages?

Because of being a more marked strategy than the others, this strategy is assumed to be limited in use to some extent. Thus, it is worth revealing conditions on locative phrases interpreted as goals of motion in each language. If a part of the conditions is shared among languages and the other parts are not, the similarity and the difference should be reduced to the generality of the languages and the idiosyncrasy of each language. To answer the questions in (7), this thesis will mainly deal with locative phrases interpreted as goals of motion in English and Japanese.

## **1.2. Organization**

This dissertation consists of five chapters with the exclusion of the present introduction and the final conclusion chapters.

Chapter 2 explores a lexical constraint on eventive verbs proposed by Rappaport Hovav and Levin (2010). As we have seen above, the literature presupposes the absence of a path meaning component in manner-of-motion verbs, which makes them incompatible with locative phrases interpreted as goals of motion. In other words, path

and manner are not packaged into one verb root. This is what the hypothesis of manner/result complementarity says. Some studies, however, have provided certain examples against the hypothesis. I will take a close look at the examples and claim that they are not counterexamples and therefore Rappaport Hovav and Levin's proposal is tenable.

Chapter 3 investigates English locative prepositional phrases interpreted as goals of motion. After reviewing the major previous studies of *in* phrases under the directional reading, I will propose a path-coercion approach to the goal interpretation of not only *in* phrases but also *on* and *under* phrases used precisely with manner-of-motion verbs. This approach will elucidate what makes the zero encoding strategy available in English.

Chapter 4 investigates co-occurrences of manner-of-motion verbs with *-ni* phrases interpreted as goals of motion in Japanese. As far as I know, these phenomena have not been analyzed in detail. Arguing that the *-ni* phrases in question do denote goals of motion, I will show that the path-coercion approach proposed in the previous chapter can apply to them. Additionally, it will be revealed that unlike in English, in Japanese path coercions require a contextual support where a motion event is described from the omniscient narrator's perspective.

Chapter 5 discusses another type of path coercion in Japanese, i.e., co-occurrences of manner-of-motion verbs with goal *-ni* phrases in causative constructions. I reveal the process of the path coercions in causative constructions on the basis of the proposal in Chapter 4, i.e., the route meaning component encoded by the verb and the place encoded by the *-ni* phrase are semantically unified to form a path along which an entity moves.

Chapter 6 explores the similarity and difference in the licensing conditions on

path coercions between the two languages. Comparing the semantic and pragmatic conditions on path coercions in English and Japanese proposed in the previous chapters, I will argue that English and Japanese share the semantic condition, whereas the pragmatic condition is imposed on only Japanese path coercions. Based on Talmy's (2000) typology, I will try to give an account of the similarity in the semantic condition and difference in the pragmatic condition between English and Japanese.

Chapter 7 gives a summary of the findings of this thesis and clarifies their significant implications. It also presents an outlook for future research.

## Chapter 2

### A Closer Look at Counterexamples to Manner/Result Complementarity \*

#### 2.1. Introduction

Since the early days of Generative Semantics, the question of possible and impossible verb meanings has been of concern for lexical semanticists. This thesis is especially concerned with the semantics of verbs of change of location and change of state. Recently, an intriguing hypothesis concerning a lexical constraint on eventive verbs has been proposed by Levin and Rappaport Hovav (1991, 1992, 1995, 2013) and Rappaport Hovav and Levin (2010), which is called manner/result complementarity. Rappaport Hovav and Levin argue that cross-linguistically, eventive verbs fall into at least two classes, i.e. result verbs (e.g. *break*, *slice*) and manner verbs (e.g. *hammer*, *wipe*), and propose that no verb encodes manner and result simultaneously. This restriction is what manner/result complementarity says. However, some studies (Beavers and Koontz-Garboden (2012), Husband (2011), among others) provide a certain apparent counterexample to Rappaport Hovav and Levin's proposal: so-called manner-of-killing verbs (e.g. *guillotine*, *drown*).<sup>1</sup> In this chapter we investigate the validity of manner/result complementarity by taking a close look at the manner-of-killing verbs.

The structure of the chapter is as follows. Section 2.2 gives a brief sketch of manner/result complementarity and provides the definition of manner and result. Section 2.3 reviews Beavers and Koontz-Garboden's (2012) proposal that



manner-of-killing verbs are counterexamples to manner/result complementarity, and points out some empirical problems. Section 2.4 reviews Husband's (2011) analysis of the manner-of-killing verbs. He proposes that the manner-of-killing verbs can be divided into two subtypes and one of the two subtypes is a real counterexample to manner/result complementarity. Section 2.5 points out that Husband's analysis has at least four empirical problems. Based on the four arguments, I claim that all of the manner-of-killing verbs do not lexicalize a result. Finally, section 2.6 summarizes the chapter and offers a conclusion.

## **2.2. A Brief Sketch of Manner/Result Complementarity**

In this section, I begin by reviewing how a series of Rappaport Hovav and Levin's studies discuss the lexical constraint on the eventive verbs. In addition, I take a close look at the definition of the concept of 'result' and 'manner' given by Rappaport Hovav and Levin (2010).

### **2.2.1. Manner/Result Complementarity**

Cross-linguistically, eventive verbs can be divided into at least two classes: manner verbs and result verbs, as shown in (1).

- (1) a. *Manner Verbs:*  
nibble, rub, scribble, sweep, wipe, flutter, laugh, run, swim, ...
- b. *Result Verbs:*  
clean, cover, empty, fill, freeze, kill, melt, open, arrive, die, enter, faint,  
...

(Rappaport Hovav and Levin (2010:22), with slight modifications)

Rappaport Hovav and Levin (2010) characterize each class as follows: manner verbs specify the manner of carrying out an action, and result verbs specify a resulting state of carrying out an action. Levin and Rappaport Hovav (1991, 1992, 1995, 2013) argue that manner and result verbs are found in complementary distribution, and propose a constraint on verbal root meaning, as shown in (2).

(2) *Manner/Result Complementarity*

Manner and result meaning components are in complementary distribution: a verb lexicalizes only one.

(Levin and Rappaport Hovav (2013:50))

The core of this hypothesis is the “lexicalized” components of meaning. These are lexical entailments, which must be entailed in all uses of a verb, regardless of contexts (Dowty (1991)). For example, the manner verb *wipe* lexicalizes a manner involving surface contact and motion. Although this action is typically performed with the intension of removing stuff from a surface, this removal can be explicitly denied

- (3) a. I just wiped the counter; it hasn't been so clean in days.  
b. I just wiped the table, but none of the fingerprints came off.

(Rappaport Hovav and Levin (2010:22))

Likewise, although the result verb *clean* lexicalizes a state that often results from actions normally carried out to remove stuff from a surface, no particular action is lexically

specified.

- (4) a. I cleaned the tub; as usual, I used a brush and scouring powder.  
b. I cleaned the tub {by wiping it with a sponge/by scrubbing it with steel wool/by pouring bleach on it/by saying a magic chant}.

(Rappaport Hovav and Levin (2010:22))

In this way, manner/result complementarity is supported by the lack of verbs encoding both manner and result meaning components.

Rappaport Hovav and Levin (2010) propose that manner/result complementarity follows from how event structures are composed, focusing on the number and place of lexical semantic roots (i.e. idiosyncratic components of verb meaning). A single lexical semantic root can either modify an underlying ACT predicate, as in (5a), or be an argument of an underlying BECOME, as in (5b).

- (5) a. [x ACT *<ROOT>*]  
b. [[x ACT] CAUSE [y BECOME *<ROOT>*]]  
c. \* [[x ACT *<ROOT>*] CAUSE [y BECOME *<ROOT>*]]  
d. \* [[x ACT *<ROOT<sub>1</sub>>*] CAUSE [y BECOME *<ROOT<sub>2</sub>>*]]

Manner verbs are formulated as (5a), and result verbs as (5b). Roots are integrated into event structures as modifiers (e.g. (5a)) or arguments (e.g. (5b)) of predicates in the event structures. Roots are italicized and are in angle brackets. They are notated via subscripts when functioning as modifiers. Note here that there is a generalization that “a root can only be associated with one primitive predicate in an event schema [or event

structure], as either an argument or a modifier (Rappaport Hovav and Levin (2010:25)).” This predicts that no event structure will ever have both result and manner simultaneously, and hence (5c) is ruled out. Furthermore, Rappaport Hovav and Levin (2010) assume that there is only ever one root per lexeme, and hence (5d) is also ruled out. These two basic discussions account for the reason that no verbs encode both meanings simultaneously.

### 2.2.2. Definition of Manner

Before entering into the core discussion, it is important to define what is meant by “manner.” Rappaport Hovav and Levin (2010) define manner as nonscalar changes, as cited in (6).

- (6) A nonscalar change is any change that cannot be characterized in terms of an ordered set of values of a single attribute [...]. The vast majority of nonscalar changes [...] involve complex changes — that is a combination of multiple changes — and this complexity means that there is no single, privileged scalar of change.

(Rappaport Hovav and Levin (2010:32))

They illustrate what a nonscalar change is by elaborating on the verb *jog*:

- (7) For example, the verb *jog* involves a specific pattern of movements of the legs, one that is different, for example, from the pattern associated with walk. Furthermore, even though there is a sequence of changes specified by *jog*, collectively these changes do not represent a change in the values of a single

attribute, nor is any one element in the sequence of changes privileged as being the necessary starting point of motion. (Rappaport Hovav and Levin (2010:32))

In short, manner verbs encode a complex combination of changes that do not constitute a change in the values of a single attribute.

### 2.2.3. Definition of Result

Let us turn to the definition of “result”. Rappaport Hovav and Levin (2010) define results as scalar changes, as in (8).<sup>2</sup>

- (8) [...] scalar changes, where a scalar is a set of degrees — points or intervals indicating measurement values — on a particular dimension (e.g. height, temperature, cost), with an associated ordering relation

(Rappaport Hovav and Levin (2010:28)).”

The canonical examples of scalar change verbs are so-called degree achievement verbs such as *warm* in the sentence *I warmed the soup*, where the soup undergoes a change along a totally ordered temperature scale of degree of warmth.

Rappaport Hovav and Levin’s definition of results seems to be problematic in that it yields an ontological mismatch: scalar changes are dynamic events, whereas result is a property/state. Husband (2011) also points out a potential problem for the delineation of results. On the basis of Rappaport Hovav and Levin’s definition of results, certain manner verbs seem to obtain some kind of results. Observe the following example:

- (9) a. # The squirrel nibbled at the apple, but the apple remained whole.  
b. # Mary wiped the table, but no friction resulted.  
c. # John ran in place, but he burned no calories.

(Husband (2011:114))

These results seem to meet their definition of result. For example, calories that are saved as fat are expended with his running (i.e., the amount of calories decreased along his running). However, the fact remains that the verb *run* is not classified into result verbs. Moreover, on Rappaport Hovav and Levin's account, motion verbs like *cross* and *traverse* are not verbs of scalar changes, that is, result verbs. These verbs do not specify the direction of motion along the path, and hence they do not impose an ordering on the points on the path. As Rappaport Hovav and Levin (2010:30) state, "the verb *cross* is equally applicable whether a traversal of the English Channel is from England to France or from France to England." However, many linguistic facts show that these verbs are result verbs. Among such facts is their incompatibility with a result-denial clause. As is well known, the sentence with a result verb is incompatible with a result-denial clause. This is illustrated in (10).

- (10) a. # Mary entered the classroom, but she isn't in the classroom.  
b. # Tom just broke the vase, but it is not broken.

Since the verbs *enter* in (10a) and *break* in (10b), which are canonical result verbs, have a result entailment, denying the result gives rise to a contradiction with the sentence involving the result verbs. The same goes for (11).

- (11) a. # Bill crossed the river, but he didn't reach the bank on the other side.  
b. # I traversed the Indian Ocean, but I headed back to the start point on the way.

The behavior in (11) is identical to that involving canonical result verbs like *enter* and *break*. This result also leads us to suggest an alternative to Rappaport Hovav and Levin's definition of results.

To resolve such problematic points, we adopt Miyakoshi's (2010) definition of result. He defines 'result' as an aspect phase after a change of state or change of location in a single event (i.e. "resultative phase" in Miyakoshi (2010)). On the basis of his proposal, change along a scale should be assigned to the BECOME predicate in an event structure involving a result root (i.e. [y BECOME z]), not to result meaning components in themselves. Based on Miyakoshi's (2010) definition, the verbs in (9) can clearly be classified into manner verbs because it is our encyclopedic knowledge but not the lexical entailment that makes the sentences in (9) weird, and the verbs *cross* and *traverse*, as shown in (11), can also be classified into result verbs because they actually specify a mover's reaching the goal of motion.

In the following section, we will inspect whether the alleged counterexamples to manner/result complementarity specify a result state after a change of state/location in a single event. More specifically, in section 2.3 we deal with manner-of-killing verbs that Beavers and Koontz-Garboden (2012) analyze as a counterexample to manner/result complementarity. We argue that a "resulthood" meaning of manner-of-killing verbs such as death merely comes from our encyclopedic knowledge that people die when drowned, electrocuted, or guillotined. Our discussion leads to a conclusion that they do not encode result, and therefore is a valid hypothesis.

### **2.3. An Apparent Counterexample to Manner/Result Complementarity**

This section investigates English manner-of-killing verbs that Beavers and Koontz-Garboden (2012) regard as a counterexample to manner/result complementarity.<sup>3</sup> In what follows, section 2.3.1 outlines their observation. Section 2.3.2 points out some problems with their analysis and gives a closer look at English manner-of-killing verbs.

#### **2.3.1. English Manner-of-Killing Verbs**

Beavers and Koontz-Garboden (2012) observe that manner-of-killing verbs, exemplified in (12), seem to encode both a result state and specific manners of bringing it about.

(12) Shane {drowned/electrocuted/guillotined} Sandy.

(Beavers and Koontz-Garboden (2012:334), with slight modifications)

Intuitively, the verbs in (12) designate the means of Shane's killing Sandy.<sup>4</sup> If these verbs really encode a result state of Shane, they are counterexamples to the manner/result complementarity.

The key issue here is whether or not manner-of-killing verbs actually entail a result state. Beavers and Koontz-Garboden (2012) adduce two types of evidence for the assumption that manner-of-killing verbs encode a result state. A direct and simple way to diagnose result is to see if denying a result gives rise to a contradiction, as shown in (13).<sup>5</sup>



(13) a. # Shane just broke the vase, but nothing is different about it.

b. Tracy just wiped the floor, but nothing is different about it.

(Beavers and Koontz-Garboden (2012:337))

Canonical result verbs generate a contradiction with the continuation that denies a result, as in (13a), but manner verbs do not, as in (13b). Beavers and Koontz-Garboden (2012:338) give their judgments that manner-of-killing verbs yield a contradiction with the result-denial clause that follows, as shown in (14).

(14) a. # Jane just drowned Joe, but nothing is different about him.

b. # Jane just crucified Joe, but nothing is different about him.

(Beavers and Koontz-Garboden (2012:338))

They provide as another piece of evidence the range of possible resultative constructions that the verb may appear in. It is generally said that with the range of possible resultative constructions, manner verbs are less constrained than result verbs, as designated in (15).

(15) a. # Kim broke the stick {across the room/purple}.

b. Cinderella scrubbed the table {clean/shiny/bare}.

(Beavers and Koontz-Garboden (2012:340-341), with slight modifications)

They point out that manner-of-killing verbs pattern like result verbs, in that resultative phrases that they occur with are more restricted. Compare the sentences in (16) with

those in (17).

- (16) a. Faulty ground wires in a building electrocuted him to death in 2004.  
b. When he came, his semen short circuited the sander and electrocuted him dead.
- (17) a. # Shane electrocuted the prisoner to a crisp.  
b. # Shane drowned Sandy blue.  
c. # Shane hanged the prisoner thin.  
d. # The Roman crucified Jesus to the tomb.

(Beavers and Koontz-Garboden (2012:341))

As (16) shows, the manner-of-killing verb *electrocute* can take resultative phrases specifying death. However, it cannot take resultative phrases that specify other end states, as in (17). The same goes for other manner-of-killing verbs like *drown*, *hang* and *crucify*.

These two types of linguistic data lead Beavers and Koontz-Garboden (2012) to conclude that manner-of-killing verbs encode a result meaning component as well as a manner meaning component.

### **2.3.2. Some Problems with Beavers and Koontz-Garboden (2012)**

Thus far, we have briefly overviewed Beavers and Koontz-Garboden's (2012) observation of manner-of-killing verbs. The important point here is whether the diagnostics for result provided by Beavers and Koontz-Garboden really indicate that the manner-of-killing verbs entail a result. This section shows that there are some problems with Beavers and Koontz-Garboden's (2012) analysis.

Superficially, the pragmatic contradictions and restricted resultative constructions above suggest that manner-of-killing verbs lexicalize a result. Beavers and Koontz-Garboden's (2012) argument, however, is not tenable for several reasons. First of all, as I noted in footnote 5, the result-denial clause *but nothing is different about x* that they adopt may deny not only the result meaning encoded by a verb but also an implication evoked by a predicate (actually, this result-denial clause over-applies to the sentence that a certain manner verb like *run*, as shown in (i) in footnote 5).

Second, with the diagnostic involving the restricted resultative phrases, the distinction of the range of possible resultative constructions between result verbs and manner verbs is not so clear. Observe the following examples:

- (18) a. John broke the egg into the bowl.  
b. The butcher sliced the salami onto the wax paper.

(Goldberg (1995:171))

As (18) shows, the result verbs like *break* and *slice*, for instance, can be used with the resultative phrase *into NP* or *onto NP* denoting the goal of change of location as well as denoting the result state of change of state.

The range of resultative constructions that the prototypical manner verb *hammer* appears in seems to be restricted as well as the range of those that result verbs appear in. For instance, despite a contextual support, the resultative constructions in (19) are judged infelicitous.<sup>6</sup>

- (19) a. [Situation: There is metal of which color changes from silver to blue when it was pounded by a hammer.]

# John hammered the metal blue.

b. [Situation: John perfects the metal to a fine art by hammering it.]

# John hammered the metal shiny.

Although Beavers and Koontz-Garboden (2012) argue that the range of resultative constructions that manner verbs appear in is less restricted than the range of those that result verbs appear in, as the sentences in (19) show, the resultative phrases that the manner verb *hammer* occurs with are semantically restricted to some extent.

Moreover, according to all my three informants, in the case of manner-of-killing verbs, the sentences that Beavers and Koontz-Garboden (2012) judge to be unacceptable *are* fully acceptable, as shown in (20).

(20) a. Shane electrocuted the prisoner to a crisp. (= (15a))

b. The Romans crucified Jesus to the tomb.

As Goldberg and Jackendoff (2004) mention, because the strict range of resultative constructions a verb appears in is still unrevealed, it is not suitable for the diagnostic for a verb encoding a result state.

We have reviewed Beavers and Koontz-Garboden's (2012) observation that all manner-of-killing verbs encode result, and shown that their analysis is problematic for several reasons. In what follows, we give a close look at manner-of-killing verbs; as an approximation, we review Husband's (2011) observation of these kinds of verbs.

## 2.4. Two Types of Manner-of-Killing Verbs

As Husband (2011) points out, manner-of-killing verbs can be divided into two classes in terms of aspectual properties: “Class I manner-of-killing verbs,” which form achievement predicates, and “Class II manner-of-killing verbs,” which form activity/accomplishment predicates.

- (21) a. *Class I manner-of-killing verbs*: guillotine, decapitate, etc.  
b. *Class II manner-of-killing verbs*: electrocute, drown, poison, etc.

He provides as evidence for the distinction of the two classes the difference of their behavior with *for*-duration modifiers between Class I and Class II manner-of-killing verbs. To begin with, the verb *kill* does not allow an interruptive interpretation. Observe the following example:

- (22) #North Korea killed two civilians for an hour.

(Husband (2011:115))

The modifier *for x times* may admit an interruptive event interpretation with accomplishment predicates in which the process component of the accomplishment was initiated, but not completed within the specified duration. Since the verb *kill* encodes the result state of death, which results from the end of the process of killing, the sentence in (22) is incompatible with an interruptive interpretation. Like in (22), the *for*-duration modifiers do not admit an interruptive event interpretation with Class I manner-of-killing verbs, as in (23), while Class II manner-of-killing verbs allow an interruptive interpretation, as in (24).

- (23) a. # King Luis XVI was guillotined for 30 seconds.  
b. # Cicero was decapitated for 10 minutes.
- (24) a. The State of Florida electrocuted Ted Bundy for 30 seconds.  
b. Joe Delaney drowned for 5 minutes.

(Husband (2011:116))

Electrocuting someone for short duration as a single event, for example, does not cause him to die. With an interruptive event interpretation, we can safely say that a result meaning component like death is absent from Class II manner-of-killing verbs.

Husband also provides their different behaviors with *to death* resultative phrases between Class I and Class II manner-of-killing verbs. Beginning again with the verb *kill*, we see from (25) the resultative phrase *to death* is unacceptable.

- (25) #North Korea killed two civilians to death.

(Husband (2011:117))

As Tenny (1987) notes, there is an implicit generalization that only one result is possible per event. Given the generalization, the result verb *kill* lexicalizes a result, and thus the resultative phrase that denotes the same result state as the verb is blocked, as in (25). Interestingly, Class II manner-of-killing verbs, not Class I, pattern like the verb *kill*. This is illustrated in (26) and (27).

- (26) a. # King Luis XVI was guillotined to death.  
b. # Cicero was decapitated to death.

- (27) a. The State of Florida electrocuted Ted Bundy to death.  
b. Joe Delaney drowned to death.

(Husband (2011:117))

Following this line of reasoning, Class I manner-of-killing verbs, as in (26), seem to lexicalize a result which bans the resultative phrase *to death*, whereas Class II manner-of-killing verbs in (27) seems to lexicalize a result which permit the resultative phrase *to death*, or lack a result meaning component, as manner verbs do. Combined with (24), (27) also lead us to conclude that Class II manner-of-killing verbs do not encode a result state.

## **2.5. All Manner-of-Killing Verbs Do Not Encode Result**

As we have seen in section 2.2.2, Husband (2011) argues that while Class I manner-of-killing verbs lexicalize a result, Class II manner-of-killing verbs do not. I claim, however, on the basis of at least four arguments, that even Class I manner-of-killing verbs do not lexicalize a result. That is to say, I claim that no manner-of-killing verbs are counterexamples to the manner/result complementarity.

### **2.5.1. Semelfactive Verbs**

First, the *for*-duration diagnostic just shows that the events denoted by Class I manner-of-killing verbs like *guillotine* are not durative events: they do not have subparts, where a subpart is defined as part of an event that is itself a separate event (Dowty (1979)). Note here that there are some manner verbs denoting a punctual

event.

(28) Mary {knocked/kicked} the door for 30 seconds.

The verbs *knock* and *kick* in (28) can only be interpreted iteratively and do not permit an interruptive interpretation. These verbs are called semelfactive verbs and clearly distinguished from achievement verbs, which are classified into result verbs. Given (28), a verb denoting a punctual event is not equivalent to one entailing result. Thus, the *for*-duration diagnostic does not directly support the presence of a result meaning component in Class I manner-of-killing verbs.

### 2.5.2. Denial of Result

Second, the sentences involving Class I manner-of-killing verbs *are* compatible with continuations that deny a result when an appropriate context is given. To begin with, the sentence with the verb *kill* is incompatible with a continuation that denies a result even when an appropriate context given, as shown in (29).

(29) [Situation: The prisoner is an alien who is alive even without his head.]

#The executioner killed the prisoner by cutting off his head, but he didn't die.

As I mentioned in section 2.2.1, the lexicalized components of meaning are lexical entailments, which must be entailed in all uses of a verb, regardless of contexts. Hence the sentence in (29), which involves the result verb *kill*, yields a contradiction despite a contextual support.

Unlike the case of *kill*, Class I manner-of-killing verbs like *guillotine* do not yield



a contradiction with a result-denial clause. Consider a situation where an executioner guillotines an alien who can be alive even without his head, or who can change his skin to super-alloy or diamond. According to my informants, in such situations, the denial of a result state is judged acceptable, as shown in (30).

- (30) a. [Situation: The prisoner is an alien who is alive even without his head.]  
The executioner guillotined the prisoner, but he didn't die.
- b. [Situation: The prisoner is an alien who can change his skin to super-alloy.]  
The executioner guillotined the prisoner, but his head couldn't cut off.

This contrast between (29) and (30) tells us that the verb *guillotine* does not encode a result state. Notice here that, with the sentences in (30), the information on what the patient refers to is closely related to the contradiction that may occur. This suggests that even Class I manner-of-killing verbs do not entail the result state of death or otherwise; rather, these “resulthood” meanings come from a pragmatic inference (or a “cultural unit” in Goldberg’s (2010) term) that, for instance, life generally dies when the head is cut off.

### 2.5.3. The Resultative Phrase *In Two Pieces*

Third, our claim that Class I manner-of-killing verbs do not entail a result state can be supported by their incompatibility with resultative phrases involving the locative preposition *in* (henceforth, *in* resultative phrases) (Namiki (2013b)). It is generally said that resultative constructions with a result verb may be used with an *in* resultative phrase, as well as an *into* resultative phrase, as shown in (31), whereas those with a

manner verb may be used only with an *into* resultative phrase, as shown in (32) (Folli and Ramchand (2005), Kitahara (2009), Ramchand (2008), among others).

- (31) a. Bill broke the vase {into/in} pieces.  
b. Mary cut the tape {into/in} three pieces.
- (32) a. Bill hammered the vase {into/\*in} pieces.  
b. The tiger clawed the curtain {into/\*in} tatters.

Although the details of how this phenomenon is captured differ from theory to theory, the studies, especially on the event structure, argue that it is the predicate [BECOME ... BE AT-z] in the verb that licenses an *in* resultative phrase. Given that, we can assume that a result verb denoting a cutting event is compatible with an *in* resultative phrase like *in two pieces*. Interestingly, the Class II manner-of-killing verb *guillotine*, which generally denotes a cutting event in which someone's head is cut off, patterns like the manner verbs in (32) on this diagnostic, in that the *into* resultative phrase *into two pieces* is compatible with the verb in the resultative construction, whereas the *in* resultative phrase is not, as in (33).

- (33) The executioner guillotined the prisoner {into/\*in} two pieces.

This is not surprising if the verb does not have [BECOME ... BE AT-z] in its LCS. Thus, the Class I manner-of-killing verb *guillotine* does not entail that someone's head is cut off, and it is therefore just a manner verb.

#### 2.5.4. Statal Passive Readings

Finally, we reinforce our claim that manner-of-killing verbs do not encode result, referring to the linguistic data that Husband uses to suggest that Class I manner-of-killing verbs encode result. It should be noticed that the sentences involving Class I manner-of-killing verbs are not parallel in form to those involving Class II manner-of-killing verbs.

- (34) a. # King Luis XVI was guillotined to death.  
b. # Cicero was decapitated to death.
- (35) a. The State of Florida electrocuted Ted Bundy to death.  
b. Joe Delaney drowned to death.

As shown in (26) and (27), repeated as (34) and (35) respectively, the sentences with Class I manner-of-killing verbs are passivized, whereas those with Class II manner-of-killing verbs are not. I have shown, on the basis of the three discussions above, that Class I manner-of-killing verbs do not encode a result. However, interestingly, when manner-of-killing verbs are used, regardless of their classes, the passivized sentences can denote that the patient realized as the subject is killed in the manner that the verb designates.<sup>7</sup> This is borne out by the diagnostic of denial of result, as shown in (36) and (37). According to my informants, denying a result yields a contradiction when manner-of-killing verbs are used in the passive form.

- (36) a. [Situation: The prisoner is an alien who is alive even without his head.]  
# The alien was guillotined, but he didn't die.
- b. [Situation: The prisoner is an alien who can change his skin to super-alloy.]

# The alien was guillotined, but his head couldn't cut off.

(37) #Jim was drowned, but he was saved by the rescue team.

The sentences in (36) are judged to be odd even with the aid of the contexts like (30). This suggests that they denote a result state as well as a manner of carrying out an action. In what follows, I will give an account for the unacceptability of the sentences in (36) and (37), in terms of the nature of passive.

As is well known, passive sentences can be ambiguous between statal passive readings and actional passive readings (Jespersen (1927), Langacker (1982), Nakau (1997), Nemoto (2007), among others). For example, Langacker (1982:61) points out that the passive sentence in (38) can be interpreted ambiguously as the reading indicated by (38a) or that indicated by (38b).

(38) The town was destroyed.

- a. The town was destroyed when we got there.
- b. The town was destroyed house by house.

(Langacker (1982:61))

(38a) denotes only the final state of the process of destruction, while (38b) denotes all the states within the process of destruction. The same goes for passive sentences with manner verbs like *hammer*, as in (39).

(39) The car was hammered.

- a. The car was hammered when I got there.
- b. The car was hammered again and again.

The sentence in (39) can be ambiguous between the statal passive reading indicated by (39a) and the actional passive reading indicated by (39b). According to my informants, (39a) denotes that the car had on its body not a few dents caused by hammering it.

In addition to the interpretation of the passive sentence, a piece of evidence supports the statal passive. It comes from the response to the question *What was X like?* The question *What was X like?* asks what state the reference of X was in. An answer to the question must be a state-reporting sentence. The statal passive sentence can be an answer to the question, whereas the actional passive sentence cannot, as shown in (40).

(40) Q: What was the car like?

A: It was hammered when I got there.

#It was hammered again and again.

Namiki (2013b) points out an interesting property of the statal passive: passivized resultative constructions involving manner verbs like *hammer* and *claw* can license *in* resultative phrases. Observe the following examples:

(41) a. The vase was already hammered in pieces when we got there.

b. \* The vase was hammered in pieces again and again.

(42) a. The curtain was already clawed in tatters when we got there.

b. \* The curtain was clawed in tatters again and again.

It should be noticed here that the statal passive use of the resultative construction with a

manner verb, not the actional passive, permits the *in* resultative phrase, as (41) and (42) clearly show. Recall that it is the predicate [BECOME ... BE AT-z] in the verb that licenses an *in* resultative phrase, as we have seen in section 2.5.3. Given that, the statal passive of a manner verb, not the verb itself, can involve a result meaning component: in the statal passive, the process of an event is backgrounded and only the final state of the process (i.e., the result state) is focused on.<sup>8,9</sup>

If the statal passive entails a result state, then we can explain the unacceptability of the resultative phrase *to death*, as in (34), repeated here as (43), and the denial of result, as in (36), repeated here as (44).

- (43) a. # King Luis XVI was guillotined to death.  
       b. # Cicero was decapitated to death.
- (44) a. [Situation: The prisoner is an alien who is alive even without his head.]  
       # The alien was guillotined, but he didn't die.  
       b. [Situation: The prisoner is an alien who can change his skin to  
           super-alloy.]  
       # The alien was guillotined, but his head couldn't cut off.

Given the property of the statal passive, the statal passive sentences, not active passive ones, in (43) can denote a final state of the patient, which leads us to judge the resultative phrase *to death* redundant. The same goes for (44): the final state of the patient entailed by the statal passive yields the contradiction with the continuation that denies a result state.

The analysis of (43) and (44) as statal passives can be supported by the acceptability of *in* resultative phrases. Although the manner-of-killing verb *guillotine*

is incompatible with an *in* resultative phrase, as shown in section 2.5.3, its passive form can be used with the *in* resultative phrase, as in (45).

(45) The prisoner was guillotined in two pieces.

As we have seen just above, it is the result meaning component of the verb or the predicate that licenses the *in* resultative phrase. Thus, (45) indicates that the passive form “*be + guillotined*” involve a result meaning component. This leads us to conclude that Class I manner-of-killing verbs also do not denote a result state.

## 2.6. Conclusion

This chapter has discussed the validity of manner/result complementarity, which is proposed by Levin and Rappaport Hovav (1991, 1992, 1995, 2013) and Rappaport Hovav and Levin (2010). This hypothesis rests on negative evidence; it is the lack of verbs lexicalizing both manner and result that supports the hypothesis. Thus, it is an effective way to take a close look at manner-of-killing verbs that Beavers and Koontz-Garboden (2012) and Husband (2011) view as a counterexample to the hypothesis.

The main points of this chapter can be summarized as follows: First, as Husband (2011) showed, the absence of a result meaning component in Class II manner-of-killing verbs is borne out by the acceptability of an interruptive interpretation of the *for X times* modification, and their compatibility with the resultative phrase *to death*. Second, I explained that the unacceptability of an interruptive interpretation of the *for X times* modification to Class I manner-of-killing verbs can be attributed to their aspectual

property of semelfactive. Third, I confirmed that Class I manner-of-killing verbs do not give rise to a contradiction with result-denial clauses when an appropriate context is given. Fourth, I pointed out that the Class I manner-of-killing verb *guillotine* is incompatible with the resultative phrase *in two pieces*, which can be used with result verbs denoting a cutting or breaking event. Finally, I revealed that the result state denoted by the sentence with a Class I manner-of-killing verb is reduced to the property of what we call the statal passive, not to the verb itself. These arguments lead us to conclude that all of the manner-of-killing verbs do not lexicalize a result. Although they may strongly evoke or imply a result state when the patient of an action is human, they do not entail any result states: a resulthood meaning comes from a pragmatic inference that the patient generally die at the end of the process denoted by the manner-of-killing verb.

Again, the hypothesis of manner/result complementarity rests on negative evidence; it is the lack of verbs lexicalizing both manner and result that supports the hypothesis. The discussion in this chapter leads us to conclude that manner/result complementarity is a valid hypothesis.



## Notes to Chapter 2

\* This chapter is a unified and radically revised version of the papers of mine that appeared as Namiki (2013a) and Namiki (2014).

<sup>1</sup> Miyakoshi (2017) discusses the following three types of Japanese expressions which apparently challenge manner/result complementarity: (i) verbs/sentences with the intransitivizing affix *-(r)e-* like *Niku-ga yak-e-ta* ‘The meat grilled’, (ii) those with the potential affix *-(r)e-* like *Okuba-ga migak-e-teiru* ‘The molars have been brushed well’, and (iii) those with the achievement affix *-rasar-* in the Hokkaido dialect like *Botan-ga os-asat-teiru* ‘The button has been pressed.’ See Miyakoshi (2017) for details.

<sup>2</sup> Rappaport Hovav and Levin (2010) also apply the definition of result to the verbs in motion domain. For instance, the directed motion verb *ascend* involves a scale in the vertical dimension with the points ordered against the pull of gravity: an event of ascending must have an entity showing an increase in value on this dimension.

<sup>3</sup> There is another type of apparent counterexamples to manner/result complementarity: so-called English manner-of-cooking verbs (e.g. *braise*, *poach*, etc.). I will leave this issue open for future research.

<sup>4</sup> Beavers and Koontz-Garboden (2012), using some diagnostics, show that manner-of-killing verbs encode manner. One of the diagnostics involves selectional restrictions on the subject. While result verbs permit inanimates and natural forces as well as animates to be their subject, as in (i), manner verbs do not, as in (ii).

- (i) a. John broke the vase.
- b. {The hammer/the earthquake} broke the vase.
- c. The earthquake broke the vase.

- (ii) a. John wiped the floor.
- b. # The stiff brush wiped the floor.
- c. # The earthquake wiped the floor.

As is the case with manner verbs, manner-of-killing verbs disallow inanimates and natural forces, as in (iii).

- (iii) a. John hanged Jesus.
- b. # A sailing rope hanged Jesus.
- c. # The wind hanged Jesus.

(Beavers and Koontz-Garboden (2012:344-345), with slight modifications)

They argue that this contrast between result verbs on the one hand and manner verbs and manner-of-killing verbs on the other follows if manner verbs and manner-of-killing verbs require specific actions of their subjects.

<sup>5</sup> Beavers and Koontz-Garboden (2012) adopt *but nothing is different about x* as the result-denial clause that can be uniformly applied to all kinds of results. This clause, however, may not apply to sentences involving certain manner verbs, as shown in (i).

- (i) #Mary ran in the park for thirty minutes, but nothing is different about her.

Again, although the verb *run* is a genuine manner verb, the contradiction seems to be valid, at least, on the basis of our real world knowledge. In sections below, I will use result-denial clauses that deny the result that a verb is assumed to encode.

<sup>6</sup> Mateu (2012:261, footnote 12) also points out that the sentence in (19a) is ill-formed, and mentions a possibility that the ill-formedness is attributed to semantic or conceptual compatibility.

<sup>7</sup> According to my informants, although the sentence in (34a) sounds redundant, the use of the verb *guillotine* with the resultative phrase *to death* is fully acceptable.

- (i) The executioner guillotined King Luis XVI to death.

This fact also indicates that the redundancy of the sentence in (34a) results from a property of the passive form.

<sup>8</sup> The assumption that in the statal passive the process of an event is backgrounded is borne out by the compatibility of an agentive *by*-phrase. An actional passive sentence is compatible with an agentive *by*-phrase, as in (ib), a statal passive sentence is not, as in (ia).

- (i) a. # The car was hammered by John when I got there.  
b. The car was hammered again and again by John.

The *by*-phrase refers to the agent of the event denoted by the predicate. Thus, the occurrence of the agentive *by*-phrase focuses on the process of the event, rather than the final state. Given the property of the agentive *by*-phrase, the unacceptability of an agentive *by*-phrase can be viewed as evidence that the event structure of a statal passive sentence lack the process of the event.

<sup>9</sup> The past participles *hammered* and *clawed* may correspond to what Embick (2004) calls “resultative participles,” which refer to a result state of an event represented

grammatically.

## Chapter 3

### Path Coercions in English Motion Expressions\*

#### 3.1. Introduction

The meaning of a complex expression is sometimes not completely traceable to the meanings of its parts. This is thought of as a violation of the compositionality principle, in which “[a]ll elements of content in the meaning of a sentence are found in the lexical conceptual structure (LCSs) of the lexical items composing the sentence” (Jackendoff (1997:48)). To avoid this violation, a number of researchers have introduced meaning shifting mechanisms that allow syntactic elements to be composed with incompatible meanings. *Semantic coercion* (or simply *coercion*) has been used as the cover term for resolutions to the violation of the compositionality principle. Semantic coercion can be classified into a number of sub-types. One of these is called complement coercions (Jackendoff (1997), Pustejovsky (1995), among others). This type is exemplified by the following sentences:<sup>1</sup>

- (1) a. Mary began the novel. (Pustejovsky (1995:32))  
b. John finished his article. (Pustejovsky (1995:45))

The sentence in (1a) refers to a time at which Mary began some event involving a specific novel such as reading or writing, although it does not contain expressions that refer to any event. Likewise, (1b) is preferably interpreted as the event of John’s finishing writing his article.

This chapter concerns a new type of semantic coercion, as exemplified in (2) and (3).

(2) Sharon jumped in the lake.

a. Sharon jumped while being in the lake.

b. Sharon jumped and (as a result) she ended up in the lake.

(Gehrke (2008:89))

(3) The mouse ran under the table.

a. The rat ran while being under the table.

b. The rat ran and (as a result) it ended up under the table.

(Jackendoff (1990:72))

Certain spatial prepositional phrases (henceforth, spatial PPs) are ambiguous between a locative and a directional interpretation. The PP *in the lake* in (2) can be interpreted as either the location where an event occurred, or the location where a directed motion event ended up. Likewise, *under the table* in (3) can be interpreted as either the location of an event or the goal of motion. One might think that these spatial PPs are lexically ambiguous between the two interpretations. Following a traditional classification of spatial Ps, we refer to spatial prepositions related to Place functions as locative Ps, and those related to Path functions as directional Ps. Such a lexical approach leads to argue that the locative P *in*, for example, has the same lexical function as the directional P *into*. Under this analysis, both locative and directional usages of locative PPs should be freely available independently of contexts. However, this is not the case: locative PPs do not always have this ambiguity. With motion verbs like *dance*, for example, they have only a locative interpretation, as exemplified in (4) and

(5):

- (4) A gentleman and lady {danced/waltzed} under the chandelier.
  - a. They {danced/waltzed} while being under the chandelier.
  - b. \* They {danced/waltzed} and (as a result) they ended up under the chandelier.
- (5) They danced in the ballroom.
  - a. They danced while being in the ballroom.
  - b. \* They danced and (as a result) they ended up in the ballroom.

(Nikitina (2008:185), with slight modifications)

The PPs *under the chandelier* and *in the ballroom* in the context of *dance* can only denote the location where the act of dancing took place. The contrast between (2) and (3), on the one hand, and (4) and (5), on the other hand, raises two questions: (i) when can a locative PP be interpreted as the goal of motion, and (ii) how can we capture conditions on directional interpretations of locative PPs?

To answer these questions, I explore a mechanism of directional interpretations of locative PPs in line with the Structural Ambiguity Hypothesis (Gehrke (2008), among others). This hypothesis is summarized in (6).

(6) *The Structural Ambiguity Hypothesis*

The spatial Ps *in*, *on*, *under* and *behind* are locative only. Any ambiguity *between* a directional and a locative reading is structural and not lexical.

(Gehrke (2008:88))

I assume that the sense of goal is not inherent in locative PPs like *under* and *in*. This assumption leads to suggest that (2) and (3) denote directed motion events, although they do not involve a lexical item encoding a path meaning component, such as the directional P *to*.<sup>2</sup> Thus, directional interpretations of locative PPs can be included in cases of semantic coercion. I will argue that the directional interpretation of a locative PP is generated by a semantic coercion of the meaning component of a verb and that of a locative PP. Since the semantic coercion that we deal with concerns a path meaning component, we will call this semantic operation “path coercion”.

This chapter is organized as follows. Section 3.2 surveys two types of previous approaches to directional interpretations of locative PPs, namely syntactic approaches and the cognitive approach, and points out some empirical problems. Section 3.3 proposes a semantic analysis of the directed motion events and the locative PPs interpreted as goals of motion. Section 3.4 investigates conditions on directional interpretations of *in* phrases and shows that my analysis can apply to other locative PPs interpreted as the goal of motion. Section 3.5 discusses the consequence resulting from the proposal. Section 3.6 concludes this chapter.

### **3.2. Previous Approaches**

This section reviews two types of previous studies on directional interpretations of English locative PPs: one is the syntactic approach and the other is the cognitive approach. The syntactic approach is also divided into two types: one is called the null path head analysis, and the other is called empty verb analysis.

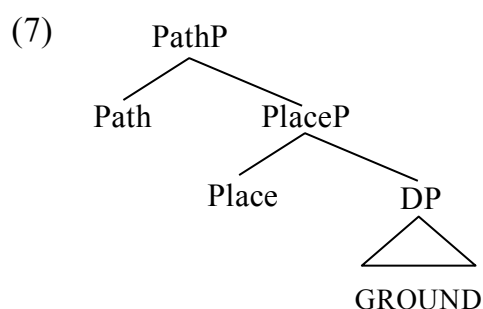


### 3.2.1. Syntactic Approaches to Directional Interpretations of Locative PPs

One of the syntactic approaches to directional interpretations of locative PPs is null or empty element analysis (Kaga (2007), Noonan (2010), Svenonius (2010)). Much of the work on directional interpretations of locative PPs assumes an empty or null element licensing the locative Ps to be interpreted directionally. The element can further fall into two types: the null Path head and the empty verb.

#### 3.2.1.1. Null Path Head Analysis

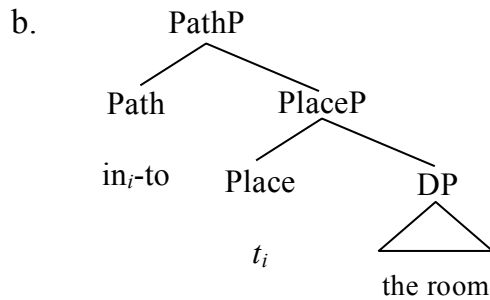
Many authors who propose the existence of the null Path head assume that the head P is decomposed into several sub-types. Among these, following Jackendoff (1983), much of the recent work on the syntax of PPs has usually argued for the presence of Path and Place, and the former head selects the latter head (Koopman (2000), Kracht (2002), den Dikken (2003), Ramchand (2008), Svenonius (2010)). The minimal structure of PPs is represented as in (7), cited from Ramchand (2008:110):



In this structure, a particular P is associated with either Place or Path. Locative Ps such as *in* and *under* are merged as Place. Directional Ps license a PathP which embeds a PlaceP. The Place head can be filled either with a silent AT or with lexically locative Ps if Path is headed by *to*. For example, the Place head *in* incorporates into *to*,

resulting in the complex preposition *into*, as illustrated in (8):

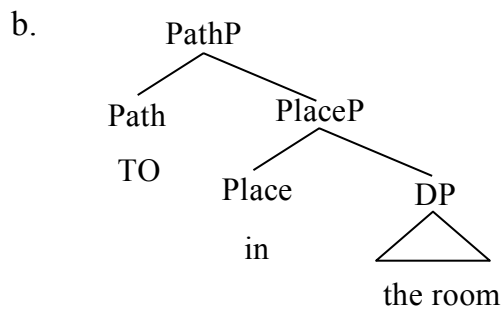
(8) a. into the room



Recent researches (Svenonius (2010), among others) assume that the extended projections of P contain more functional structures than the structure in (7). Since complex structures of PP are not very relevant to the points that I make in this chapter, I will continue to use the simple structure in (7).

Based on the structure in (7), Svenonius (2010) argues that the directional interpretation of a locative PP results from merging a null Path head with the locative PlaceP. He assumes that if no element occupies in the Path head position, this head attracts the Place head. An example of the *in* phrase interpreted directionally is represented as in (9), where the null Path head is represented as TO.

(9) a. in the room (under the directional reading)



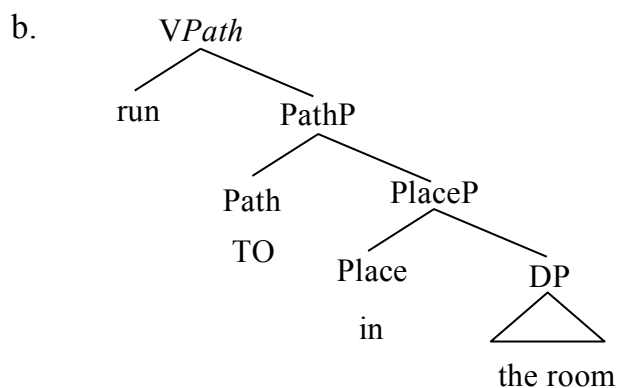
Svenonius (2010:130) takes examples like those in (10) as evidence for the presence of the null Path head. Observe the following examples:

- (10) a. The boat drifted (?to) behind the hill.  
 b. The boat drifted (?to) inside the cave.

Svenonius predicts that if a null Path head exists, it can be pronounced under certain conditions. His prediction is borne out by (10), where the directional P *to* is marginally licit when used with a locative PP interpreted as the goal of motion.

As shown in (4) and (5) in section 1 and as has been noted in Folli and Ramchand (2005) and Svenonius (2010), directional interpretations of locative PPs are available only in certain contexts. This observation leads Svenonius to propose that it is a path meaning component of some motion verbs that licenses a null Path head. He annotates motion verbs with a subscript *Path* to indicate that they allow directional interpretations of locative PPs. In this framework, the syntactic structure of *run in the room* under the directional reading can be represented as shown in (11b).

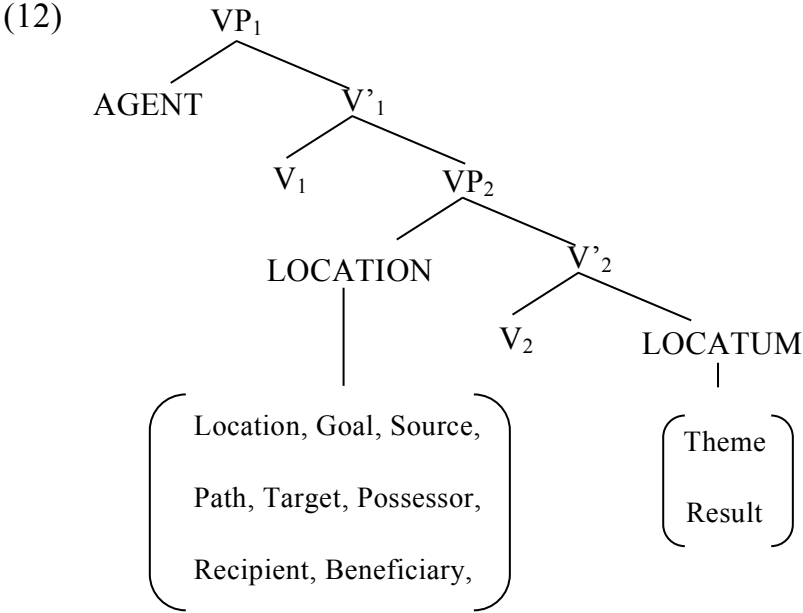
- (11) a. run in the room (under the directional reading)



On the basis of the fact that the PP in *run in the room* can be interpreted as either locative or directional, this approach assumes that some manner-of-motion verbs like *run* are polysemous, that is to say, *run* has the locational and directional uses (cf. Thomas (2001), Noonan (2010)).

**3.2.1.2. Empty Verb Analysis**

In contrast to the null Path head analysis above, Kaga (2007b) assumes another type of null elements. He discusses a typological contrast of the availability of strong resultative constructions between satellite-framed languages such as English and German and verb-framed languages such as French and Japanese, based on the thematic hierarchy proposed by Kaga (2007a).



(Kaga (2007a:9))

Kaga (2007a) assumes a thematic hierarchy corresponding to a syntactic structure: a

syntactic structure maps a set of thematic roles to a VP shell structure, as shown in (12). In this theory, thematic roles proposed by the literature are classified into three macro-roles of AGENT, LOCATION, and LOCATUM, and these macro-roles are assigned to the three different argument positions.<sup>3</sup> For example, the macro-role of “LOCATUM is defined as a role assigned to an entity in motion or being located” (Kaga (2005:12)). Note that LOCATUM includes not only the micro-role of Theme but also Result. According to Kaga, since the micro-role of Result is regarded as a property that appears in (or sometimes disappears from) an entity as Location, it is a member of LOCATUM. Under this theory, the syntactic structure of an English transitive weak resultative is represented as in (13):

(13) a. John painted the wall red.

b. [<sub>VP1</sub> John [<sub>V'1</sub> V<sub>1</sub> [<sub>VP2</sub> the wall [<sub>V'2</sub> painted red]]]]

(Kaga (2007b:184))

The structure of the resultative sentence in (13a) is explained in the following way: the agent *John* is generated in the spec position of VP<sub>1</sub>, the subject of change of state *the wall* is generated in the spec position of VP<sub>2</sub>, and the adjective predicate *red* occupies the complement position of VP<sub>2</sub>. Then the lower verb *painted* moves to and adjoins to the upper verb.

One of Kaga's (2007a, 2007b) important assumptions related to our interest is the availability of an empty verb that serves as the lower V head. Kaga (2007b) proposes that the availability of an empty verb in the V<sub>2</sub> position determines the acceptability of strong resultatives. As Washio (1997), among others, points out, the English and German type of language allows strong resultatives, while the French and Japanese type

of language does not.

- (14) a. John hammered the metal flat.  
b. \* Jean a martelle le metal plat.  
Jean AUX hammered the metal flat

In the English sentence in (14a), the result XP *flat* is compatible with the manner verb *hammer*, which does not denote a result state by itself. Its French counterpart in (14b), on the other hand, is not acceptable. Kaga (2007b:185) suggests that the English resultative construction has the following syntactic structure.

- (15) a. John hammered the metal flat.  
b. [<sub>VP1</sub> John [<sub>V'1</sub> V<sub>1</sub> [<sub>VP2</sub> the metal [<sub>V'2</sub> hammered-*e<sub>v</sub>* flat]]]]]

Since the verb *hammer* does not denote a result state, it cannot take the complement. In his analysis, the empty verb *e<sub>v</sub>* can add a argument-taking capacity to the lexical verb *hammer*. The lexical verb *hammered* is merged with an empty verb to form the complex verb *hammered-e<sub>v</sub>*, which denotes a result state caused by the act of hammering. Then, the complex verb *hammered-e<sub>v</sub>* can take the adjective predicate *flat* as its complement, as is the case with weak resultatives like (13).

Kaga (2007b) extends his analysis to directional interpretations of locative PPs. In analogy with the cross-linguistic variation of strong resultatives, the acceptability of directional interpretations of locative PPs differs between satellite-framed and verb-framed languages in general. Based on this typological contrast, he suggests that in satellite-framed languages, a manner-of-motion verb can be merged with an empty

verb, which can take a locative PP as the goal argument. Consider the following example, cited from Kaga (2007b:188):

- (16) a. The mouse crawled on the table.  
 b. [[<sub>VP1</sub> the mouse [<sub>V'1</sub> crawled]] on the table]  
 c. [<sub>VP1</sub> [<sub>V'1</sub> V1 [<sub>VP2</sub> on the table [<sub>V'2</sub> crawled-e<sub>v</sub> the mouse]]]]

(16a) has the syntactic structure in (16b) when the PP *on the table* is interpreted as the location of the event. In (16b) the unergative verb *crawl* shows up in the single VP<sub>1</sub> and the agent *the mouse* raises to the Spec of TP. Since the unergative verb *crawl* does not take a complement, the adjunct phrase *on the table* is attached to VP. (16a), in turn, has the syntactic structure in (16c) when the PP is directional. In (16c) *on the table* is generated in the Spec position of VP<sub>2</sub> as it is interpreted as the goal of motion, and *the mouse* as the Theme occupies the complement position of VP<sub>2</sub>. Kaga assumes that as is the case with strong resultatives like (15), it is an empty verb that takes the locative PP as its complement.

It should be noticed here that in Kaga's (2007b) analysis, directional PPs like *to*, *into*, and *onto* phrases with manner-of-motion verbs are also selected by an empty verb: no manner-of-motion verbs have the ability to take any goal arguments. An example of *to* phrases with the manner-of-motion verb *swim* is given in (17), where *swam* is merged with an empty verb and *to the shore* is generated in the Spec position of VP<sub>2</sub>.

- (17) a. Mary swam to the shore.  
 b. [<sub>VP1</sub> [<sub>V'1</sub> V1 [<sub>VP2</sub> to the shore [<sub>V'2</sub> swam-e<sub>v</sub> Mary]]]]

(Kaga (2007b:203))

An empty verb is not used without restrictions. Kaga (2007b:203) assumes the following condition in line with Rappaport Hovav and Levin (2001):

- (18) An empty verb is merged with an active verb iff the subevents denoted by the two verbs are co-identified, that is, they are conceived of as one event.

Take the sentence in (17a) for example. The event described by *Mary swam to the shore* can be decomposed into at least two subevents: Mary's swimming and her reaching the shore. These two subevents are co-identified, because they are temporally coextensive and unfold at the same rate: the subevent of swimming is accomplished when Mary reaches the shore. Thus, these two subevents are conceptualized as one event. The condition in (18) also captures the ungrammaticality of sentences like *\*Mary laughed to the room* (the intended meaning is "Mary entered the room (by) laughing."). The subevent of laughing is not generally conceptualized as a means of the subevent of entering the room. In this case, an empty verb cannot be merged with the verb *laugh*. Since *laugh* cannot take a goal argument in itself, the sentence *Mary laughed to the room* is judged to be ungrammatical.

### 3.2.1.3. The Need for Conditions on Directional Interpretations of Locative PPs

We have reviewed so far the two types of syntactic approach to directional interpretations of locative PPs. These approaches, however, seem to be insufficient in some respects.

A problem with the null Path head analysis concerns the licensing condition on a null Path head, which allows a locative PP to be interpreted directionally. The



researchers who employ the null Path head approach argue that it is the path meaning component of the verb that makes a null Path head available. However, they do not clearly define what the path meaning component is. Even if path meaning components of some manner-of-motion verbs are the same as those of result verbs like *go* and *come*, it leaves a further problem. The idea that some manner-of-motion verbs have both manner and path meaning components conflicts with a general constraint on the complexity of non-stative verb meanings. As seen in Chapter 2, this constraint is called manner/result complementarity proposed by Rappaport Hovav and Levin (2010), which is summarized as in (19):<sup>4</sup>

(19) *Manner/Result Complementarity*

Manner and result meaning components are in complementary distribution: a verb lexicalizes only one.

(Levin and Rappaport Hovav (2013:50))

The lexicalization constraint is supported by various kinds of linguistic data. A direct way to test a result state is to see if denying a result state gives rise to a contradiction. Canonical result verbs like *go* and *come* generate a contradiction with a continuation that denies a result state, but manner-of-motion verbs do not (e.g., #*John came (somewhere), but he didn't move anywhere.* vs. *John ran/jumped, but he didn't move anywhere.*). Although we need to take into account a lexical semantic difference between the *run* type and the *dance* type, the difference is not the presence or absence of a path (i.e. result) meaning component.

The empty verb approach may also need to consider at least two issues. A first issue concerns the parameter of the availability of an empty verb. According to the

empty verb approach, verb-framed languages do not have the ability to use an empty verb. This suggests that in languages like Japanese and French, a locative expression used with a manner-of-motion verb is not interpreted as the goal of motion. However, this is not the case. Japanese and French do have attested examples of directional interpretations of locative expressions, as shown in (20).

(20) a. Sassoku,       tukai-ga               *inaba-zyo-ni*   *hasitta.*

immediately messenger-NOM inaba-castle-to ran

‘Immediately, a messenger ran to the Inaba Castle.’

(Ryotaro, Shiba *Kunitori Monogatari*)

b. Elle a       couru   sous   le   pont   (afin   de   se   mettre   à l’abris).

she has run       under the bridge (in   order to find   shelter)

‘She has run under the bridge.’

(Noonan (2010:176))

In Japanese the goal phrase NP-*ni* ‘to NP’ canonically co-occurs only with a result verb like *iku* ‘go’, *kuru* ‘come’, etc. However, the phrase *inaba-zyo-ni* ‘to the Inaba Castle’ in (20a) can be used with the manner-of-motion verb *hasiru* ‘run’ in an appropriate context (see for more details Chapter 4). Likewise, in French the PP *sous le pont* ‘under the bridge’ with the manner-of-motion verb *courir* ‘run’ in (20b) is interpreted as the goal of motion.<sup>5</sup> The data in (20) demonstrates that there is a similarity of path coercion between satellite-framed and verb-framed languages. Although these types of data are not a core issue for the studies on the empty verb approach including Kaga (2007b), the parametric analysis may need to give a further account of the presence of the data in (20). While Kaga’s (2007b) parametric analysis deals with the

cross-linguistic variation of not only directional interpretations of locative phrases but also strong resultatives, “a hole” constructions, and gesture-expressions constructions, it does not correctly predict the similarity between satellite-framed and verb-framed languages.

Second, the condition in (18) fails to capture the difference of acceptability between directional PPs and directionally interpreted locative PPs. As is well known, directional PPs can be used with manner-of-motion verbs like *dance* or *wiggle*, whereas locative PPs interpreted directionally cannot, as illustrated in (21):

- (21) a. They danced {into/\*in} the ballroom (from the outside). (cf. (4))  
b. She wiggled {into/\*in} the blanket.

If an empty verb always allowed a manner-of-motion verb to take a PP as the goal argument, it would not give rise to the grammatical difference in the acceptability of the two types of spatial PP. Thus, the condition in (18) needs more explanation to certain cases of directional interpretations of locative PPs.

By comparison of the two syntactic approaches, it could be expected that the null Path head approach is persuasive about locative PPs interpreted as the goal of motion, rather than the empty verb approach. I will employ the null Path head approach to directional interpretations of locative PPs, and propose a semantic mechanism of path coercion that can resolve the problem with the two syntactic approaches. In what follows, I will tackle the question of what is the semantic property of manner-of-motion verbs that allows *in* phrases to be interpreted as goals of motion? Before entering into my proposal, it should be useful to review a semantic approach to directional interpretations of locative PPs, which I will call the cognitive approach to directional

interpretation of locative PPs.

### **3.2.2. The Cognitive Approach to Directional Interpretations of Locative PPs**

#### **3.2.2.1. The Result State of Motion Is Profiled Rather Than the Process of Motion**

There is another type of approach to directional interpretations of locative PPs: the cognitive approach proposed by Nikitina (2008). She explores directional interpretations of the locative P *in* in American English as opposed to the alternative strategy of denoting goals of motion by the directional P *into*. Her main claim is that directional *in* phrases are used only when the directional meaning can be inferred pragmatically, and that the pragmatic factors are reduced to how to conceptualize a complex event.

Nikitina (2008) argues that the choice between directional *in* phrases and *into* phrases is determined by which semantic element is profiled, the process of motion or a result state. Directional *in* phrases are used when the end point of a path along which an entity moves is profiled, whereas *into* phrases are used when the process of motion is profiled. Nikitina demonstrates this idea by showing three pieces of evidence. First, directional interpretations of *in* phrases are dispreferred when used with manner-of-motion verbs that denote highly specific manners of motion. This is exemplified in (22).<sup>6</sup>

- (22) a. ?? He crawled in the room.  
b. ?? They danced in the ballroom.  
c. ?? They biked in the garage.

d. ?? The man limped in the house.

(Nikitina (2008:185))

Manner verbs specify a manner of carrying out an action as part of their meaning (Rappaport Hovav and Levin (2010), among others). Since carrying out an action corresponds to the process of the event, a manner modifies the process of an event. According to Nikitina, modifying the process of an event can be thought of as profiling the process. In motion events, the process corresponds to a path along which an entity moves. Thus, a manner-of-motion verb in a motion expression implies that the path of motion is profiled. This is incompatible with directional *in* phrases, which profile the result state of a spatial transition.

Second, Nikitina (2008) shows that directional *in* phrases are dispreferred when the path of motion is mentioned explicitly, as shown in (23):

(23) a. ?? John walked from the kitchen in the living room.

b. ?? John walked through the corridor and in the kitchen.

(Nikitina (2008:185))

(23a) involves the *from* phrase which makes it possible to construe a path along which a figure moves. As is the case with the manner-of-motion verbs in (22), the function of *from* phrases as evoking the path of motion is incompatible with the function of directional *in* phrases as profiling a result state. Likewise, since the *through* phrase in (23b) profiles the route consisting of the path of motion, the *in* phrase is not interpreted as the goal of motion.

Finally, Nikitina (2008) points out that there is a restriction on the NPs

functioning as the complement of directional *in* phrases. Compare (24) and (25):

- (24) a. He walked in the {room/backyard/store}.  
b. ?? He walked in the {city/field/mountain}.
- (25) a. Then we went in the {room/backyard/store}.  
b. ?? Then he went in the {city/field/mountain}.

(Nikitina (2008:187-188))

Whereas the *in* phrases *in the room*, *in the backyard*, and *in the store* in (24a) and (25a) are ambiguous between a locative and a directional reading, *in the city*, *in the field*, and *in the mountain* in (24b) and (25b) are interpreted only as a location in which an action takes place. As is clear from the comparison of (24) and (25), the acceptability of the directional interpretations of these *in* phrases is not relevant to meanings of verbs. Nikitina ascribes the difference of the acceptability of directional *in* phrases in (24) and (25) to whether or not the path is profiled. She assumes that the presence or absence of a prominent path of motion is determined by a relatively objective characteristic of location: the presence or absence of well-defined boundaries. According to her, the places in (24a) and (25a) are referred to as “containers” with respect to the presence of well-defined boundaries. The locations in (24b) and (25b), on the other hand, are referred to as “areas” with respect to the absence of well-defined boundaries. Nikitina notes that “[d]ue to the presence of a well-defined boundary, goals of this type ([she] refer[s] to them as “containers”) allows for a possibility of a punctual transition that does not involve a prominent path” (Nikitina (2008:186)).

The claim of Nikitina’s (2008) cognitive semantic approach can be summarized as follows: (I) Directional *in* phrases profile the result state of motion rather than the

process of motion; and (II) directional *in* phrases are disfavored if (a) the verb has a highly specific manner meaning component, (b) the source phrase or path phrase occurs, or (c) the location denoted by the complement of *in* lacks a well-defined boundary. These three factors, as opposed to the function of directional *in* phrases, conceptually focus on the process of motion.

### 3.2.2.2. The Need for a Closer Look at Data of Directional *In* Phrases

The cognitive approach can capture the above conditions on directional *in* phrases. Nevertheless, this approach is insufficient in three important respects. First, it is not clear why directional *in* phrases are incompatible with manner-of-motion verbs that denote highly specific manners of motion. Admittedly, manner-of-motion verbs like *crawl*, *dance*, *bike*, and *limp* denote more specific manners than, for example, *run* and *walk* do. However, *in* phrases can be interpreted directionally when present participles, such as *dancing*, or adverbs, such as *staggeringly*, specify the manner of motion, as shown in (26):

- (26) a. Bill came in the classroom (by) dancing.  
b. Mary went in the office staggeringly.

In (26) the highly specific manners are encoded by not the verbs but the two modifiers. As seen in section 2.2.1, Nikitina argues that directional *in* phrases are incompatible with factors profiling the process of motion. If Nikitina's analysis were correct, the sentences in (26) would be unacceptable because the present participle and the adverb in (26) profile the process of motion. Thus, this fact is unpredictable in her framework.

Second, not all the verbs that denote highly specific manners of motion are

incompatible with directional *in* phrases. Some attested examples are given in (27) (emphasis mine).<sup>7</sup>

- (27) a. I was excited now to tell Sam and the others. I didn't even know if Embry or Quil noticed. I parked on the gravel and jogged in the house.  
(<http://klumsybellagirl.deviantart.com/art/Halley-Meets-Jacob-ch2-118260380>)
- b. The house seemed so quiet, lonely as he drove in the garage.  
([http://www.prose-n-poetry.com/display\\_work/2019](http://www.prose-n-poetry.com/display_work/2019))

The examples in (27) show that the directional interpretations of the *in* phrases are acceptable even when used with the manner-of-motion verbs *jog* and *drive*. As is clear from the definitions of these verbs in COBUILD<sup>5</sup>, *jog* and *drive* denote more specific manners of motion than *run* and *walk* do: for example, the meaning of *jog* consists of the act of running plus the slowness of the action.

- (28) a. *jog*: If you jog, you run slowly, often as a form of exercise.
- b. *drive*: When you drive somewhere, you operate a car or other vehicle and control its movement and direction.
- c. *run*: When you run, you move more quickly than when you walk.
- d. *walk*: When you walk, you move forward by putting one foot in front of the other in a regular way.

(COBUILD<sup>5</sup>)

The data in (27) make it questionable whether Nikitina's analysis is valid for the restriction on verbs that license directional *in* phrases.



It should be noticed here that even manner-of-motion verbs like *run* and *walk* have manner meaning components. Since manners of motion modify the process of motion, *run* and *walk* do profile the process of motion, as is the case with *jog* or *drive*. The framework of Nikitina (2008) would not explain what makes the difference between manner-of-motion verbs like *jog* and *drive*, on the one hand, and those like *run* and *walk*, on the other hand.

Moreover, although Nikitina (2008) observes that directional *in* phrases are dispreferred with the verb *crawl*, there are cases where *in* phrases can be interpreted as goals of motion in the context of *crawl*. According to Tutton (2009), the *in* phrase in (29) is interpreted directionally in British English.

(29) [T]he slug was said to have crawled in the bottle before it was filled[.]

(news.bbc.co.uk, cited from Tutton (2009:18))

Further evidence from the attested example in (30) confirms the acceptability of directional *in* phrases in the context of *crawl* (emphasis mine):

(30) He carried a towel when he came back out and saw that Alizabet had crawled from the bed and was sorting through her armoire. “Back to bed,” he said. “We are not leaving this room today.” [...] When she didn’t make a move, he walked toward her and wrapped one arm around her waist, directing her toward the bed. She crawled in the bed. “But what are we going to do?”

(Eliza Lloyd, *Wicked Secrets*)

As is obvious from the previous contexts in (30), Alizabet was outside of the bed before

she was encouraged to get in the bed, and then she got in the bed crawling. Therefore, we need to take these attested data into consideration, and reexamine a semantic difference between manner-of-motion verbs that license directional *in* phrases and those that do not.

Last, but not least, there are cases where the source phrase or path phrase is compatible with directional *in* phrases, as shown in (31):

- (31) a. John walked in the living room from the kitchen.  
b. John walked in the kitchen through the corridor.
- (32) a. ?? John walked from the kitchen in the living room. (= (23a))  
b. ?? John walked through the corridor and in the kitchen. (= (23b))

According to my informants, the opposite acceptability judgments between (31) and (23), repeated as (32), result from the syntactic alignment of the PPs. The sentences in (31) would be unacceptable, if as Nikitina (2008) argues, their acceptability were ascribed to the explicit mention of the path of motion by the presence of a source phrase. Alternatively, Thomas (2001) points out the adjacency of a directional *in* phrase with the verb. She observes that a directional interpretation of an *in* phrase is lost when the PP moves out of VP, or when syntactic constituents intervene between the verb and the PP.<sup>8</sup>

- (33) a. John ran in the house.  
b. \* John ran at top speed in the house.
- (34) a. He ran in the house.  
b. \* He ran out of the barn and in the house.

(35) a. The orchestra ran in the concert.

b. \* In the concert hall ran the orchestra.

(Thomas (2001:96-97), with slight modifications)

(36) \* The pool in which John fell is extremely deep.

(37) \* In this pool John fell.

(Thomas (2001:98))

The details of how the syntactic adjacency between an *in* phrase and a verb follows differ from theory to theory. However, it is clear that the syntactic adjacency is crucial here for an *in* phrase to be interpreted as the goal of motion. Aside from the account of the adjacency, now I focus only on pointing to the insufficiency of Nikitina's analysis.<sup>9</sup> The unacceptability of (30) is reduced not to the incompatibility of the function of directional *in* phrases and the meaning of the source phrase or path phrase, but to the syntactic adjacency between an *in* phrase and the verb.

Then, to account for conditions on directional interpretations of not only *in* phrases but also other locative PPs, we will mainly address the following question: what is the semantic property of manner-of-motion verbs that allows *in* phrases to be interpreted as goals of motion?

### 3.3. Proposal

We have reviewed so far the three previous approaches to directional interpretations of locative PPs, especially *in* phrases, and pointed out that these approaches share the same problem concerning manner-of-motion verbs. This section provides a proposal to reveal the mechanism of path coercions, which can resolve the

problems with the previous studies.

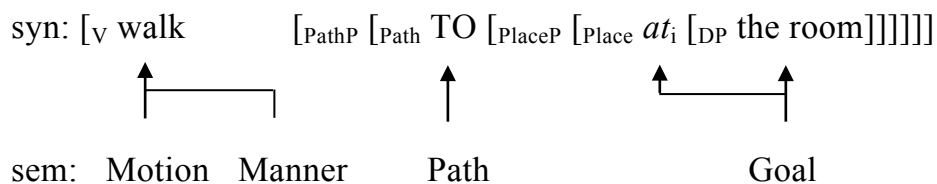
To begin with, let us consider how a directed motion event is generally encoded. A directed motion event consists of, at least, a moving figure, motion, a manner in which the figure moves, and a path along which the figure moves (Talmy (2000) and Jackendoff (1983, 1990), among others).

(38) Prototypical Directed Motion:

Figure + Motion + Manner + Path + Ground (i.e. Goal)

In an English prototypical directed motion expression, a moving figure is encoded in NP1 as the subject, a motion and a manner are encoded in the main verb, a path is encoded in a path preposition, and a goal is encoded in NP2. For example, the structure in (39) has the following representation:

(39) Mary walked to the room.

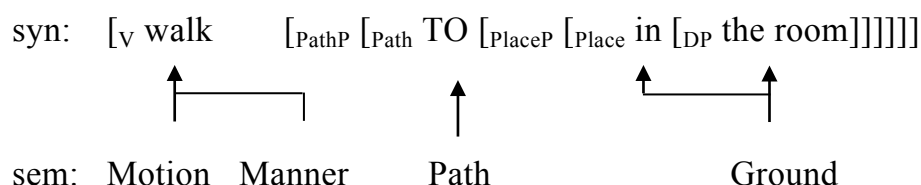


In (39), a motion and a manner are encoded in the main verb *walk*, a path is encoded in the preposition *to*, and a goal is encoded in the NP *the room*.

The co-occurrence of a manner-of-motion verb with a locative PP interpreted as a goal of motion involves a moving figure encoded by NP1 as the subject, a motion and a manner by the manner-of-motion verb, and a goal by the PP. However, there exists no phonologically linguistic element in the predicate that encodes a path. Given the

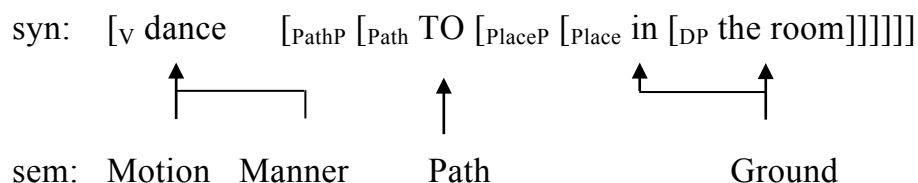
presence of the null path head TO in English, we might represent the structure of the sentence in (40) as follows:

(40) Mary walked in the room. (under the directional interpretation)



Like in (39), a path is encoded in the null path head TO and the place head *in*, as is the case in *walk into the room*. This representation, however, leads to a structure like (41), which is judged unacceptable.

(41) \*Mary danced in the room. (under the directional interpretation)



The representation of (41) is quite similar to that of the sentence *Mary danced into the room*, despite the unacceptability of (41). Moreover, (40) and (41) have the same structure, although only (40) is acceptable. If the null path head could encode a path, (41) would be judged acceptable, too. Thus, this encoding pattern should be true of sentences in which a locative PP is interpreted as the goal of motion, but this seems to be problematic because in a sentence where a locative PP is interpreted as the goal of motion, no constituent lexicalizes a path meaning component.

Here, based on Jackendoff (1990) and Talmy (2000), in my framework the notion

of path is decomposed into two notions: a route (or vector as a term of Talmy (2000)) and a place function.

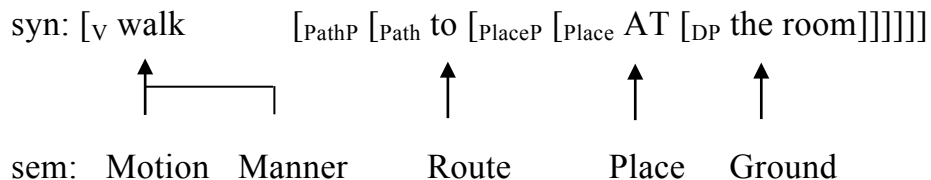
$$(42) \text{ Path} \rightarrow \text{Route} + \text{Place} \{ \text{AT, IN, ON, ...} \}$$

A route is part of path along which an entity moves, and a place function specifies the property of a place which is the endpoint of the route (e.g., at X, in X, and on X). In English the variety of the bounded path Ps is dependent on the place function. In the Lexical Conceptual Structure approach, this is represented in (43).

- (43) a. [Path to ([Place AT ([Thing ])))] [= to]  
 b. [Path to ([Place in ([Thing ])))] [= into]  
 c. [Path to ([Place on ([Thing ])))] [= onto]

Based on Jackendoff (1983), Zwarts (2005), Gehrke (2008), among others, I assume that the path preposition *to* involves the null place head AT. Given the decomposition of the conception of path, the schema of directed motion event in (38) is refined as in (44):

(44) Mary walked to the room.



In this framework, each meaning component in *Mary walked in the room* under the directional interpretation is encoded as follows:

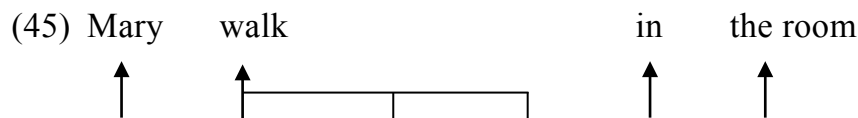


Figure + Motion + Manner + Route + Place + Ground

In my framework, which presupposes the meaning components of directed motion events in (38), the sentence with a locative PP interpreted directionally is supposed to involve a path meaning component as well as a figure, a motion, a manner, and a ground interpreted as a goal. In addition, a path meaning component consists of two parts, a route and a place. Given this, I propose the strategy of how to compose a path, which I call a path coercion, as summarized in (46).

(46) Path Coercion in English

A sentence in an appropriate context can denote a directed motion event iff it involves the verb including a route meaning component and a locative PP.

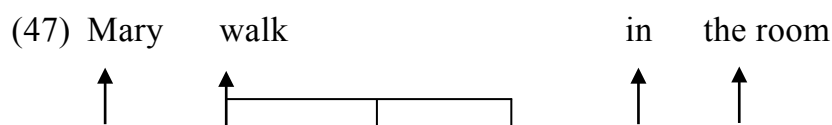


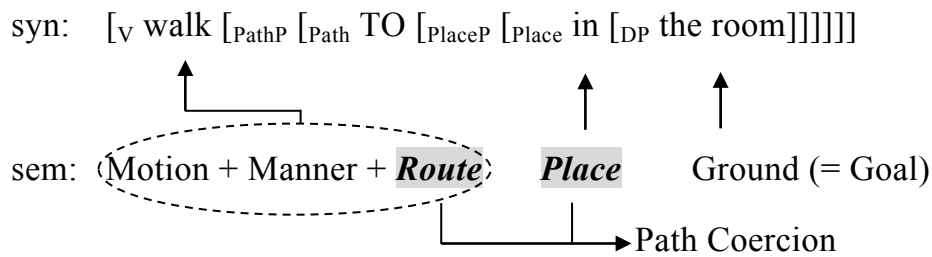
Figure    Motion + Manner + **Route Place**    Ground (= Goal)

└──┬──┘ ──> reinterpreted as Path (Path Coercion)

We assume that when a locative PP is interpreted as the goal of motion, a route meaning component encoded by the verb is conceptually unified with a place meaning component encoded by the locative PP to be conceived of as a path meaning component as a whole.

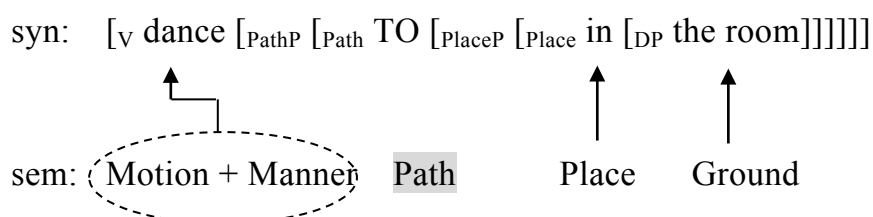
Under the proposal to the mechanism of path coercions, the directional interpretation of a locative PP is explained in the following way. Consider (48):

(48) Mary walked in the room. (under the directional interpretation)



In (48), a phonologically null Path head TO is merged with the PlaceP. When we read off the sentence, we need to take into consideration meaning components encoded by each element. Since the sentence has all meaning components of a motion event, we may unify a route meaning component with a place meaning component to generate a path meaning component. This is what I call the path coercion. The path coercion allows the locative PP to be interpreted as the goal of motion. In contrast, *in the room* in *danced in the room* is interpreted as only a location of the event. Comparing (48) and *dance in the room*, we can assume that even if the sentence is built up in the same way as (48), the path coercion does not work because of the lack of a route meaning component. This can be represented as in (49).

(49) \*Mary danced in the room. (under the directional interpretation)





To sum up, I claim that path is decomposed into route and place, and that in the sentence including a locative PP interpreted as the goal of motion, the verb encodes a route meaning component and the locative PP encodes a place meaning component. Since these two meaning components are conceptually unified, we can semantically coerce the locative PP to express the goal of motion.

### 3.4. Supporting Evidence

#### 3.4.1. Route Meaning Components

As seen so far, manner-of-motion verbs are classified into two types in terms of the acceptability of directional *in* phrases: one type involves *run, walk, jog, crawl*, etc., which can be used with directional *in* phrases, whereas the other type involves *dance, wander, rove, wobble*, etc., which cannot be used with directional *in* phrases.

- (50) a. John ran in the kitchen.  
b. Mary walked in the room.  
c. I parked on the gravel and jogged in the house.  
d. She crawled in the bed.
- (51) a. \* They danced in the ballroom.  
b. \* Nora {wandered/roved/wobbled} in the park.

We have proposed in the previous section another type of encoding pattern of directed motion events, where a manner-of-motion verb encodes a route meaning component. In other words, the lexical semantic difference between the verbs in (50) and those in (51) is reduced to the presence or absence of a route meaning component.

The claim that the presence of the route meaning component in the verb can divide the manner-of-motion verbs into the two subtypes is borne out by three pieces of evidence. First, the manner-of-motion verbs in (50) can take as a complement a DP denoting a route along which an entity moves in a certain manner. Such DPs include *the street (to the station)*, for example.

- (52) a. Mary {walked/ran/jogged/crawled} the street to the station.  
b. \* Mary {wandered/roved/wobble/danced} the street to the station.

The grammatical difference in (52) is predictable on our proposal that the verbs in (52a), but not those in (52b), have a route meaning component.

Second, as Zubizarreta and Oh (2007) point out, manner-of-motion verbs allowing locative PPs to be interpreted as the goal of motion can take a generic classifier that measures distance or interval, which they refer to as the distance classifier. Compare (53a) with (53b).

- (53) a. John {ran/walked/swam/galloped} {a certain distance/a mile}.  
b. \* John {wandered/roved/wobbled} {a certain distance/a mile}.

(Zubizarreta and Oh (2007:131))

We can also find that *crawl* takes the NP *X mile* as a complement. An example is given in (54) (emphasis mine).

- (54) We kept crawling and crawling and crawling, and then we crawled some more.

Even though it felt like we crawled a mile, I knew we had really only crawled

for about 20 feet.

(Charlie McCarthy, *Wave of Destruction*)

This distance classifier is thought of as an abstract path. Thus, the grammatical difference of (53) and the fact of (54) are also predictable if manner-of-motion verbs differ in the presence or absence of a route meaning component.

Third, the manner-of-motion verbs in (50) can co-occur with delimiter phrases like *until* phrases, whereas those in (51) cannot. Compare (55a) with (55b).

- (55) a. John {ran/walked/jogged/crawled} until the station  
b. \* John {wandered/roved/wobbled/danced} until the station.

Delimiter phrases are used to express general delimitation, providing a static boundary point for some event participant that has physical or abstract extent (Beavers (2008)). When a motion predicate takes a delimiter phrase with a place as its complement, the inference is that the complement measures the endpoint of the route of motion. Given this function of a delimiter phrase in a motion expression, we can attribute the grammatical difference of (55) to the presence or absence of a route meaning component: *until* phrases expressing the endpoint of the route of motion are incompatible with the manner-of-motion verbs in (55b) because they lack a route meaning component.

To recapitulate, we have proposed that the manner-of-motion verbs that allow locative PPs to be interpreted as the goal of motion have a route meaning component, which is borne out by the following three pieces of evidence: their co-occurrences with a route DP, a distance classifier, and a delimiter phrase.

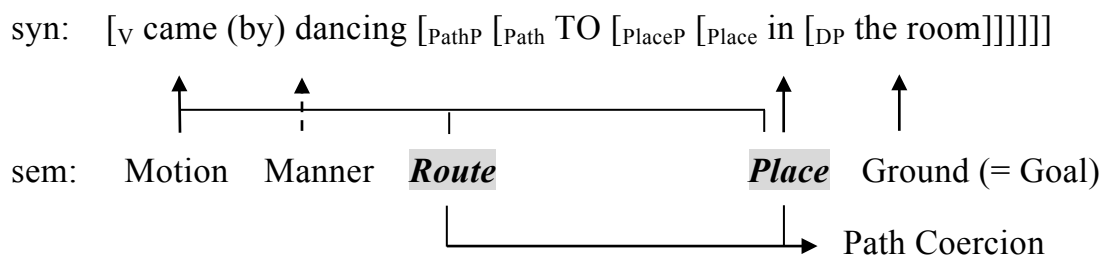
Our proposal can also account for the data in (26) that Nikitina (2008) fails to explain, which is repeated in (56).

- (56) a. Bill came in the classroom (by) dancing.  
 b. Mary went in the office staggeringly.

(= (26))

Unlike the prepositional phrase headed by *in* of *Bill danced in the classroom* for example, the PP *in the classroom* in (56a) is interpreted as the goal of motion. This fact does not follow from Nikitina's (2008) claim that a highly specific manner is incompatible with an *in* phrase interpreted as the goal of motion. Our proposal, however, can predict the data like (56) because the result verbs *come* and *go* have a path meaning component. The path coercion in (56a) can be expressed by the following representation:

- (57) Mary came in the room (by) dancing.



In (57), a motion and a route are encoded by the verb, a manner is encoded by the adverb, a place function is marked by the verb as well as the locative preposition, and a ground is encoded by the NP in the PP. Unlike the case of *dance in the room*, the predicate involves a route meaning component and a place meaning component, which

compose a path.

### 3.4.2. Conceptually Unified Paths

Another important part of our proposal is that a place meaning component is conceptually unified with a route meaning component to be interpreted as a goal of motion. It can be predicted that if the two meaning components are conceptually unified, their syntactic elements must be “unified” to form a complex predicate. This is supported by the fact in section 4.2.2, as exemplified in (58) and (59):

- (58) a. John ran in the house.  
b. \* John ran at top speed in the house.
- (59) a. He ran in the house.  
b. \* He ran out of the barn and in the house.

The data in (58) and (59) clearly show that the verb and the locative PP are unified: when a locative PP is interpreted as the goal of motion, the PP must appear in the verbal complement position, and stay VP internally and adjacent to the verb.

### 3.4.3. Path Coercions on Other Locative PPs

We have so far been mainly concerned with directional interpretations of *in* phrases. This section shows that our proposal of path coercion also applies to directional interpretations of other locative PPs like *on* and *under* phrases. To be more precise, we take a closer look at conditions on directional interpretations of the two locative PPs with respect to types of verb and the syntactic adjacency between the PP

and the verb.

As is well known, *on* and *under* phrases in motion expressions can be ambiguous between a locative and a directional interpretation. This is illustrated in (60) and (61).

(60) Kim jumped on the bed. (Beavers et al. (2010:363))

- a. Kim jumped while being on the bed.
- b. Kim jumped and (as a result) he ended up on the bed.

(61) The rat ran under the table.

- a. The rat ran while being under the table.
- b. The rat ran and (as a result) it ended up under the table.

(= (3))

As is the case with directional interpretations of *in* phrases, *on* phrases and *under* phrases cannot be interpreted as the goal of motion when the verb does not have a route meaning component (Bouchard (1995), Milway (2015)). This is exemplified in (62) and (63).

(62) a. \* A famous singer danced on the stage.

b. \* I wandered on a frozen river.

(63) a. \* A gentleman and lady {danced/waltzed} under the chandelier.

b. \* A drunk {wandered/roved} under the bridge.

As shown in (62), *under* is not lexically ambiguous between a locative and a directional interpretation, although, unlike *in* and *on*, it lacks the morphological alternative (e.g. *\*underto*). Additionally, the syntactic adjacency between the locative PP and the verb

is also true for the cases of directional interpretations of *on* and *under* phrases:

- (64) a. \* A baby went from the kitchen under the table.
- b. \* Under the table, a cat ran.
- (65) a. \* Bill ran at top speed on the beach.
- b. \* On the beach, Bill ran.

From the observation of directional interpretations of *on* and *under* phrases, it can be safely said that our proposal on the mechanism of path coercions can apply to directional interpretations of other locative PPs like *on* and *under* phrases.

### 3.5. Consequences

It has often been said that in addition to syntactic adjacency, verb meaning, and the type of location that the NP refers to, contexts play an important role in licensing directional interpretations of the locative PPs (Levin et al. (2009)). The locative PP headed by *in* used with a manner-of-motion verb is unambiguous when uttered out of blue: the PP is interpreted only as locational. This is illustrated in (66).

- (66) [Discourse initial] Mary walked in the room.
- a. Mary walked while being inside the room.
- b. ?? Mary walked and (as a result) she ended up in the room.

Levin et al. (2009) argues that contexts need to indicate the situation in which an entity travels a short distance to the goal, which is attributed to Nikitina's (2008) proposal that

a directional *in* phrase profiles only the result state.

- (67) a. [Standing just outside of the room]  
John walked in the room.
- b. [Standing down the hallway from the room]  
?? John walked in the room.

They explain that (67b) is unacceptable because of the explicit mention of a long distance from the source of motion to the goal.

Their explanation, however, is not tenable. In fact, there are a number of attested examples in which contexts do not imply that the distance of a transition is short. Consider the following example:

- (68) He [Joey] gasps and loses his balance and grabs on to one of the gurneys. At that moment, Al lets him sit down on the chair in the waiting room, and they talk. The first thing Joey says is, “Can I see her? I mean, where is she?” “Down this way. She was in critical care last night. Today, she is moved to her own room because she’s more stable now.” As he walks in the room, he sees her lying in front of him on the bed, [...]

(J. Mahmough, *Be That As It May: Don’t Worry about Thing You Can’t Change*)

We can construe that the goal of the transition *her own room* is not so far away from the source *the waiting room* because the scene of the story is inside a hospital. The *in* phrase in (68), however, is interpreted as the goal of motion, although the contexts in (68) involve no expression suggesting that they are located near each other.



Alternatively, I argue that contexts serve just as resolving the ambiguity between a locative and a directional interpretation. Recall the Structural Ambiguity Hypothesis, as repeated in (69):

(69) *The Structural Ambiguity Hypothesis*

The spatial Ps *in*, *on*, *under*, and *behind* are locative only. Any ambiguity between a directional and a locative reading is structural and not lexical. (= (6))

Although the locative interpretation of the PP in (66) is preferable to the directional interpretation, (66) is ambiguous between locative and directional. A context is used to exclude the semantic ambiguity of a locative PP. Based on the preference of the interpretation of locative PPs, we can predict that the locative PP can be interpreted directionally if the context excludes the possibility of the locative interpretation of the PP. In fact, in the example in (68) the previous contexts explicitly indicate that Al and Joe are not inside her room. Thus, the directional interpretation of a locative PP is sensitive not to a movement distance, but to the movement to the place referred to as the locative PP.

If so, why is the sentence underlined judged to be natural? A possible answer to this question is that the unacceptability of (67b) is attributed to the aspectual property of the sentence. As Denis et al. (2003) point out, locative PPs under the directional interpretation give rise to achievement predicates as well as bounded path PPs do. This is supported by Dowty's (1979) perfective-to-progressive entailment test, as illustrated in (70) and (71).

(70) Bill ran in the office in an hour.

≠ Bill was running in the office during that hour.

(71) Bill ran into the office in an hour.

≠ Bill was running into the office during that hour.

(Denis et al. (2003:126))

According to this test, accomplishment predicates license the entailment of the form *VP-ed in an hour = VP-ing for that hour*, whereas achievement predicates do not. As shown in (70) and (71), this test indicates that *into-PP* and *in-PP* give rise to achievement predicates.

Interestingly, achievement predicates can fall into two subtypes in terms of the entailment of a process component (e.g., Kearns (2011)). This is illustrated in (72).

(72) a. Achievements with a process component ('prelude')

*win, die, reach the summit, arrive, etc.*

b. Achievements without any process component

*recognize, notice, lose a key, turn fifty, etc.*

This classification is borne out by at least two pieces of evidence. The first evidence includes the acceptability of process progressives. According to this test, achievements with a process component, but not those without a process component license a process progressive. This is shown in (73).

(73) a. Jones was winning for the first three laps.

b. # Jones was recognizing the woman when she sneezed.

(Kearns (2011:161))

The second evidence comes from the acceptability of the context *it took someone X time ... test* (Dowty (1979)), which is only compatible with predicates involving duration. This test shows that achievements with a process component are only compatible with this context, as in (74).

- (74) a. It took ten minutes for the train to arrive at the station.  
b. # It took a minute for him to recognize her.

(Kearns (2011:161))

Based on the two types of achievements, into-PP give rise to achievements with a process component, whereas directional *in* phrases give rise to those without a process component. This is borne out by the process progressive test and *it took some X time ... test*, as shown in (75) and (76).

- (75) a. Look! John is running into the room from the outside!  
b. \* Look! John is running in the room from the outside!
- (76) a. It took Bill more than ten minutes to walk into the room.  
b. # It took Bill five minutes to walk in the room. He did not know which key opened the door.

As shown in (75) and (76), predicates involving directional *in* phrases denote punctual events. Given this, we can predict that a sentence with a directional *in* phrase expressing a directed motion event is incompatible with a context that evokes the

process of the event, because the predicate lacks a process component. Thus, the unacceptability of (67b) can be attributed to a general characteristic of achievement predicates.

### **3.6. Conclusion**

This chapter has discussed English locative PPs interpreted as a goal of motion. On the basis of the meaning components of directed motion events, I have proposed a new encoding pattern of directed motion events. First, the conception of path can be decomposed into a route meaning component and a place function. Second, some manner-of-motion verbs encode a route meaning component as well as a motion and a manner. Third, a route meaning component encoded by the verb and a goal encoded by the locative PP can consist of a path along which an entity moves. When the locative PP is interpreted as the goal of motion, the verb encodes a route meaning component and the locative PP encodes a place meaning component. For a place to be a goal, these meaning components need to be conceptually unified. It is the syntactic adjacency relationship between the verb and the locative PP that the conceptual unification of the two meaning components gives rise to.

I have shown that my proposal of a route meaning component in some manner-of-motion verbs is supported by three pieces of evidence: (i) the acceptability of route DPs, (ii) their compatibility with distance classifiers, and (iii) their compatibility with the delimitation phrase *until*. This proposal can clarify the semantic difference between manner-of-motion verbs that license directional *in* phrases and those that do not.

I have also attributed the contextual preference to the aspectual property of the

predicates with directional *in* phrases. In my analysis, directional *in* phrases give rise to achievements without a process component. Since the sentence with a directional *in* phrase does not involve duration, it is incompatible with a context that evokes the process of the directed motion event denoted the verb.

### Notes to Chapter 3

\* This chapter is a unified and revised version of the papers of mine that appeared as Namiki et al. (2012) and Namiki (2015).

<sup>1</sup> The linguistic literature on semantic coercion has also dealt with aspectual coercions (e.g., *Fred played the sonata for one day.*), psychological coercions (e.g., *She enjoyed a book.*), and mass-count coercions (e.g., *I'll have three coffees, please.* (Jackendoff (1997:53))). See Pustejovsky (1995) and Jackendoff (1997) for details on these types of semantic coercions.

<sup>2</sup> We will make further reference to the absence of a lexical item that encodes a path meaning component in section 3.2.1.3, arguing there that even the verbs in (2) and (3) do not have a path meaning component lexically.

<sup>3</sup> He refers to traditional thematic roles as “micro-roles,” as opposed to macro-roles.

<sup>4</sup> Following Rappaport Hovav and Levin (2010) and Talmy (2000), we take directional meaning components (i.e. path) as a subset of a result meaning component.

<sup>5</sup> One might think that the acceptability of (20b) is attributed to the specialty of the verb *courir*, which is used to mean not only ‘to run’ but also ‘to hurry’. However, according to Noonan (2010:176), the locative PP *sous le pont* can be interpreted as the goal of motion when it co-occurs with French counterparts of *roll* and *jump*.

<sup>6</sup> Below, I use “??” to indicate that the *in* phrase is not interpreted as the goal of motion.

<sup>7</sup> Gehrke (2008) reports, however, that there is cross-speaker variation on the acceptability of directional interpretation of *in*. As Ramchand (2008) notes, it is likely that American English speakers tend to accept directional *in* more easily than British

English speakers. Among my informants, all three Australian English speakers judge the sentences in (27) felicitous.

<sup>8</sup> Nikitina (2008:182) also mentions this point, but she does not associate the acceptability of the sentences in (31) with the observation of (33) to (37) in Thomas (2001).

<sup>9</sup> I will deal with the syntactic adjacency between directional *in* and a verb on the basis of a path coercion analysis in section 3.4.

## Chapter 4

### Path Coercions in Japanese Narrative Contexts\*

#### 4.1. Introduction

In the previous chapter, I dealt with the goal interpretation of English locative PPs, which I treated as one of the phenomena of path coercion, and I argued that the presence of a route meaning component in certain English manner-of-motion verbs is crucial for an English locative PP to be interpreted as the goal of motion. The process of path coercion can also be found in Japanese. This chapter deals with a special case where locative *-ni* phrases used with certain manner-of-motion verbs are interpreted as the goal of motion.

Before entering into a discussion of the Japanese peculiar phenomenon of path coercion, let us overview how directed motions are characteristically encoded in Japanese. Observe the following examples:<sup>1</sup>

- (1) a. Taroo-ga eki-ni {it-ta/ki-ta}.  
Taroo-NOM station-LOC {go-PAST/come-PAST}.  
'Taro {went/came} to the station.'
- b. Taroo-ga eki-ni hait-ta.  
Taroo-NOM station-LOC enter-PAST  
'Taro entered the station.'

As shown in (1), in Japanese a motion and a path are conflated into the verb root,



whereas a goal is expressed as a locative *-ni* phrase. The crucial point here is that in Japanese the verb is the only resource to encode a path (Talmy (2000)). To put it another way, when the verb does not have a path meaning component, a locative *-ni* phrase does not denote the goal of motion. In fact, Japanese, unlike English, does not allow a manner-of-motion verb to occur with a locative *-ni* phrase designating the goal of motion (Ikegami (1981), Yoneyama (1986), Talmy (1991), Takezawa (1993), Tsujimura (1994), Kizu (1996), Kageyama and Yumoto (1997), Kageyama (2002), Inagaki (2002), Kitahara (1997, 2009), Kawano (2006), Ueno (2007), Mihara (2009), Isono (2013), among others). This is exemplified in (2a).

- (2) a. ??Taroo-ga eki-ni {aru-ita/hasit-ta}.
- Taroo-NOM station-LOC {walk-PAST/run-PAST}.
- ‘Taro {walked/ran} to the station.’
- b. Taroo-ga eki-ni arui-te it-ta.
- Taroo-NOM station-LOC walk-by go-PAST.
- ‘Taro went to the station (by) walking.’

As we have seen in Chapter 2, manner and path meaning components cannot be packaged into one verbal root (in accordance with manner/result complementarity, proposed by Rappaport Hovav and Levin (2010)). Since these verbs specify the manner of carrying out an action, *aruku* ‘walk’ and *hasiru* ‘run’ do not encode a path: hence the occurrence of the goal phrase in (2a) is not acceptable. To convey both a manner and a path, Japanese needs a grammatically more complex option like a *V-te-V* complex predicate, as in (2b), where it is the path verb *iku* ‘go’ that selects for the goal phrase, not the manner-of-motion verb.

However, as some researchers have recently pointed out, there are cases where certain manner-of-motion verbs are compatible with locative *-ni* phrases interpreted as the goal of motion, despite the lack of a path verb (Stringer (2003), Yumoto (2006), Beavers (2008), Namiki (2013, 2014), Usuki (2013), among others). Compare the following examples with (2a) (emphasis mine):

- (3) a.   Sassoku,    tukai-ga            *inaba-zyo-ni*    *hasit-ta.*<sup>2</sup>  
 immediately messenger-NOM inaba-castle-LOC run-PAST  
 ‘Immediately, a messenger ran to the Inaba Castle.’

(Ryotaro, Shiba *Kunitori Monogatari*)

- b.   Kooban-o           de-ta        hutari-wa       mugon-no-mama  
 police.box-ACC   exit-PAST   the.two-TOP   wordless-GEN-as  
*eki-ni*            *aru-ita.*  
 station-LOC   walk-PAST  
 ‘After exiting the police box, they walked to the station without saying a word.’

(Kiryu, Aoi *Doukoku no Daichi*)

As opposed to the example in (2a), the *-ni* phrases in (3) do occur with *aruku* ‘walk’ and *hashiru* ‘run,’ and *are* interpreted as the goal of motion under an appropriate context. Thus, we see here that even in Japanese the goal interpretation of the locative *-ni* phrase can be generated without an element directly expressing a path. For the sake of simplicity, I will call locative *-ni* phrases interpreted as the goal of motion “goal *-ni* phrases”.

This chapter explains, in terms of path coercion, why certain Japanese

manner-of-motion verbs can occur with goal *-ni* phrases, despite the lack of a path verb. More specifically, it elucidates two conditions for the occurrence of the manner-of-motion verb with the goal *-ni* phrase, one of which is associated with an idiosyncratic constraint on construing a situation in Japanese.

The organization of this chapter is structured as follows. Section 4.2 overviews locative *-ni* phrases interpreted as the goal of motion, in order to define the locative *-ni* phrases in (3) as a goal phrase. Section 4.3 reviews two previous approaches to occurrences of certain manner-of-motion verbs with goal *-ni* phrases and points out empirical problems. In section 4.4, scrutinizing the conditions for occurrences of certain manner-of-motion verbs with goal *-ni* phrases, I propose a path coercion approach, which accounts for the overall range of the relevant phenomena. Section 4.5 provides supporting evidence for my approach. Section 4.6 reveals the reason why the possibility of the co-occurrence of manner-of-motion verbs with goal *-ni* phrases is sensitive to types of contexts. Section 4.7 concludes the discussion of this chapter.

## **4.2. Preliminary Discussion**

This section begins by taking a close look at the semantics of the *-ni* phrases in question. More specifically, I confirm that the *-ni* phrases used with manner-of-motion verbs (e.g., *inaba-zyo-ni* in (3a) and *eki-ni* in (3b)) denote the goal of motion. This is because there are cases where a *-ni* phrase in a motion expression is interpreted not as a goal of motion, but as a direction in which a figure moves. Consider the following examples:

- (4) a. Koko-kara *higasi-ni* sukosi aruku to,  
 here-from east-to a.bit walk and  
 ookina kanban-ga mie-masu-yo.  
 big sign-NOM see-POL-I.tell.you  
 ‘When you walk a bit to the east from here, you’ll find a big sign soon.’
- b. Kare-wa *oka-no-hoo-ni* {it-ta/hasit-ta}.  
 He-TOP hill-GEN-direction-to {go-PAST/run-PAST}  
 ‘He {went/ran} toward the hill.’

The *-ni* phrase *higashi-ni* ‘to the east’ in (4a) does not represent a goal of motion, but a direction in which one moves. Likewise, the phrase *oka-no hoo-ni* ‘toward the hill’ in (4b) is not a goal phrase but just a directional phrase. For the sake of clarity, we will call *-ni* phrases interpreted as the direction of motion “directional *-ni* phrases”. As the two examples in (4) show, directional *-ni* phrases can be used with manner-of-motion verbs regardless of the presence or absence of a path verb. From this fact, one might think that the *-ni* phrases in (3) are just directional *-ni* phrases. Among the researchers taking such an approach are Kageyama and Yumoto (1997). They assume that when a sentence includes a goal *-ni* phrase, it is required to entail reaching the goal encoded by the goal phrase. Based on this assumption, they argue that the *-ni* phrases in (3) should be interpreted as the direction of motion, because (3a), for example, does not lexically entail the messenger reaching the Inaba Castle. It should be noticed here, however, that the goal *-ni* phrase is clearly distinguished from the directional *-ni* phrase semantically as well as morphologically. In what follows, I review semantic and morphological differences between goal *-ni* phrases and directional *-ni* phrases.

Kitahara (1997) explicitly points out that directional *-ni* phrases are

morphologically more marked expressions than goal *-ni* phrases, arguing that there are two possible situations for a *-ni* phrase in a motion expression to be interpreted as the direction of motion. His generalization about locative *-ni* phrases in motion expressions can be summarized in (5):

- (5) a. A *-ni* phrase is interpreted as the direction of motion if;
- i. the NP involved in the *-ni* phrase consists of a relative noun (e.g. *higasi* ‘east,’ *nisi* ‘west,’ *kita* ‘north,’ *minami* ‘south,’ *ue* ‘upside,’ *sita* ‘downside,’ *migi* ‘right,’ *hidari* ‘left,’ etc.) or;
  - ii. a marked expression denoting the direction of a motion connects to the NP (e.g. (NP)-*no-hoo-ni* ‘toward,’ (NP)-*hoomen-ni* ‘in the direction of’).
- b. Except for (i) and (ii), a locative *-ni* phrase used with a motion verb is interpreted as the goal of motion.

(Kitahara (1997:46))

As the generalization in (5) clearly shows, locative *-ni* phrases in motion expressions do not express the direction of motion without a specialized marker like *-no-hoo* ‘toward’, which is opposed to Kageyama and Yumoto’s (1997) observation of the *-ni* phrases in (3).

There are three pieces of evidence that bears out the generalization in (5). The first piece of evidence comes from the compatibility of the predicate including a *-ni* phrase with the *-kan* ‘for’/ *-de* ‘in’ temporal modifier. In general, sentences including goal phrases describe telic events, i.e., events with a definite endpoint. Thus, they allow only temporal adverbial phrases with “in”. By contrast, sentences including directional phrases describe atelic events. Thus, they allow only temporal adverbial

phrases with “for”. This is shown by the examples in (6):

- (6) a. Taroo-wa eki-ni {\*iti-zikan/iti-zikan-de} idoos-ita.  
 Taroo-TOP station-LOC {one-hour/one-hour-in} move-PAST  
 ‘Taro moved to the station {for/in} an hour.’
- b. Taroo-wa higasi-ni {iti-zikan/??iti-zikan-de} idoos-ita  
 Taroo-TOP east-to {one-hour/one-hour-in} move-PAST  
 ‘Taro moved to the east {for/in} one hour.’

The sentence in (6a) denotes a telic event, which is confirmed by the fact that only the *-de* temporal modifier can occur in the sentence. In (6b) the sentence with the directional *-ni* phrase *higasi-ni* ‘to the east’ denotes an atelic event, as shown by its compatibility only with the *-kan* temporal modifier. Hence, the *-ni* phrase in (6a) refers to the goal of motion, whereas that in (6b) refers to the direction in which Taro walked, but not vice versa.

The second piece of evidence for (5) has to do with the presence of quantifier phrases measuring out a motion event. Quantifier phrases like *iti-kiro* ‘one kilometer’ has a function to turn atelic predicates into telic ones. Compare (7a) with (7b).

- (7) a. Taroo-wa sanzyu-ppun-*{kan/\*de}* arui-ta.  
 Taroo-TOP thirty-minutes-*{for/in}* walk-PAST.  
 ‘Taro walked *{for/in}* thirty minutes.’
- b. Taroo-wa sanzyu-ppun-*{\*kan/de}* *iti-kiro* arui-ta.  
 Taroo-TOP thirty-minutes-*{for/in}* one-kilometer walk-PAST.  
 ‘Taro walked one kilometer *{for/in}* thirty minutes.’

The event of walking is an atelic event, as shown by its compatibility with the *-kan* temporal modifier in (7a). On the other hand, the event of *walking a certain distance* is interpreted as a telic event, which is confirmed by the fact that the predicate is compatible with the *-de* temporal modifier, as in (7b). Thus, such quantifier phrases can delimit or measure out an event. According to Tenny's (1994:79) proposal of the Single Delimitation Constraint, the event described by the verb may only have one measuring-out and be delimited only once. Given this constraint, it can reasonably be predicted that the quantifier phrase *iti-kiro* cannot be compatible with goal *-ni* phrases, which refer to the endpoint of an event, while it can be compatible with directional *-ni* phrases. This prediction is borne out, as the following examples show:

- (8) a. \* Taroo-wa eki-ni iti-kiro idoos-ita.  
 Taroo-TOP station-LOC one-kilometer move-PAST  
 'Taro moved one kilometer to the station.'
- b. Taroo-wa eki-no hoo-ni iti-kiro idoos-ita.  
 Taroo-TOP station-GEN direction-to one-kilometer move-PAST  
 'Taro moved one kilometer toward the station.'

As is clear from the unacceptability of the sentence in (8a) and the acceptability of that in (8b), the *-ni* phrase in (8a) is interpreted as a goal, whereas that in (8b) as a directional phrase, but not vice versa.

The last piece of evidence in favor of the generalization in (5) involves whether *-ni* phrases are compatible with continuations that deny a result. In an event of change of location, the participant is expected to reach the goal at the end of the event.

Therefore, it should be contradictory to follow a predicate headed by a verb of change of location with a denial that the participant has ended up in the goal. One test is to see if a past tense predicate headed by a verb of change of location with a locative *-ni* phrase generates a contradiction with continuations that deny the achievement of the transition. It is readily predictable that a past tense predicate including a goal *-ni* phrase is incompatible with a denial of the achievement of the transition. On the other hand, since directional phrases do not have a function to specify the goal of motion, a past tense predicate including a directional phrase is predicted not to yield a contradiction with a sentence denying that the participant has ended up in the location denoted by the DP in the *-ni* phrase. This contrast is exemplified in (9).

- (9) a. # Taroo-wa eki-ni idoos-ita ga, mada tui-te  
 Taroo-TOP station-LOC move-PAST but yet arrive-ASP  
 ina-i.  
 not-NPST  
 ‘Taro moved to the station, but he hasn’t arrived there yet.’
- b. Taroo-wa eki-no hoo-ni idoos-ita ga,  
 Taroo-TOP station-GEN direction-to move-PAST but  
 mada tui-te ina-i  
 yet arrive-ASP not-NPST  
 ‘Taro moved toward the station, but he hasn’t arrived there yet.’

As is clear from (9), the *eki-ni* in (9a) designates the goal of motion, while the *eki-no hoo-ni* in (9b) designates the direction of motion, but not vice versa. It should be noted here that the directional *-ni* phrase in (9b) obscures the endpoint of the transition



denoted by the motion verb. The verb *idoosuru* ‘move’ encodes a path, which allows a goal argument to be realized. Thus, the past tense predicate headed by *idoosita* is incompatible with a denial that the moving figure has ended up in the goal, as in (9a). In (9b), on the other hand, the predicate includes the directional phrase that encodes an unbounded path. Unbounded path PPs does not specify a goal, and therefore make indistinct a result denoted by the motion verb.

To recapitulate, Kitahara (1997) claims that a locative *-ni* phrase is interpreted as the goal of motion when it is used in a motion expression without a relative noun or a specialized marker denoting a direction, which is borne out by the three pieces of evidence: temporal modification, their compatibility with a measurement phrase, and denial of result. Below is a table showing the relationships between the two types of *-ni* phrases and the results of the three diagnostics.

**Table 5.1: Relationships between the two types of *-ni* phrases and the results of the three diagnostics**

	Temporal Modification		Measurement Phrase	Denial of Result
	<i>X-de</i>	<i>X-kan</i>		
Goal <i>-Ni</i> Phrases	✓	*	*	*
Directional <i>-Ni</i> Phrases	*	✓	✓	✓

One might object to the generalization in (5), arguing that there are a few counterexamples to the generalization in (5), one of which is given in (10):

- (10) Taroo-wa eki-ni mukat-ta.  
 Taroo-TOP station-LOC head.toward-PAST  
 ‘Taro headed toward the station.’

As the translation in (10) indicates, the *-ni* phrase seems to represent an unbounded path along which a moving figure moved, despite the lack of specialized markers like *-no-hoo* ‘toward’ and *-gawa* ‘side’. In fact, Kawano (2006:288, fn. 4), Kitahara (2009:357, fn. 11), and Mihara (2009), among others, take the *-ni* phrase in (10) as an example of directional *-ni* phrases. However, this is not the case. As the results of the three diagnostics below show, the locative *-ni* phrase used with the verb *mukau* denotes the goal of motion. Consider the following examples:

- (11) a. Taroo-wa eki-ni zyu-ppun{??-kan/-de} mukat-ta.  
 Taroo-TOP station-LOC ten-minute{-for/in} head.toward-PAST  
 ‘Taro was headed toward the station {for/in} ten minutes.’
- b. ?? Taroo-wa eki-ni iti-kiro mukat-ta.  
 Taroo-TOP station-LOC one-kilometer head.toward-PAST  
 ‘Taro was headed kilometer toward the station.’
- c. Taroo-wa eki-ni mukat-ta ga,  
 Taroo-TOP station-to head.toward-PAST but,  
 mada tui-te ina-i.  
 yet arrive-ASP not-NPST  
 ‘Taro was headed toward the station, but he hasn’t arrived there yet.’

Except for the denial of result in (11c), the results of the diagnostics clearly indicate that the locative *-ni* phrase used with the motion verb *mukau* represents the goal of motion. In addition, the fact of (11c) can be accounted for in the following way: the acceptability of the sentence in (11c) should be attributed not to the property of the *-ni* phrase but to the semantic property of the verb *mukau*. As is obvious from the comparison between (9a) and (9b), the diagnostic of denial of result in Japanese is sensitive to whether a verb lexically entails a result. Since the verb *mukau* lexically entail not reaching but just moving toward the goal, the predicate headed by *mukau* is not contradictory to a denial of result. Thus, given this semantic property of *mukau*, the acceptability of (11c) is not problematic for the *-ni* phrase to be interpreted as the goal of motion.

Moreover, the assumption that the *-ni* phrase in (10) is interpreted directionally gives rise to another empirical problem; that is to say, if the phrase *eki-ni* in (10) were interpreted as a directional phrase, the sentence in (10) could be paraphrased into *eki-no hoo-ni mukatta*, which includes the canonical directional phrase. In fact, if we compare *eki-ni mukau* with *eki-no hoo-ni mukau*, we see that they are semantically different from each other. Consider the following examples:

(12) [Taro and Hanako are trying to reach the same station.]

Taroo-wa eki<sub>i</sub>-ni mukat-ta ga,

Taroo-TOP station-LOC head.toward-PAST but

Hanako-wa eki<sub>i</sub>-no hoo-ni mukat-ta.

Hanako-TOP station-GEN direction-to head.toward-PAST

‘Taro was headed to the station, but Hanako was headed toward it.’

The sentence in (12) describes a situation where Taro and Hanako are heading for the same station. As the conjunction *ga* introduces the information in contrast to the main clause, the phrase *eki-no hoo-ni* ‘toward the station’ bears contrastive focus. If this phrase denoted the same meaning as the phrase *eki-ni* ‘to the station’, the sentence in (12) should be weird because of the absence of any contrastive element. For this reason, it can be reasonably assumed that there exists the semantic difference between *-ni mukau* and *-no hoo-ni mukau*.

To summarize, a locative *-ni* phrase in a motion expression is interpreted as the goal of motion if (i) its DP is not a relative noun and (ii) it does not include a specialized marker denoting a direction. From the discussion so far, we can safely say that the locative *-ni* phrases used with the manner-of-motion verbs in (3), as repeated in (13), are defined as goal *-ni* phrases.

- (13) a.   Sassoku,    tukai-ga            *inaba-zyo-ni*    *hasit-ta*.  
           immediately messenger-NOM inaba-castle-LOC run-PAST  
           ‘Immediately, a messenger ran to the Inaba Castle.’
- b.   Kooban-o           de-ta           hutari-wa       mugonnomama  
           Police.box-ACC exit-PAST the.two-TOP without.saying.anything  
           *eki-ni*            *aru-ita*.  
           station-LOC walk-PAST  
           ‘After exiting the police box, they walked to the station without saying anything.’
- (= (3))

Then, the following question arises naturally: what allows goal *-ni* phrases to occur

with manner-of-motion verbs? In what follows, I review two previous analyses of occurrences of manner-of-motion verbs with goal *-ni* phrases and point out empirical problem with each of them.

### **4.3. Previous Studies**

In this section, I begin by surveying two previous studies of occurrences of manner-of-motion verbs with goal *-ni* phrases: an argument structure extension analysis presented by Usuki (2013) and a metonymy analysis by Yumoto (2006). Both studies provide interesting insight into the phenomenon of path coercion, but they have several empirical problems.

#### **4.3.1. An Argument Structure Extension Analysis**

Usuki (2013) examines three types of Japanese linguistic phenomena including occurrences of manner-of-motion verbs with goal *-ni* phrase, peculiar resultative constructions, and spray-paint alternation in terms of the argument structure extension. He argues that the extension of an argument structure can be licensed by the introduction of some peculiar mimetics (or ideophones). He proposes the following rule for the three types of the exceptional constructions:

##### **(14) Licensing of Exceptional Constructions by Coercion**

If the semantic element that is necessary for each type of construction (i.e. RESULT for resultative constructions, PATH for motion constructions, and FULLNESS for spray-paint alternations) is conceptually supplied to the lexical conceptual structure of its construction, coercion takes place to extend its

argument structure.

(Usuki (2013:8))

For the sake of simplicity, I will focus on what Usuki calls peculiar motion constructions. The crucial point of his proposal here is that certain types of mimetic can augment the argument structure of a manner-of-motion verb with the goal argument. According to Usuki's judgment, compared to (15a), the sentences in (15b) and (15c) are more acceptable.

- (15) a. \* Takuya-wa eki-ni aru-ita.  
Takuya-TOP station-LOC walk-PAST  
'Takuya walked to the station.'
- b. Takuya-wa eki-ni *tobotoboto* aru-ita.  
Takuya-TOP station-LOC ploddingly walk-PAST  
'Takuya plodded to the station.'
- c. Takuya-wa eki-ni *sutasutato* aru-ita.  
Takuya-TOP station-LOC in.haste walk-PAST  
'Takuya walked to the station briskly.'

(Usuki (2013:80), with slight modifications)

Usuki (2013:83) argues that there are two factors related to the acceptability of (15). One factor is a lexical property of the manner-of-motion verb *aruku*: the action of walking strongly implies a translational motion, which facilitates the occurrence of goal *-ni* phrases. The manner-of-motion verb *aruku*, however, does not encode a path meaning component, which is the most crucial factor for a motion verb to take a goal

argument. Hence (15a) is unacceptable. To be used with a goal *-ni* phrase, *aruku* needs an element that evokes a path. In Usuki's analysis, it is the mimetics *tobotobo* 'ploddingly' and *sutasuta* 'in haste' that can evoke a path at the end of which a figure arrived. He classifies these mimetics into path-oriented mimetics, as in (16a), as opposed to *urouro* 'waking restlessly' and *burabura* 'wandering', which do not imply transitions along a path, as in (16b):

(16) a. Path-oriented mimetics:

*tobotobo* 'walking in a trudging manner,' *sutasutato* 'walking at a brisk pace,' *tekutekuto* 'going on foot,' etc.

(Usuki (2011:3), with slight modification)

b. Other mimetics:

*urouro* 'waking restlessly,' *burabura* 'wandering,' etc.

Based on this classification, he suggests the qualia structure of *tobotobo* and *sutasuta*, as represented in (17):

(17) Qualia Structure of *tobotobo* and *sutasuta*:

[x MOVE<walking & MANNER>] CAUSE [x BE ON-PATH-TOWARD y]]

(Usuki (2013:87), with slight modification)

As the representation in (17) shows, path-oriented mimetics function to further specify the manner of walking, as indicated by the form <walking & MANNER>, and evoke a figure being on a path toward a goal, as indicated by the form BE ON-PATH-TOWARD. Based on this qualia structure, Usuki suggests that when *aruku* is used with the

path-oriented mimetic *tobotoboto*, coercion happens to augment the argument structure of *aruku* with the goal argument, as represented in the following lexical conceptual structure:<sup>3</sup>

(18) *tobotoboto aruku* ‘plod/trudge’

[x MOVE<walking & TOBOTOBO>]

CAUSE [x BE ON-PATH-TOWARD y]]

(Usuki (2013:87))

Usuki’s observation that some mimetics may affect the acceptability of some Japanese peripheral constructions might be of interest. However, his analysis of occurrence of manner-of-motion verbs with goal *-ni* phrases is not tenable for two reasons. First, Usuki’s analysis lacks independent evidence for the classification of *tobotoboto* and *sutasutato* into path-oriented mimetics. This classification is just based on the fact that there are cases where some manner-of-motion verbs used with certain mimetics occur with goal *-ni* phrases. This fact does not prove at all that the qualia structures of *toboboto* and *sutasuta* involve the function BE ON-PATH-TOWARD. Although Usuki (2013:83) mentions that *tobotobo* and *sutasuta* are different from *urouro* and *burabura* in that the formers indicate a motion with a destination whereas the latters indicate a motion without a destination, this is not supported by adequate evidence. In fact, using a path-oriented mimetic with an expression denoting a motion without a destination does not yield a contradiction. Consider the following examples (emphasis mine):



- (19) a.    Watasi-wa *atemonaku*       tobotoboto   sinzyuku-no    mati-o  
 I-TOP       without.an.aim   ploddingly   Sinzyuku-GEN  town-ACC  
 arui-ta.  
 walk-PAST  
 ‘I plodded around Shinjuku aimlessly.’
- b.    *atemonaku*       sutasutato   aruiteim-asi-ta.  
 without.an.aim  in.haste       walking-POL-PAST  
 ‘(I) was walking briskly and aimlessly.’

(<http://plaza.rakuten.co.jp/ayumi6336/diary/200803090000/>)

The adverbial *atemonaku* literally means that the motion denoted by the verb does not involve a definite goal. If, as Usuki mentions, the two mimetics strongly implied that someone walks along a path toward a goal, they could not be used with the adverbial *atemonaku* because of the contradiction between their meanings. Thus, unless independent evidence is found, Usuki’s classification of *tobotobo* and *sutasuta* into path-oriented mimetics is not tenable.

Second, I could not find any attested data of peculiar motion constructions with so-called path-oriented mimetics by doing internet searches using Google® search engine and by using the Balanced Corpus of Contemporary Written Japanese (BCCWJ-NT). Rather, there are a number of attested examples in which manner-of-motion verbs are used with goal *-ni* phrases without so-called path-oriented mimetics, as we have seen in (3). The presence of attested data like (3) lead us to claim that such mimetics do not contribute to improving the felicity of the occurrence of a manner-of-motion verb with a goal *-ni* phrase, and that there are alternative factors that make the occurrence of a manner-of-motion verb with a goal *-ni* phrase felicitous.

In fact, the occurrences of manner-of-motion verbs with goal *-ni* phrases are sensitive to types of contexts irrespective of the presence or absence of so-called path-oriented mimetics. Consider the following examples:

- (20) a. \* Takuya-wa eki-ni tobotoboto aru-ita-yo.  
Takuya-TOP station-LOC ploddingly walk-PAST-I.tell.you  
'(Lit.) Takuya plodded to the station.'
- b. \* Watasi-wa eki-ni sutasutato aruki-masi-ta.  
I-TOP station-LOC in.haste walk-POL-PAST  
'(Lit.) I walked to the station briskly.'

As the sentences in (20) show, occurrences of manner-of-motion verbs with goal *-ni* phrases are incompatible with the sentence final particle *yo*, as in (20a), and the polite verb *masu*, as in (20b) (we will be back for the details in 5.4.2). This fact is not predictable from the argument structure extension analysis proposed by Usuki, because the polite verb and the sentence final particle do not affect the argument structure of the verb. Therefore, it is doubtful whether so-called path-oriented mimetics affect the acceptability of co-occurrences of manner-of-motion verbs with goal *-ni* phrases.

#### 4.3.2. A Metonymy Analysis

Let us now move on to the metonymy analysis proposed by Yumoto (2006). She refers to co-occurrences of the verb *hasiru* 'run' with a goal *-ni* phrase as the *X-ni hasiru* construction and those of the verb *aruku* 'walk' as the *X-ni aruku* construction, and analyzes them as metonymy-based expressions. She argues that in these constructions

the manner of motion is significantly focused on rather than the transition to a goal, and that focusing on the manner of motion pays our attention to a purpose or circumstance of the motion described by the constructions. More specifically, she claims that using *X-ni hasiru* constructions invokes the urgency, unexpectedness, and extraordinariness of the transition denoted by the construction, whereas *X-ni aruku* constructions functions to focus on circumstances of the referent of the subject in the construction.

Yumoto's claim that *X-ni hasiru* constructions invoke the urgency, unexpectedness, and extraordinariness of the transition is based on the contextual difference between *X-ni hasiru* constructions and the canonical construction *X-ni hasitte iku*. Compare the following two examples:

(21) [It has been scheduled that a messenger goes to the Inaba Castle.]

a. ? Tukai-ga inaba-zyo-ni hasit-ta.

messenger-NOM inaba-castle-LOC run-PAST

b. Tukai-ga inaba-zyo-ni hasit-te it-ta.

messenger-NOM inaba-castle-LOC run-by go-PAST

'The messenger ran to the Inaba Castle.'

(22) [The master ordered the messenger to go to the Inaba Castle.]

a. Sassoku, tukai-ga inaba-zyo-ni hasit-ta.

immediately messenger-NOM messenger-NOM run-PAST

b. Sassoku, tukai-ga inaba-zyo-ni hasit-te it-ta.

immediately messenger-NOM messenger-NOM run-by go-PAST

'Immediately, the messenger ran to the Inaba Castle.'

(Yumoto (2006:43), with slight modification)

According to Yumoto's judgment, the sentence in (21a), unlike that in (21b), is infelicitous under the context where the messenger was supposed to go to the Inaba Castle. The *X-ni hasiru* construction can be judged acceptable when the moving figure suddenly or unexpectedly got into a situation where he or she needed to hurry to the goal, as (22) shows.

Yumoto (2006) also points out a contextual property of the *X-ni aruku* construction, compared to the usage of the unmarked motion construction *X-ni aruite iku*. Compare the following two examples:

- (23) a.    ?*(Kangaegoto-o      si-nagara) eki-ni            arui-ta.*  
           thinking.about-ACC do-while   station-LOC walk-PAST
- b.    *(Kangaegoto-o      si-nagara) eki-ni            arui-te    it-ta.*  
           thinking.about-ACC do-while   station-LOC walk-by go-PAST  
           ‘(I) walked to the station (thoughtfully).’

(Yumoto (2006:45), with slight modification)

The subordinate clause *kangaegoto-o si-nagara* ‘while thinking about something’ in (23) describes a circumstance of the subject walking to the station. Yumoto explains that such a subordinate clause is necessary for the sentence in (23a), not for that in (23b), to be judged acceptable.

Yumoto ascribes the contextual constraint on each construction to our encyclopedic knowledge of manners of motion. Generally, the manner of running is a marked manner in our locomotion, compared with the manner of walking. This encyclopedic knowledge enables us to infer that the referent of the subject in the construction is in a hurry for a purpose. The *X-ni hasiru* construction, which focuses

on the manner of running, therefore requires a context that invokes the urgency, unexpectedness, and extraordinariness of the transition. In contrast to the *X-ni hasiru* construction, the *X-ni aruku* construction focuses on the manner of walking, which is a common manner of motion. According to Yumoto, focusing on the common manner of motion causes us to pay attention to other facets of the process of the motion including the figure's mental state and appearance.

Yumoto provides supporting evidence for her analysis of each construction. First, she takes as an example the idiomatic use of *X-ni hasiru*. Compare the following two examples:

- (24) a. Hikoo-ni hasiru (koto)  
 delinquency-to run (thing)  
 'to become (a) delinquent'
- b. \* Zenkoo-ni hasiru (koto)  
 benefaction-to run (thing)  
 'to be a good person'

The *X-ni hasiru* in its idiomatic use means that someone gets to perform an extraordinary, unexpected act like a criminal act, unethical act, apostasy, etc., as in (24a). The unexpectedness and extraordinariness can be seen not only in the *X-ni hasiru* construction, but also in *X-ni hasiru* in its idiomatic use. Yumoto takes this similarity as supporting evidence for her analysis of the *X-ni hasiru* construction. Second, she takes the adverbial form (known as “*ren'yookei*” in Japanese) *ayum-i* ‘walk’, as shown in (25), as supporting evidence for her analysis of the *X-ni aruku* construction.<sup>4</sup>

- (25) a. Kono iti-nen-no ayumi  
 this one-year-GEN walk
- b. \* Kono iti-nen-no hasiri  
 this one-year-GEN hasiri  
 “(Lit.) the course of this year”

(Yumoto (2006:47))

Yumoto’s cognitive approach leads to a prediction that walking as a common manner of motion enables *aruku* to express just a process. This is borne out by (25a). The usage of the adverbial form *ayum-i* in (25a) lacks the meaning of the manner of walking and designates a process of someone’s growth. This usage is not involved in the adverbial form *hasir-i* ‘run’, as shown in (25b).

Yumoto’s observation of the contextual constraint on each construction is intriguing in light of the markedness of the two constructions. However, her explanation has two problems. First, it is difficult for her explanation to predict that there are attested data of co-occurrences of other manner-of-motion verbs like *oyogu* ‘swim’, *hau* ‘crawl’, and *kakeru* ‘dash’ with a goal *-ni* phrase, as shown in (26).

- (26) a. Kare-wa te-o nobasita ga, kanozyo-ga,  
 He-TOP hand-ACC stretch-PAST but she-NOM  
 puurusaido-ni oyogu to kare-mo sore-ni sitagat-ta.  
 poolside-LOC swim then he-too it-DAT follow-PAST  
 ‘He reached for her hand to bring her back, but she swam to the poolside.  
 Soon he followed her.’

(Jessica, Steel *Raimei no Yoru*)

- b. Kise-wa isu kara rakkas-i korogaru yooni  
 Kise-TOP chair from fall-and roll like  
 deguti-ni hat-ta.  
 exit-DAT crawl-PAST

‘Kise fell off a chair and crawled to the exit like rolling.’

(<https://www.pixiv.net/novel/show.php?id=8050326>)

- c. Kutu-mo nug-azu, kamati-o tobikoe  
 shoe-even take.off-not door.frame-ACC jump.over  
 oku-no heya-ni kake-ta.  
 back-GEN room-DAT dash-PAST

‘(He) jumped over the door frame and dashed to the backroom, without taking off his shoes.’

(Hosizora Bunnko, *Toki Sakatu Kage*)

The attested data including the sentences in (26) leads us to suggest that co-occurrences of manner-of-motion verbs with goal *-ni* phrases are somewhat productive. On the other hand, as we will see, the fact remains that the other manner-of-motion verbs cannot be used with the goal *-ni* phrases without a path verb. So, it is preferable to explain what the difference is between *aruku* ‘walk’, *hasiru* ‘run’, and the verbs in (26) on the one hand and the others manner-of-motion verbs that cannot be used with the goal *-ni* phrase without a path verb on the other hand.

Second, as is the case with Usuki (2013), her claim cannot predict that the *X-ni hasiru/aruku* construction is unacceptable when used with the polite verb *desu/masu* and the sentence final particle *-yo*, even if the context guarantees the urgency, unexpectedness, and extraordinariness of the transition by running, or focuses on the

circumstance of the subject walking to a goal.

(27) [The master ordered the messenger to go to the Inaba Castle.]

\*Sassoku,      tukai-ga              inaba-zyo-ni      hasiri-*masi*-ta.

immediately messenger-NOM inaba-castle-LOC run-POL-PAST

In the light of this fact, the question then arises: What allows goal *-ni* phrases to occur with manner-of-motion verbs without a path verb?

In the following discussion, I will reveal what allows goal *-ni* phrases to occur with manner-of-motion verbs in terms of meaning components composing directed motion events. Also, I will make clear how co-occurrences of manner-of-motion verbs with goal *-ni* phrases are related to the context.

#### 4.4. A Compositional Approach

In this section, I propose a compositional approach to co-occurrences of manner-of-motion verbs with goal *-ni* phrases, i.e., an approach incorporating path coercion. Based on this approach, I argue that the co-occurrence of manner-of-motion verbs with goal *-ni* phrases is contingent on the involvement of a route component in the verb, which is essential to path coercion.

Under the compositional approach, an event described by the predicate is interpreted as a directed motion event if and only if the predicate has the meaning components that consist of a directed motion event. As stated in Chapter 3, a directed motion event consists minimally of a moving figure, motion, a manner in which the figure moves, and a path along which the figure moves and a goal (or ground), i.e., the



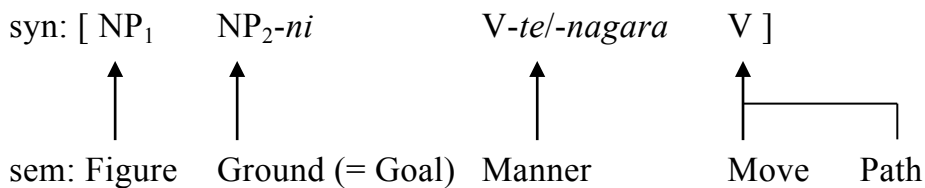
end of the path, at which the figure arrives.

(28) Prototypical Directed Motion:

Figure + Motion + Manner + Path + Ground (= Goal)

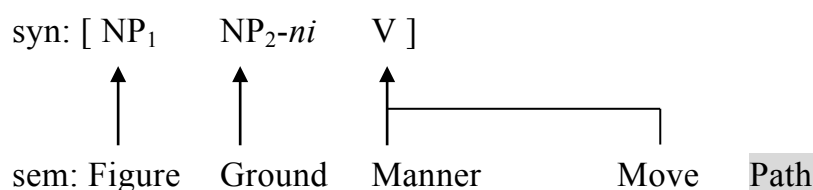
In a Japanese prototypical motion expression, a moving figure is encoded in NP<sub>1</sub> as the subject, a motion and a path are encoded in the main verb, a manner is encoded in a subordinate adjunct like *V-te* and *V-nagara*, and a goal is encoded in NP<sub>2</sub> with an argument marker *-ni*. In our framework, the sentence in (29), for example, has the following representation:

(29) *Taroo-wa eki-ni aruite/hasitte itta.* ‘Taro walked/ran to the station.’



A co-occurrence of a manner-of-motion verb with a goal *-ni* phrase like (2a), repeated as (30), involves a moving figure encoded by NP<sub>1</sub> as the subject, a motion and a manner by the manner-of-motion verb, and a ground by NP<sub>2</sub>-*ni*. However, there exists no linguistic element in the predicate that encodes a path, which leads the sentence to be ungrammatical. This is represented in (30).

(30) \**Taroo-wa eki-ni aruita/hasitta.* ‘Taro walked/ran to the station.’ (= (2a))



As shown in (30), a path meaning component is essential to a directed motion event. The absence of a path meaning component in the predicate leads us to judge sentences like (2a) to be weird in out-of-the-blue contexts.

It should be noted here that directed motion expressions like (3) *are* acceptable in an appropriate context, despite of the absence of a linguistic element directly encoding a path. This fact leads us to assume that a path meaning component does exist in its semantic structure. Under the compositional approach, the conception of path can be decomposed into two subparts: a route and a place function.

(31) Path → Route + Place {AT}

A route is part of a path along which an entity moves, and a place function specifies the property of a place which is the endpoint of the route. We assume that while English has a variety of place functions like AT, IN, and ON, Japanese has the only place function AT. Based on the decomposition of path, I propose the strategy of how to compose a path in Japanese, as summarized in (32).

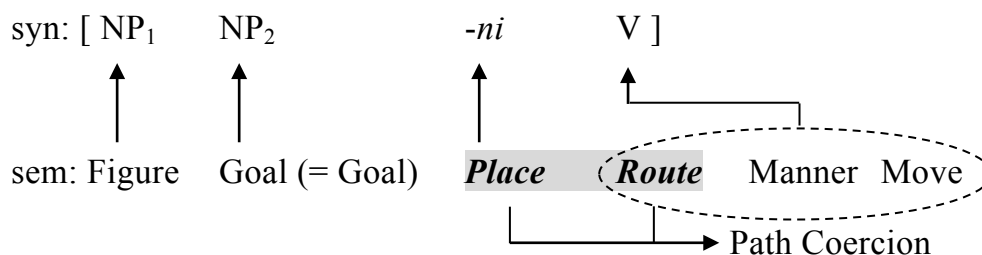
(32) Path Coercion in Japanese

A sentence in an appropriate context can denote a directed motion iff it involves the verb including a route meaning component and the place phrase

marked by *-ni*.

We assume that when a locative *-ni* phrase is interpreted as the goal of motion, a route meaning component encoded by the verb is conceptually unified with a place meaning component encoded by the locative *-ni* phrase to be conceived of as a path meaning component as a whole. Thus, the semantic structure of the sentence in (30) under a directional reading can be represented as follows:

(33) *Taroo-wa eki-ni aruita/hasitta.*



When we read off the sentence, we need to take into consideration meaning components encoded by each element. Since the sentence has all meaning components of a motion event, we may unify a route meaning component with a place meaning component to generate a path meaning component.

#### 4.5. Route-Oriented Manner-of-Motion Verbs

As proposed in the previous section, path coercion is based on the assumption that path can be decomposed into route and place. In my explanation of path coercion in Japanese, the verb and the locative *-ni* phrase needs to encode a route meaning component and a place meaning component, respectively. This leads to the following

prediction.

- (34) The manner-of-motion verbs can be classified into two subtypes in terms of a route meaning component. When the verb has a route meaning component, it can be used with a goal *-ni* phrase in an appropriate context.

To validate the prediction, let us review as a first approximation the attested data of occurrence of manner-of-motion verbs with goal *-ni* phrases. First, we can easily find data of the verb *run*, as in (35).

- (35) a. Sassoku, tukai-ga inaba-zyo-ni hasit-ta.  
immediately messenger-NOM inaba-castle-LOC run-PAST  
'Immediately, a messenger ran to the Inaba Castle.'  
 (= (3a))
- b. Ootani-hikoojoo-ni tuku-yainaya watasi-wa eki-ni hasit-ta.  
Ootani-airport-at arrive-as.soon.as I-TOP station-LOC run-PAST  
'As soon as I arrived at the Otani airport, I ran to the station.'  
(Takamichi, Nakayama *Kieta Ashiato*)
- c. Watasi-wa mama-no kooto-o haot-te eki-ni hasit-ta.  
Watasi-TOP mam-GEN coat-ACC wear-by station-LOC run-PAST  
'I ran to the station wearing my mother's coat.'  
(Chifune, Sato *Toki to Michizure*)

We can also find data of the verb *aruku* with goal *-ni* phrases, as illustrated below:

- (36) a. Kooban-o de-ta hutari-wa mugonnomama  
 Police.box-ACC exit-PAST the.two-TOP without.saying.anything  
 eki-ni aru-ita.  
 station-LOC walk-PAST  
 ‘After exiting the police box, they walked to the station without saying  
 anything.’

(= (3b))

- b. Daidokoro-ni tikai syokutaku-no isu-ni Koohei-wa  
 kitchen-to close dining.table-GEN chair-LOC Koohei-TOP  
 aru-ita.  
 walk-PAST

‘Kohei walked to the chair of the dining table close to the kitchen.’

(Okada (2001:8))

- c. Turube-wa, Aki-no kata-o dai-te sinsitu-ni  
 Turube-TOP Aki-GEN shoulder-ACC hold-by bedroom-LOC  
 aru-ita.  
 walk-PAST

‘Turube walked to the bedroom with his arm around Aki’s shoulder.’

(Ranzo, Ota *Satsui no Asahi Renpo*)

Furthermore, other types of manner-of-motion verbs including *oyogu* ‘swim,’ *hau* ‘crawl’, and *kakeru* ‘dash’ with goal *-ni* phrases, although not so many, can be found in novels and by doing internet searches using Google® search engine, as illustrated below:

- (37) a. Kare-wa te-o nobasi-ta ga, kanozyo-ga  
 He-TOP hand-ACC stretch-PAST but she-NOM  
 puurusaido-ni oyogu to kare-mo sore-ni sitagat-ta.  
 poolside-LOC swim then he-too it-DAT follow-PAST  
 ‘He reached out for her, but she swam to the poolside without his help.  
 Soon he followed her.’  
 (Jessica, Steel *Raimei no Yoru*)
- b. Kyuu-si-ni is-syoo-o e-ta Aisa-wa sohu-no  
 nine-death-DAT one-alive-ACC get-PAST Aisa-TOP grandfather-GEN  
 ie-ni hat-ta.  
 house-DAT crawl-PAST  
 ‘Escaping certain death, Aisa crawled to her grandfather’s house.’
- c. Kutu-mo nug-azu, oku-no heya-ni kake-ta.  
 shoe-even take.off-not back-GEN room-LOC dash-PAST  
 ‘(He) dashed to the backroom without taking off his shoes.’

All types of manner-of-motion verbs cannot occur with goal *-ni* phrases, however. As seen in (38), manner-of-motion verbs like *odoru* ‘dance’, *samayou* ‘wander’, and *buratoku* ‘roam’ cannot be used with a goal *-ni* phrase without a path verb.

- (38) a. \* Takusan-no yosakoi-tiimu-ga gennkini Oodoori-kooen-ni  
 many-GEN Yosakoi-team-GEN with.energy Oodoori-park-LOC  
 odot-ta.  
 dance-PAST  
 ‘Many Yosakoi teams danced to the Odori Park with energy.’

- b. \* Yopparatta otoko-wa hurahurato hankagai-ni samayot-ta.  
 drunken man-TOP faint.and.dizzy downtown-LOC wander-PAST  
 ‘The drunken man wandered to the downtown feeling faint and dizzy.’
- c. \* Kanojo-wa hitori miturin-no-naka-ni buratui-ta.  
 she-TOP alone dense.jungle-GEN-inside-LOC roam-PAST  
 ‘She roamed into a dense jungle in loneliness.’

Given the observation of the co-occurrences of manner-of-motion verbs with goal *-ni* phrases above, we can divide the manner-of-motion verbs into two subtypes: route-oriented manner-of-motion verbs, as in (39a), and motion (or action)-oriented manner-of-motion verbs, as in (39b).

- (39) a. Route-oriented manner-of-motion verbs  
*hasiru* ‘run,’ *aruku* ‘walk,’ *oyogu* ‘swim,’ *hau* ‘crawl,’ *kakeru* ‘dash,’  
 etc.
- b. Motion-oriented manner-of-motion verbs  
*odoru* ‘dance,’ *samayou* ‘wander,’ *buratuku* ‘roam,’ *arukumawaru*  
 ‘amble,’ etc.

The claim that the presence of a route meaning component in the verb can divide the manner-of-motion verbs into the two subtypes is borne out by three pieces of linguistic evidence. The first one includes the compatibility of the verbs with a route-denoting complement. A route-denoting complement is a DP with the accusative case *-o* denoting a route along which an entity moves in a certain manner. Such DPs include *reen* ‘lane’, *hodoo* ‘sidewalk’, *kawa* ‘river’, etc. These are compatible with

verbs denoting a change of location or a motion along a route.

- (40) sakamiti-o agaru.  
slope-ACC climb  
'(I) climb up the slope.'

(Kawano (2006:288))

The manner-of-motion verbs in (39a) can take a route-denoting complement, whereas those in (39b) cannot. Compare the examples in (41) with those in (42).

- (41) a. Taroo-wa *daini-reen-o* hasit-ta.  
Taroo-TOP second-lane-ACC run-PAST  
'Taro ran (on) the second lane.'
- b. Jiroo-wa *hodoo-o* arui-ta.  
Jiroo-TOP sidewalk-ACC walk-PAST  
'Jiro walked (on) the sidewalk.'
- c. Hanako-wa *tone-gawa-o* oyo-da.  
Hanako-TOP Tone-river-ACC swim-PAST  
'Hanako swam in the Tone River.'
- (42) a. \* Taroo-wa *hodoo-o* odot-ta.  
Taroo-TOP sidewalk-ACC dance-PAST  
'(Lit) Taro proceeded along the sidewalk dancing'
- b. ? Taroo-wa *hodoo-o* samayo-tta.  
Taroo-TOP sidewalk-ACC wander-PAST  
'(Lit) Taro proceeded along the sidewalk wandering.'



- c. ? Taroo-wa hodoo-o buratui-ta.  
 Taro-TOP sidewalk-ACC roam-PAST  
 ‘(Lit) Taro proceeded along the sidewalk roaming.’

The route-oriented manner-of-motion verbs can denote locomotion along a route, whereas the other manner-of-motion verbs denote just an action or a motion from the place denoted by the DP. The grammatical difference between (41) and (42) is predictable on our proposal that the verbs in (39a), but not those in (39b), have a route meaning component.

The second piece of evidence involves the compatibility between manner-of-motion verbs and a distance classifier. A distance classifier is a generic classifier that measures distance or interval (Zubizarreta and Oh (2007)). It includes measurement phrases like *kyori* ‘distance’, *san-burokku* ‘three blocks’ and *iti-kiro* ‘one kilometer’. Interestingly, the route-oriented manner-of-motion verbs are compatible with the measurement phrases, whereas motion-oriented verbs are not. Compare the examples in (43) with those in (44).

- (43) a. Taroo-wa tokuteino kyori-o hasit-ta.  
 Taroo-TOP certain distance-ACC run-PAST  
 ‘Taro ran a certain distance.’
- b. Taroo-wa san-burokku-o arui-ta.  
 Taroo-TOP three-block-ACC walk-PAST  
 ‘Taro walked three blocks.’
- c. Taroo-wa iti-kiro-o oyoi-ta.  
 Taroo-TOP one-kilometer-ACC swim-PAST

‘Taro swim one kilometer.’

- (44) a. ?? Jiroo-wa tokuteino kyori-o odot-ta.  
Jiroo-TOP certain distance-ACC dance-PAST  
‘Jiro danced one kilometer.’
- b. ? Jiroo-wa san-burokku-o samayot-ta.  
Jiroo-TOP three-block-ACC wander-PAST  
‘Jiro wandered three blocks.’
- c. ? Jiroo-wa iti-kiro-o buratui-ta.  
Jiroo-TOP one-kilometer-ACC roam-PAST  
‘Jiro roamed one kilometer.’

These distance classifiers are thought of as an abstract path, for the predicate with these phrases indicates how far the figure moves. Thus, we can reduce the compatibility of the route-oriented verbs with the distance classifier to the presence or absence of a route meaning component in the verb.

Finally, the third piece of evidence is concerned with the compatibility between manner-of-motion verbs and the delimitation phrase *-made* ‘continuously until X’. According to Beavers (2008), the inherent semantic property of *-made* is that it delimits some participant in the event or state including a temporal trace, a path, a numerical range, etc.

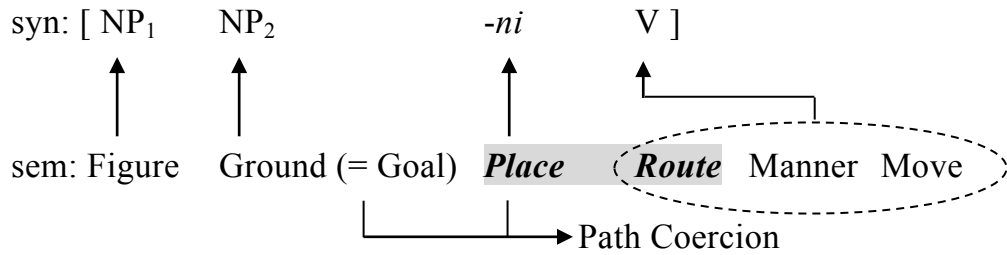
- (45) a. Hanako-wa hantai-gawa-made {hasit-ta/arui-ta/oyoi-da}.  
Hanako-TOP opposite-side-until {run-PAST/walk-PAST/swim-PAST}  
‘Hanako {ran/walked/swam} to the opposite side.’

- b. \* Hanako-wa hantai-gawa-made {odot/samayot/buratui}-ta.  
 Hanako-TOP opposite-side-until {dance/wander/roam}-PAST  
 ‘Hanako {danced/wandered/roamed} until the opposite side.’

Delimiter phrases are used to express general delimitation, providing a static boundary point for some event participant that has physical or abstract extent (Beavers (2008)). When a motion predicate takes a delimiter phrase with a place as its complement, the inference is that the complement measures the endpoint of the route of motion. Given this function of a delimiter phrase in a motion expression, we can attribute the grammatical difference of (45) to the presence or absence of a route meaning component: *-made* phrases expressing the endpoint of the route of motion is incompatible with the manner-of-motion verbs in (45) because they lack a route meaning component.

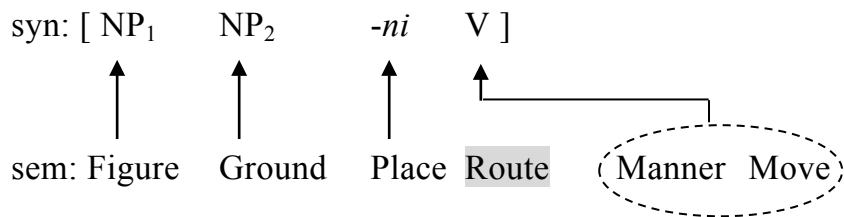
To sum up so far, the manner-of-motion verbs have a route meaning component when the locative *-ni* phrase is interpreted as the goal of motion, which is borne out by the three pieces of evidence: (i) the acceptability of a route-denoting DP complement with the accusative case *-o*, (ii) the acceptability of a distance classifier, and (iii) their compatibility with the delimiter phrase *-made*. Given the verb classification in (39), our framework of the compositional theory of path can represent the structure of an unacceptable case of path coercion like the sentence in (47).

(46) *Taroo-wa eki-ni aruita/hasitta.*



(= (33))

(47) \**Taroo-wa eki-ni odotta.* ‘Taro danced to the station.’



Comparing the phrase *eki-ni aruita/hasitta* in (46) and the *eki-ni odotta* in (47), we can assume that even if the sentences are built up in the same way, path coercion does not work in the latter, where the verb lack a route meaning component in (47).

#### 4.6. A Contextual Constraint on Path Coercion

In the previous section, I have provided supporting evidence for my proposal that the presence of a route meaning component in the verb licenses the locative *-ni* phrase to be interpreted as a goal of motion. It should be noticed here that there is another constraint on co-occurrences of manner-of-motion verbs with goal *-ni* phrases. This constrain is associated with the ungrammaticality of the example in (27), repeated here as (48).

(48) [The master ordered the messenger to go to the Inaba Castle.]

\*Sassoku,      tukai-ga              inaba-zyo-ni      hasiri-*masi*-ta.

immediately messenger-NOM inaba-castle-LOC run-POL-PAST

(= (27))

As (48) shows, co-occurrences of manner-of-motion verbs with goal *-ni* phrases are sensitive to types of contexts. More specifically, they are permitted in non-first person stories. Then, a question naturally arises: Why should it be so? In the rest of this section, I tackle the issue of the contextual constraint on co-occurrences of manner-of-motion verbs with goal *-ni* phrases.

It has often been pointed out that certain Japanese predicates of direct experience restrict their subject to first person, depending on the speech act (Kuroda (1973), Tenny (2006), among others). These include stative predicates of basic sensation and experience which are morphologically adjectives. Observe the following examples:

(49) a.      Boku-wa      kanashi-i.

I-TOP      sad-PRE

‘I am sad.’

b.    ?? Mary-wa      kanashi-i.

Mary-TOP      sad-PRE

‘Mary was sad.’

c.      Mary-wa      kanashi-sooda.

Mary-TOP      sad-likely

‘Mary looks sad.’

In Japanese a predicate formed by *ureshii* ‘be happy’, *kanashii* ‘be sad’, etc., which is called an internal subjective predicate, is compatible with a first-person subject pronoun (e.g. *boku* in (49a)) but not with a second person subject pronoun and a third person subject (e.g. *Mary* in (49b)). If the speaker (= “I”) is narrating the story from his (= “my”) point of view, then the speaker have to say (49c), where the auxiliary *sooda* is used to mark evidentiality. For the sake of simplicity, I will call this phenomenon constraint of empathy. There is a case, however, where in a narrative story the third person may be the subject of an internal subjective predicate in the past tense, as shown in (50).

- (50) Yama-dera-no                      kane-o      ki-ite,      Mary-wa      kanasi-katta.  
       mountain-temple-GEN    bell-ACC    hear-by    Mary-TOP    sad-PAST  
       ‘Hearing the bell of the mountain temple, Mary felt sad.’

(Kuroda (1973:384))

As Kuroda (1973) points out, this sentence form with a third person subject and a sensation adjective can be used when the omniscient narrator adopts the point of view of its third person subject. Thus, the contextual effect of the omniscient narrator’s perspective can be summarized as follows:

- (51) The suspension of the constrain of empathy

In Japanese the omniscient narrator’s perspective can suspend the constraint of empathy.

In motion expressions, the constraint of empathy is associated with the deictic

verbs *iku* ‘go’ and *kuru* ‘come’. As to the deictic verbs in Japanese, Matsumoto (2012, 2017) makes an interesting observation: in motion expressions Japanese characteristically prefers encoding deixis to encoding manner or result. Consider the following example:

- (52) a. Taroo-ga heya-ni ki-ta.  
 Taroo-NOM room-LOC come-PAST  
 ‘Taro came to the room.’
- b. Taroo-ga heya-ni hasit-te ki-ta.  
 Taroo-NOM room-LOC run-by come-PAST  
 ‘Taro came to the room running.’
- c. Taroo-ga heya-ni hasit-te hait-te ki-ta.  
 Taroo-NOM room-LOC run-by enter-by come-PAST  
 ‘Taro entered the room running.’

As (52a) and (52b) show, the verb *kuru* encodes a deictic perspective as well as a path along which the moving figure moves. Interestingly enough, this verb can be used in (52c), where a path is already encoded in the motion verb *hairu* ‘enter’. On the basis of Matsumoto’s observation, we can safely say that in Japanese unmarked motion expressions, encoding a deictic perspective is preferable to encoding a path and a manner.

Given the preference for encoding a deictic perspective in motion expressions and the property of the omniscient narrator’s perspective summarized in (51), the contextual constraint on co-occurrences of manner-of-motion verbs with goal *-ni* phrases can be explained in the following way: As shown in (52), in Japanese motion expressions it is

preferable to encode a deictic perspective. However, in a non-first person story where a motion event is construed through the omniscient narrator's perspective, the information of a deictic perspective is suppressed because of the presence of the omniscient narrator's perspective, which enables the motion expression to lack a deictic verb. It should be noticed here that there are few pure path verbs in Japanese except for *iku* 'go' and *kuru* 'come'. Thus, in the omniscient narrator's stories the path coercion is necessary to encode a path. Hence, the context involving the omniscient narrator's perspective enables co-occurrences of manner-of-motion verbs with goal *-ni* phrases to be acceptable.

The suspension of the constraint of empathy is borne out by at least three pieces of linguistic evidence. First, as Kuroda (1973) observes, the expression uttered through the omniscient narrator's perspective cannot be used with any linguistic base related to the speaker-hearer interpersonal relationship and the politeness of expression. More specifically, an expression uttered from the omniscient narrator's perspective is incompatible with sentence-final particles like *yo* 'I tell you', as shown in (53).

- (53) \*Kooban-o            de-ta            hutari-wa            mugonnomama  
 Police.box-ACC    exit-PAST    the.two-TOP    without.saying.anything  
 eki-ni            aru-ita-yo.  
 station-LOC    walk-PAST-I.tell.you  
 'After exiting the police box, they walked to the station without saying anything.'

This can be explained in the following manner: Japanese has addressee-oriented expressions (Hirose (1995)) including sentence final particles like *yo* 'I tell you' and *ne*



‘you know’, and polite verbs such as *desu* and *masu*. The use of these expressions entails that the speaker presupposes the existence of an addressee, and that he pays attention to his socio-psychological relationship with the addressee. The omniscient narrator, however, need not pay any attention to the speaker-addressee interpersonal relationship, because he is like God, free from such a polite relationship.

Similarly, the omniscient narrator’s expression does not allow the formality usage of the verb *desu* or *masu*, as shown in (54).

- (54) \*Kooban-o            de-ta            hutari-wa            mugonnomama  
 Police.box-ACC    exit-PAST    the.two-TOP    without.saying.anything  
 eki-ni            aruki-*masi*-ta.  
 station-LOC    walk-POL-PAST  
 ‘After exiting the police box, they walked to the station without saying anything.’

This can be accounted for if we assume the omniscient narrator’s property; politeness is sensitive to the aim of ordinary communication, which needs a speaker and a hearer. In Japanese the presence of a hearer characteristically leads the speaker to pay attention to the interpersonal relationship between them. However, the omniscient narrator does not need to consider the interpersonal relationship, because of his idiosyncratic status. Thus polite verbs are incompatible with omniscient narrative expressions.

The second piece of evidence comes from the ungrammaticality of (55b). Consider the following example:

(55) a. Kooban-o de-ta hutari-wa mugonnomama  
 Police.box-ACC exit-PAST the.two-TOP without.saying.anything  
 eki-ni aru-ita.  
 station-LOC walk-PAST  
 ‘After exiting the police box, they walked to the station without saying  
 anything.’  
 (= (36a))

b. \* Kooban-o de-ta hutari-wa mugonnomama  
 Police.box-ACC exit-PAST the.two-TOP without.saying.anything  
 eki-ni aru-ita to watasi-wa omot-ta.  
 station-LOC walk-PAST QUOT I-TOP think-PAST  
 ‘I thought that after exiting the police box, they walked to the station  
 without saying anything.’

(55b) shows that the same motion expression as in (36a), repeated here as (55a), is embedded in the complement of the verb *omou* ‘think’. The presence of *omou* in (55b) indicates that the event of their walking to the station is perceived through the perspective of the referent of the subject of *omou*, not that of the omniscient narrator. In this case, the co-occurrence of a manner-of-motion verb with a goal *-ni* phrase is judged felicitous without the aid of a deictic verb like *iku* ‘go’ or *kuru* ‘come’. From the grammaticality contrast between (55a) and (55b), we can safely say that what makes co-occurrences of manner-of-motion verbs with a goal *-ni* phrase acceptable is the omniscient narrator’s perspective, through which we construe a motion event.

Lastly, the incompatibility of modal expressions with omniscient narrator’s expressions provides a piece of evidence for our proposal that omniscient narrator’s

perspective is a trigger of the bird's-eye view construal. If our assumption that the omniscient narrator's perspective enables us to construe a motion event in a bird's-eye view way is valid, it is safe to say that the construal of a motion event through the omniscient narrator's perspective is regarded as an objective one. Thus, we can predict that subjective expressions cannot be used with (55a), and this is true, as shown in (56), where the predicate is incompatible with the modal verb *kamoshirenai* 'may':

- (56) \*Kooban-o            de-ta            hutari-wa            mugonnomama  
 Police.box-ACC    exit-PAST    the.two-TOP    without.saying.anything  
 eki-ni            aru-ita-kamosirenai.  
 station-LOC    walk-PAST-may  
 'After exiting the police box, they might walk to the station without saying anything.'

The modal verb expresses a speaker's subjective attitude toward the proposition, which is in conflict with the objective construal of the situation in question.

#### 4.7. Conclusion

This chapter has discussed Japanese locative *-ni* phrases interpreted as a goal of motion. Especially, I have showed a number of attested data in which manner-of-motion verbs are used with goal *-ni* phrases, regardless of directional expressions like path verbs. In addition, my investigation has revealed that co-occurrences of manner-of-motion verbs with goal *-ni* phrases are allowed in omniscient narrator's expressions.

On the basis of the meaning components of directed motion events, I have proposed a new encoding pattern of directed motion events. First, the conception of path can be decomposed into a route meaning component and a place function. Second, some manner-of-motion verbs encode a route meaning component as well as a motion and a manner. Third, a route meaning component encoded by the verb and a goal encoded by the locative *-ni* phrase can consist of a path along which an entity moves. When the locative *-ni* phrase is interpreted as the goal of motion, the verb encodes a route meaning component and the locative *-ni* phrase encodes a place meaning component. For a place to be a goal, these meaning components need to be conceptually unified.

I have shown that my proposal of a route meaning component in some manner-of-motion verbs is supported by three pieces of evidence: (i) the acceptability of route denoting DPs, (ii) their compatibility with distance classifiers, and (iii) their compatibility with the delimitation phrase *-made*. This proposal can clarify the semantic difference between manner-of-motion verbs that license goal *-ni* phrases and those that do not.

I have also attributed the contextual constraint on path coercion to the necessity of the omniscient narrator's perspective. The presence of the omniscient narrator's perspective has been confirmed by at least three pieces of evidence: (i) the unacceptability of hearer-oriented sentence final particles like *yo* 'I tell you' and *ne* 'you know', (ii) its incompatibility of the formality usage of the verb *desu* or *masu*, and (iii) its incompatibility of *watasi-wa omou* 'I think'. In Japanese motion expressions encoding a deictic perspective is preferable. However, in a non-first person story where a motion event is construed through the omniscient narrator's perspective, the information of a deictic perspective is suppressed because of the presence of the

omniscient narrator's perspective, which enables the motion expression to lack a deictic verb. Thus, in the omniscient narrator's stories the path coercion is necessary to encode a path. Hence, the context involving the omniscient narrator's perspective enables co-occurrences of manner-of-motion verbs with goal *-ni* phrases to be acceptable. In my analysis, path coercion is licensed by the omniscient narrator's perspective, which suspends the constraint of empathy that applies to ordinary language use.

## Notes to Chapter 4

\* This chapter is a unified and revised version of the papers of mine that appeared as Namiki (2013a) and Namiki (2014).

<sup>1</sup> The following abbreviations are used in the glosses of examples: ACC stands for accusative case marker, ASE for causative marker, ARE for passive marker, ASP for aspectual maker, COP for copular verb, DAT for dative case marker, GEN for genitive case marker, LOC for locative marker, NOM for nominative case marker, PAST for past morpheme, POL for polite verb, and TOP for topic marker.

<sup>2</sup> The phrase *inabazyoo-ni hasitta* ‘ran to the Inaba Castle’ in (3a) may have the same meaning as *inabazyoo-ni isoida* ‘hurried to the Inaba Castle’. In fact, the sentence in (3a) may also express a situation where a messenger hurried to the Inaba Castle riding a horse. Even if that is the case, (3a) is considered worthy of attention, because *hasiru* meaning ‘to hurry’ cannot be used with a goal *-ni* phrase without an appropriate context.

<sup>3</sup> Usuki (2013) takes TOWARD as a subtype of Path based on Talmy (2000), arguing that both concepts entail the presence of a goal, which evokes a path.

<sup>4</sup> Her argument that the usage of *ayum-i* can be supporting evidence is untenable. The adverbial form of *aruku* is *aruk-i*, not *ayum-i* in fact. Although both *aruku* and *ayumu* means running, the meaning of their adverbial forms is different from each other. While *ayum-i* means the course of time or someone’s growth, *aruk-i* means the way of walking or the event of walking.

- (i) Kono iti-nen-no aruki  
this one-year-GEN walk

‘the way of walking in this year’

Since the noun *aruki* does not have the same meaning as *ayumi*, as shown in (i), the usage of *ayumi* cannot be taken as supporting evidence for her analysis of the *X-ni aruku* construction.

## Chapter 5

### Path Coercions in Japanese Causative Constructions\*

#### 5.1. Introduction

In Chapter 4, I dealt with the goal interpretation of *-ni* phrases used with manner-of-motion verbs in narrative contexts in Japanese. This chapter deals with Japanese causative constructions, as illustrated in (1), where the manner-of-motion verbs are used with the *-ni* phrases interpreted as goals of motion.<sup>1</sup>

- (1) a. Byoogatyuu-no gokeninn-wa dairino mono-o  
bedridden-GEN retainer-TOP substitute person-ACC  
yakata-ni hasir-ase-ta.  
castle-to run-CAUS-PAST

‘The bedridden samurai retainer made a substitute run to the castle.’

(Huujin, Sato *Minamoto no Sanetomo no Syoogai*)

- b. Suzuki-san-o byooinn-ni hasir-ase-ta gekituu-mo,  
Suzuki-Mr.-ACC hospital-to run-CAUS-PAST severe.pain-too  
tyokutyoo gann-no sigunaru da-tta yoo da.  
rectum cancer-GEN signal COP-PAST EVID COP

‘That severe pain causing Mr. Suzuki to run to the hospital seems to be a signal of rectal cancer.’

(BCCWJ-NT)



In (1), despite the absence of path verbs like *iku* ‘go’ and *kuru* ‘come’, the *-ni* phrases are interpreted as goals of motion. In light of the absence of directional expressions in (1), we regard the sentences like (1) as involving path coercion. What, then, makes the path coercions in (1) acceptable? This chapter aims to answer the question on the basis of the proposal in Chapter 4, i.e., the route meaning component encoded by the verb and the place encoded by the *-ni* phrase are semantically unified to form a path along which an entity moves; I will argue that the function of the direct causative constructions licenses the path coercions in (1).

The organization of this chapter is as follows. Section 5.2 takes a close look at causative constructions consisting of manner-of-motion verbs and goal *-ni* phrases. On the basis of the investigation in the previous section, section 5.3 argues that the proposal on path coercions in Chapter 5.4 applies to co-occurrences of manner-of-motion verbs with goal *-ni* phrases in causative constructions. In addition, I claim that the function of causative constructions is associated with the acceptability of path coercions, as is the case with the omniscient narrator’s perspective in Chapter 4. Section 5.4 discusses a consequence resulting from the proposal in the previous section. Section 5.5 offers a conclusion.

## **5.2. A Close Look at Co-Occurrences of Manner-of-Motion Verbs with *-Ni* Phrases in Causative Constructions**

As far as I know, there is no study closely investigating co-occurrences of manner-of-motion verbs with goal *-ni* phrases in causative constructions.<sup>2</sup> Thus, I begin by taking a close look at examples like (1).

### 5.2.1. Interpretations of *-ni* Phrases

Let us start by confirming that the *-ni* phrases in question are interpreted as goals of motion. As shown in Chapter 4, at least two types of tests can clarify whether a *-ni* phrase with a motion verb is interpreted as a goal of motion or not. One is to check the compatibility of the predicate with “in/for” temporal modifiers. Sentences with goal phrases do not allow temporal modifiers with “for”, as illustrated in (2).

- (2) \*Taroo-wa eki-ni iti-zikan it-ta.  
Taro-TOP station-to one-hour go-PAST  
‘Taro went to the station for one hour.’

Another test is to check the compatibility of the predicate with quantifier phrases measuring out a motion event. As Tenny (1994:79) points out, the event described by the verb may only have one measuring-out and be delimited only once. Thus, sentences with goal phrases are inconsistent with a quantifier phrase like *iti-kiro* ‘one kilometer’. This is exemplified in (3)

- (3) \*Taroo-wa eki-ni iti-kiro it-ta.  
Taro-TOP station-to one-kilometer go-PAST  
‘Taro went one kilometer to the station.’

The sentences in (4a) and (4b), where the manner-of-motion verbs are used with the *-ni* phrases, pattern like (2) and (3), respectively.

- (4) a. \* Hanako-wa Taroo-o eki-ni jyu-ppun hasir-ase-ta.  
 Hanako-TOP Taro-ACC station-to ten-minutes run-CAUS-PAST  
 ‘Hanako made Taro run to the station for ten minutes.’
- b. \* Hanako-wa Taroo-o eki-ni hyaku-meetoru  
 Hanako-TOP Taro-ACC station-to one.hundred-meter  
 hasir-ase-ta.  
 run-CAUS-PAST  
 ‘Hanako made Taro run 100 meters to the station ’

From these observations, we can safely say that *-ni* phrases used with manner-of-motion verbs in causative constructions are interpreted as goals of motion.

### 5.2.2. The Restriction on Manner-of-Motion Verbs

Let us turn to types of manner-of-motion verbs. Chapters 3 and 4 have revealed that the route meaning component encoded by the verb licenses the locative phrase to be interpreted as a goal of motion. In light of the presence of a route meaning component, we have classified manner-of-motion verbs into two subtypes, as summarized in (5).

- (5) a. *Route-oriented manner-of-motion verbs*  
 hasiru ‘run’, aruku ‘walk’, oyogu ‘swim’, hau ‘crawl’, kakeru ‘dash’,  
 etc.
- b. *Action-oriented manner-of-motion verbs*  
 odoru ‘dance’, samayou ‘wander’, buratuku ‘roam’, arukimawaru  
 ‘amble’, etc.

My proposal in Chapters 3 and 4 for the restriction on verbs applies to path coercions in causative constructions. In addition to examples of the verb *hasiru* like (1), other types of route-oriented manner-of-motion verbs including *aruku* ‘walk’ and *oyogu* ‘swim’, although not so many, can be found in novels and by doing internet searches using Google® search engine, as illustrated below:

(6) a. Pettto-o ten-nai-ni aruk-ase-nai-de kudasai.  
 pet-ACC store-inside-to walk-CAUS-not-te please  
 ‘Don’t walk your pet into the store.’

b. Kakki-no-ii otori-o nawabari-nai-ni oyog-ase-ta.  
 healthy-looking decoy-ACC territory-inside-to swim-CAUS-PAST  
 ‘I made a healthy-looking decoy swim into the territory.’

(Masaki, Hanami *Kyoayu ni Tukareta Otokotati*)

c. Katatumuri-o kao-ni(-made) haw-ase-ru dooga  
 snail-ACC face-to(-until) crawl-CAUS-PRES video  
 ‘The video showing that someone caused a snail to crawl onto his face.’

Unlike route-oriented manner-of-motion verbs, we cannot find the examples of action-oriented manner-of-motion verbs. In fact, all of my informants judged the sentences in (7) to be ungrammatical.

(7) a. \* Hanako-wa Taroo-o eki-ni odor-ase-ta.  
 Hanako-TOP Taro-ACC station-to dance-CAUS-PAST  
 ‘Hanako made Taro dance to the station.’

- b. \* Watasi-wa kare-o hankagai-ni samayow-ase-ta.  
 I-TOP he-ACC downtown-to wander-CAUS-PAST  
 ‘(Lit.) I made him wander to the downtown.’

Among my informants, one judged (7b) to be acceptable if it indicates that the person referred by *watashi* caused him to wander in the downtown. However, this does not mean that he wandered and as a result he ended up in the downtown.

In sum, route-oriented manner-of-motion verbs can allow path coercions in causative constructions, as is the case with those in narrative contexts.

### 5.2.3. Two Types of Causative Constructions

Last, but not least, we examine two types of causative constructions. It has often been pointed out that the object referring to the causee can bear either accusative case *-o* or dative case *-ni* in causative constructions with intransitive verbs. This is exemplified in (8).

- (8) a. Hanako-ga Taroo-o ik-ase-ta.  
 Hanako-NOM Taro-ACC go-CAUS-PAST  
 ‘Hanako made Taro go.’
- b. Hanako-ga Taroo-ni ik-ase-ta.  
 Hanako-NOM Taro-DAT go-CAUS-PAST  
 ‘Hanako had Taro go.’

(Shibatani (1990:309))

Kuno (1978), Kuroda (1965), and Shibatani (1973, 1976, 1990), among others, point out

that there is a slight difference in meaning between the *-o* version in (8a) and the *-ni* version in (8b). The former implies that the intention of the causee is ignored by the causer, while in the latter, the causer typically appeals to the causee's intention to carry out the caused event. In fact, the *-ni* version is acceptable only when the causee acts as a volitional entity. This is exemplified in (9).

- (9) a. Taroo-ga hana{-o/\*-ni} migoto-ni sak-ase-ta.  
 Taro-NOM flower{-ACC/-DAT} beautifully bloom-CAUS-PAST  
 'Taro made the flowers bloom beautifully.'
- b. Kuuhuku-ga Hanako{-o/\*-ni} kizetus-ase-ta.  
 hunger-NOM Hanako{-ACC/-DAT} faint-CAUS-PAST  
 'Hunger made Hanako faint.'

(Shibatani (1990:309-310), with slight modifications)

The unacceptability of the *-ni* version in (9a) is attributed to the inanimateness of flowers, indicating the lack of volition. Likewise, an animate entity does not faint volitionally, which disallows the *-ni* version in (9b).

With the semantic difference between the two versions in mind, let us look at causative constructions involving manner-of-motion verbs used with goal *-ni* phrases. Interestingly enough, co-occurrences of manner-of-motion verbs with goal *-ni* phrases are permitted only in the *-o* version. In fact, we cannot find those in the *-ni* version both in Chunagon Corpus and by doing internet searches using Google® search engine. Additionally, all of my informants judged the *-ni* version in (10) to be weird.

- (10) ?? Taro-wa ototoo-ni eki-ni hasir-ase-ta.  
Taro-TOP brother-DAT station-to run-CAUS-PAST  
'Taro let his brother run to the station.'

One might think that the weirdness of (10) is attributed to the occurrence of the two constituents marked by *-ni*. However, the *-ni* version consisting of the path verb *iku* 'go' with a goal *-ni* phrase is judged to be fully acceptable, as shown in (11).

- (11) Taro-wa ototoo-ni eki-ni ik-ase-ta.  
Taro-TOP brother-DAT station-to go-CAUS-PAST  
'Taro let his brother go to the station.'

Comparing (10) and (11), we can safely say that co-occurrences of manner-of-motion verbs with goal *-ni* phrases are allowed only in the *-o* version of causative constructions.

#### 5.2.4. Interim Summary

Thus far, we have investigated co-occurrences of manner-of-motion verbs with goal *-ni* phrases in causative constructions from three perspectives; (i) the interpretation of the *-ni* phrase, (ii) the restriction on manner-of-motion verbs, and (iii) two types of causative constructions. The important results of our investigation are summarized in (12).

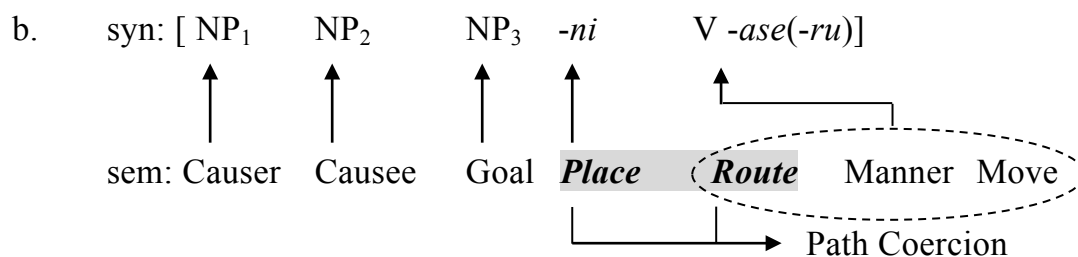
- (12) a. Route-oriented manner-of-motion verbs can be used with *-ni* phrases interpreted as goals of motion in causative constructions, while action-oriented manner-of-motion verbs cannot.

- b. Co-occurrences of manner-of-motion verbs with goal *-ni* phrases are allowed in the *-o* version of causative constructions, not in the *-ni* version.

Based on the proposal in Chapter 4, we can now give an account of (12a) from the perspective of a compositional approach. As I have mentioned in Chapters 3 and 4, the conception of path plays a central role in motion events; it is impossible for a path to be absent in a motion event. Thus, a path must be involved in the motion event denoted by a causative construction involving a manner-of-motion verb with a goal *-ni* phrase, despite the absence of a path expression in it. This leads us to hypothesize that the causative construction involves a phonologically null path element, or that the conception of path can be formed unifying the route meaning component encoded by the verb with the place function encoded by the *-ni* phrase. The former is not tenable because of the restriction on verbs as summarized in (12a): if a phonologically null path element were involved in the causative construction, action-oriented manner-of-motion verbs like *odoru* ‘dance’ could be used in it, as is the case with *odot-te iku* ‘go dancing’. By contrast, the latter corresponds to the fact as summarized in (12a). Our compositional approach to path can represent the structure of co-occurrences of manner-of-motion verbs with goal *-ni* phrases in causative constructions like (13a) as follows:

- (13) a. Hanako-wa Taroo-o eki-ni hasir-ase-ta.  
 Hanako-TOP Taro-o station-to run-CAUS-PAST





When we read off the sentence, we need to take into consideration meaning components encoded by each element. Since the sentence in (13a) has all meaning components of a motion event, we may unify a route meaning component with a place meaning component to generate a path meaning component.

It should be noticed here that path coercions in Japanese require a contextual support, as I have summarized in Chapter 4:

#### (14) Path Coercion in Japanese

A sentence in an appropriate context can denote a directed motion iff it involves the verb including a route meaning component and the place phrase marked by *-ni*.

Taking (12b) into consideration, we can predict that the appropriate context in this case corresponds to the implication generated by the *-o* version of causative constructions. Then, a question naturally arises. How does the implication of the *-o* version make path coercions possible?

### 5.3. Direct Causation and the Achievement of a Caused Event

To answer the question raised in the previous section, we take a close look at a

semantic property of the *-o* version of causative constructions. In light of its semantic property, the *-o* version is often called direct causation (Washio (2002), among others; cf. Shibatani (1973)). Washio (2002) proposes the interpretation of direct causation, as summarized in (15).

(15) The Interpretation of Direct Causation

- a. The causer himself or his volition causes a certain effect *E*.
- b. The causee himself or his volition is not responsible for the establishment of *E* at all.
- c. *E* refers to a situation caused by the end of the event denoted by the main verb.

(Washio (2002:46), with slight modifications)

As (15c) indicates, the direct causation implies a result component as a consequence of the caused event. Consider (16), showing a result component inferred from the event denoted by the main verb:

- (16) a. i. Q-ni kabann-o mot-ase-ru  
           Q-DAT bag-ACC have-CAUS-PRES
- ii. Q(-no te)-ni-wa kabann-ga aru  
               Q(-GEN hand)-at-TOP bag-NOM exist
- b. i. Q-ni kasi-o tabes-ase-ru  
               Q-DAT sweets-ACC eat-CAUS-PRES
- ii. Q(-no kuti)-ni-wa kasi-ga aru  
                   Q(-GEN mouth)-at-TOP sweets-NOM exist

The sentence in (ii) refers to a consequence of the event denoted in (i). Taking (16a) as an example, causing someone to have a bag gives rise to the bag being in his hand.

(15c) also applies to causative constructions consisting of manner-of-motion verbs with goal *-ni* phrases. Consider (17).

(17) Q-o      eki-ni      hasir-ase-ru      →      Q-wa      eki-ni      iru  
           Q-ACC   station-to   run-CAUS-PRES      Q-TOP   station-at   exist

As shown in (17), *eki-ni hasir-ase-ru* ‘to have someone run to the station’ implies that the causee reaches the station as a consequence of the causing event.<sup>3</sup> Thus, we can say that (15) guarantees that the event of change of location is pragmatically presupposed in the *-o* version of causative constructions. As Matsumoto (1997) points out, a goal *-ni* phrase is judged to be acceptable iff the predicate indicates the achievement of the transition. Hence, based on Washio’s (2002) proposal on the direct causation and Matsumoto’s (1997) proposal on goal *-ni* phrases, we can assume that path coercion in causative constructions is supported by their semantic property guaranteeing the achievement of the caused event.

There is a piece of evidence for our assumption. In our assumption, the caused event in question consists of a manner meaning component and a result meaning component. Interestingly enough, the manner meaning constitutes the foreground of the whole meaning, i.e., the asserted meaning, and the result meaning forms the background, i.e., the presupposed meaning (Goldberg (2010), Husband (2011); cf. Levinson (1983)). Generally, it is only the former component that can be negated by

sentential negation:

(18) A: Eki-ni arui-te it-ta no?  
station-to walk-by go-PAST PRT  
'Did you walk to the station?'

B1: Iya, kuruma-de it-ta yo.  
no car-by go-PAST I.tell.you  
'No, I went to the station by car.'

B2: # Iya, eki-ni it-te nai yo.  
no station-to go-te NEG I.tell.you  
'No, I didn't go to the station.'

As in (18B1), the way of reaching the station can be negated, but the negation of his reaching the station itself, as in (18B2), is impossible. A causative construction involving a manner-of-motion verb with a goal *-ni* phrase patterns like (18), as illustrated in (19).

(19) A: Hanako-wa Taroo-o eki-ni hasir-ase masita ka?  
Hanako-TOP Taro-ACC station-to run-CAUS POL.PAST SFP  
'Did Hanako make Taro run to the station?'

B1: Iya, aruk-ase masita yo.  
no walk-CAUS POL.PAST I.tell.you  
'(Lit.) No, she made him walk to the station.'

B2: # Iya, nani-mo s-ase-te nai yo  
no anything-Q do-CAUS-te NEG I.tell.you

‘No, she didn’t make him do anything.’

As (19B2) indicates, the negation of causing Taro to go to the station itself is impossible. This negation test can support our assumption that the transition serves as a presupposed meaning in causative constructions involving manner-of-motion verb with goal *-ni* phrases.

#### 5.4. Consequence

The previous section has claimed that the direct causation functions to pragmatically guarantee the resultant of the caused event, which makes path coercions available. This claim leads to a consequence, as summarized in (20).

- (20) Route-oriented manner-of-motion verbs can be used with goal *-ni* phrases if a semantic property of the construction implies that the motion event is carried out.

The consequence of the claim in the previous section is borne out by the consideration of adversative passive constructions. Consider (21), which is based on an intransitive verb:

- (21) Watasi-wa ame-ni hur-are-ta.  
I-TOP rain-DAT fall-ARE-PAST  
‘(Lit.) I was inconvenienced by rain.’

(Kageyama (2006:92))

Here, the verb is *huru*, an intransitive verb roughly meaning “fall”, and the passive morpheme is *-are-*. What is to be noted here is that the verb is an intransitive one, and unlike impersonal passive derived from intransitive verbs in some other languages, here the valency increases by one, contrary to the usual pattern of passive. Another distinct property of this construction is the obligatory adversity connotation, as is indicated by the English translation given in (21). (21) indicates that the adverse effect on the referent of *watasi* is achieved by the raining event. Thus, the adversative passive construction implicates the achievement of the subevent causing the adverse event. When an adversative passive construction involves a motion event as a subevent, its implication precisely corresponds to (20). Thus, we can predict that co-occurrences of manner-of-motion verbs with goal *-ni* phrases can be accepted in adversative passive constructions. This prediction is borne out by the following attested data, found by doing internet searches using Google® search engine:<sup>4</sup>

- (22) a. Mata yabu-no-naka-ni hasir-are-te simat-ta.  
 again shrubs-GEN-inside-to run-ARE-te finish-PAST  
 ‘(Lit.) I let my pet escape into shrubs again.’
- b. Hokoosya-ni muyamini kidoo-nai-ni aruk-are-te-wa  
 pedestrian-DAT immoderately train.tracks-inside-to walk-ARE-te-TOP  
 komaru.  
 it.is.a.problem  
 ‘It is a problem for pedestrians to walk into the train tracks.’
- c. Tetora-ni oyog-are-ta-wa murini ageru-koto-mo  
 tetrapod-to swim-ARE-PAST-TOP forcedly land-doing-Q  
 deki-nai-ne.

can-not-SFP

‘You cannot now land the fish forcedly, because it swam into tetrapod blocks.’

(22) indicates that the referents of the subjects are inconvenienced to some extent by the motion events denoted by the manner-of-motion verbs with the goal *-ni* phrases. These data can support our proposal that the constructional meaning of the achievement of the transition is closely associated with the process of path coercions in Japanese.

## 5.5. Conclusion

This chapter has discussed path coercions in Japanese causative constructions. We have revealed that (i) route-oriented manner-of-motion verbs can be used with *-ni* phrases interpreted as goals of motion in causative constructions, while action-oriented manner-of-motion verbs cannot: and (ii) co-occurrences of manner-of-motion verbs with goal *-ni* phrases are allowed only in the *-o* version of causative constructions. The former is attributed to the conceptual unification of a route and a place to form a path, which is the schematic core of the motion event. The latter leads us to suggest that the function of the *-o* version supports the process of the path coercions in causative constructions. In the *-o* version of causative constructions, called direct causation, the caused event is pragmatically presupposed to be carried out regardless of the causee’s volition. In causative constructions consisting of manner-of-motion verbs with goal *-ni* phrases, the achievement of the caused event indicates the change of location. Thus, the direct causation functions to pragmatically guarantee the resultant of the caused event, which makes path coercions available.

## Notes to Chapter 5

\* This chapter is a revised version of the papers that appeared as Namiki (2012) and Namiki et al. (2013).

<sup>1</sup> The following abbreviations are used in the glosses of examples: ACC stands for accusative case marker, ARE for passive marker, ASP for aspectual marker, CAUS for causative marker, COP for copular verb, DAT for dative case marker, GEN for genitive case marker, LOC for locative marker, NEG for negation, NOM for nominative case marker, PAST for past morpheme, POL for polite verb, PRE for present morpheme, PRT for particle, and TOP for topic marker.

<sup>2</sup> Ono (2010) and Usuki (2011) point out that co-occurrences of manner-of-motion verbs with goal *-ni* phrase obtain in Japanese causative constructions, as in the following examples.

(i) a. Nobita-ga Zyaiann-o iti-rui-ni hasir-ase-ta.

Nobita-NOM Jaian-ACC first-base-to run-CAUS-PAST

‘Nobita caused Jaian to run to the first base.’

(Ono (2010:117))

b. Iwakuma-ga Omatu-o iti-rui-ni aruk-ase-ta.

Iwakuma-NOM Omatsu-ACC first-base-to walk-CAUS-PAST

‘Iwakuma caused Omatsu to advance to first.’

(Usuki (2011:3))

The sentences in (i), however, are not genuine examples showing that occurrences of manner-of-motion verbs and goal *-ni* phrases can be accepted in causative constructions.



In fact, the motion expressions *iti-rui-ni hasiru* and *iti-rui-ni aruku* can be found in the contexts of broadcasts of baseball games.

- (ii) a. Iti-rui rannaa-ga nir-rui-ni hasit-ta.  
 first-base runner-NOM second-base-to run-PAST  
 ‘The runner on the first base tried to steal second.’
- b. Battaa-ga iti-rui-ni aruki-masu.  
 batter-NOM first-base-to run-POL  
 ‘The first-base runner advances to first.’

The acceptability of (ii) leads us to consider why the two manner-of-motion verbs are compatible with the *-ni* phrase *iti-/ni-/sann-rui-ni* ‘to the first/second/third base’, regardless of the path verb *iku* ‘go’. A possible answer to the question is to distinguish these *-ni* phrases from other goal *-ni* phrases like *eki-ni* ‘to the station’. In fact, their referentiality is considered to be low. Consider the following examples:

- (iii) a. ? Booru-o ut-ta ra, ano rui-ni hasit-te kudasai.  
 ball-ACC strike-PAST if that base-to run-te please  
 ‘If you strike the ball, then run to that base.’
- b. ? Rannaa-ga ano ni-rui-ni hasit-ta yo.  
 runner-NOM that second-base-to run-PAST I.tell.you  
 ‘The runner ran to that second base.’

Compared with (ii), (iii) is judged to be infelicitous, because of the presence of the demonstrative *ano* ‘that’. This grammatical behavior is similar to motion expressions

involved in relative nouns such as *\*ano higasi-ni hasiru* ‘to run to that east’. This similarity leads to a conclusion that *iti-/ni-/sann-rui* ‘the first/second/third base’ falls into relative nouns. I have to leave this issue for further research.

<sup>3</sup> One might think that the resultant state of (17) is not presupposed, because of its cancelability, as illustrated in (i).

- (i) Hanako-wa Taroo-o eki-ni hasir-ase-ta ga,  
 Hanako-TOP Taro-o station-to run-CAUS-PAST but  
 saihu-o wasure-ta koto-ni kizuki, totyuude  
 wallet-ACC leave-PAST fact-DAT notice on.the.way  
 hikikaesi-ta.  
 go.back-PAST

‘Hanako made Taro run to the station, but he noticed that he left his wallet on the way, so he went back.’

Generally, the presupposed meaning cannot be negated by sentential negation. In an event of change of location, the moving figure is expected to reach the goal at the end of the event. As shown in (i), however, denying the result does not give rise to a contradiction with the causative construction. I assume that this cancelability is attributed not to a property of the construction but to that of deictic center. It has often been pointed out that the result component denoted by the verb *iku* ‘go’, not *kuru* ‘come’, can be denied, as exemplified in (ii).

- (ii) eki-ni {it/#ki}-ta ga, sai-hu-o wasure-ta koto-ni  
 station-to go/come-PAST but wallet-ACC leave-PAST fact-DAT  
 kizuki, totyuude hikikaesi-ta.  
 notice on.the.way go.back-PAST  
 ‘(I) {went/came} to the station, but I noticed that I left my wallet on the way,  
 so I went back.’

These verbs are classified into result verbs, which lexically entail a result state. However, the result component denoted by *iku*, that is to say, reaching the goal is cancelable in an appropriate context, although the judgments are variable. The same holds true for the causative constructions in (iii).

- (iii) Hanako-wa Taro-o eki-ni {ik/#kos}-ase-ta ga,  
 Hanako-TOP Taro-ACC station-to go/come-CAUS-PAST but  
 sai-hu-o wasure-ta koto-ni kizuki, totyuude  
 wallet-ACC leave-PAST fact-DAT notice on.the.way  
 hikikaesi-ta.  
 go.back-PAST  
 ‘Hanako made Taro {go/come} to the station, but he noticed that he left his  
 wallet on the way, so he went back.’

The deictic verb *iku* makes the deictic center correspond to the source of motion, whereas the deictic center of the verb *kuru* is the goal of motion. This difference along with (i) leads to a hypothesis that in (i) the deictic center preferably corresponds to the source of motion. This hypothesis is borne out by the following example:

- (iv) Eki-de      saihu-o      ie-ni      wasure-ta      koto-ni      kizuki,  
 station-at    wallet-ACC    home-at    leave-PAST    fact-ni    notice  
 haha-o      eki{??-ni/      -made}    hasir-ase-ta.  
 mother-ACC   station-to/      until      run-CAUS-PAST  
 ‘(Lit.) When he noticed at the station that he left his wallet at home, he asked  
 his mother to bring it to the station.’

The context in (iv) indicates that the deictic center corresponds to the station. In this context, the goal of motion is expressed by the *-made* phrase rather than the goal *-ni* phrase. Thus, we can safely say that the cancelability of (i) is not problematic for our proposal.

<sup>4</sup> The restriction on verbs applies to path coercions in adversative passive constructions. While route-oriented manner-of-motion verbs with goal *-ni* phrases in adversative passive constructions are found by doing internet searches using Google® search engine, as shown in (22), action-oriented manner-of-motion verbs are not. In fact, all of my informants judged (i) to be unacceptable.

- (i) a. \* Hanako-wa      Taroo-ni      eki-ni      odor-are-ta.  
 Hanako-TOP    Taro-DAT    station-to    dance-ARE-PAST  
 ‘(Lit.) Taro danced to the station and Hanako was put into an awkward  
 situation.’
- b. \* Watasi-wa      kare-ni      hankagai-ni      samayow-are-ta.  
 I-TOP      he-DAT    downtown-to    wander-ARE-PAST  
 ‘(Lit.) He unexpectedly wandered to the downtown and I was put into an  
 awkward situation.’

The grammatical contrast between (22) and (i) can also support our proposal on path coercions.

## Chapter 6

### A Comparative Study of Path Coercions in English and Japanese

#### 6.1. Introduction

In the previous three chapters, I highlighted the fact that in both English and Japanese manner-of-motion verbs *are* compatible with locative PPs interpreted as goals of motion in an appropriate context, as exemplified below:

- (1) a. As he walks in the room, he sees her lying in front of him on the bed,  
[...]

(J. Mahmough, *Be That As It May*)

- b. Kooban-o            de-ta            hutari-wa            mugon-no-mama  
Police.box-ACC exit-PAST the.two-TOP wordless-GEN-as  
eki-ni                aru-ita.  
station-LOC        walk-PAST

‘After exiting the police box, they walked to the station without saying a word.’

(Kiryu, Aoi *Doukoku no Daichi*)

These can be regarded as marked expressions, because English has prepositions *into* specialized for overt encoding of goals and Japanese characteristically encodes paths in verbs like *iku* ‘go’ and *kuru* ‘come’. Marked expressions are associated with licensing conditions in general. As we have revealed in the previous two chapters, the semantic

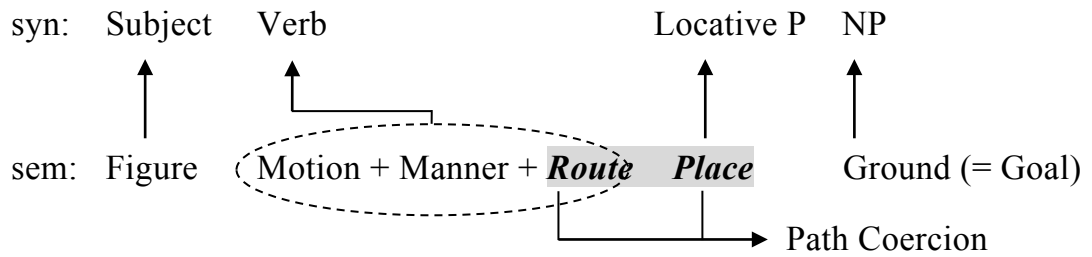
and pragmatic conditions are imposed on path coercions in English and Japanese. This chapter explores the similarity and difference in the licensing conditions on path coercions between the two languages.

The organization of this chapter is as follows. Section 6.2 compares the semantic and pragmatic conditions on path coercions in English and Japanese. We argue that English and Japanese share the semantic condition, whereas the pragmatic condition is imposed on only Japanese path coercions. Section 6.3 overviews the motion typology proposed by Talmy (1985, 1991, 2000), which enables us to theoretically explain the facts observed in the previous section. Based on Talmy's typology, Section 6.4 tries to give an account for the similarity in the semantic condition and difference in the pragmatic condition between English and Japanese. Finally, section 6.5 summarizes the chapter and offers a conclusion.

## **6.2. The Semantic and Pragmatic Conditions on Path Coercions**

We have proposed so far that a path meaning component can be decomposed into a route meaning component and a place function, and the route denoted by the verb and the place function denoted by the preposition or postposition are conceptually integrated into a path, which is called path coercion. The event compositionality of path coercion is illustrated in (2).

(2) The Event Compositionality of Path Coercion



Additionally, we have revealed in the two previous chapters that path coercions are subject to a semantic condition in both English and Japanese and a pragmatic condition in Japanese. Now, we can summarize the conditions on path coercion in English and Japanese, as in (3).<sup>1</sup>

(3) a. *The Semantic Condition on Path Coercions*

A locative expression can be interpreted as a goal of motion iff the verb encodes a path or a route along which a moving entity moves. There is no difference in this point between English and Japanese.

b. *The Pragmatic Condition on Path Coercions*

English sometimes requires a context suggesting that a moving entity is outside the place denoted by the locative phrase in a motion expression. On the other hand, Japanese obligatorily requires a contextual support where, for example, the motion event is construed from the omniscient narrator's perspective.

As summarized in (3), the semantic condition on path coercions is imposed on both English and Japanese, whereas the pragmatic condition is imposed on only Japanese. Let us detail them in turn.



### 6.2.1. The Semantic Condition on Path Coercions

As we have seen in the previous three chapters, in both English and Japanese a manner-of-motion verb must have a route meaning component, in order for the locative phrase to be interpreted as a goal of motion. In light of a route meaning component, we have classified the manner-of-motion verbs into two types, as summarized in (4).

- (4) a. *Route-oriented manner-of-motion verbs*  
run/hasiru, walk/aruku, swim/oyogu, crawl/hau, dash/kakeru, etc.
- b. *Action-oriented manner-of-motion verbs*  
dance/odoru, wander/samayou, roam/buratoku, amble/arukimawaru, etc.

This classification is borne out by at least three diagnostics: whether or not the verb is compatible with DP complements denoting a route, distance classifiers, and delimiter phrases, as exemplified in (5), (6), and (7), respectively.

(5) *Route-DP complements*

- a. Mary {walked / \*danced} the street to the station.
- b. Taroo-ga hodoo-o {arui-ta / \*odot-ta}.
- Taro-NOM sidewalk-ACC walk-PAST / dance-PAST

(6) *Distance classifiers*

- a. John {walked / \*danced} a mile.
- b. Taro-wa iti-kiro-o {arui-ta / \*odot-ta}.
- Taro-TOP one-kilometer-ACC walk-PAST / dance-PAST

(7) *Delimiter phrases*

- a. John {walked / \*danced} until the station.
- b. Taro-wa eki-made {arui-ta / \*odot-ta}  
 Taro-TOP station-until walk-PAST / dance-PAST

Below is a table showing the relationships between the two types of manner-of-motion verbs and the results of the three diagnostics.

**Table 6.1: Relationships between the two types of manner-of-motion verbs and the results of the three diagnostics**

	Route DP complements	Distance classifiers	Delimiter phrases
Route-oriented manner-of-motion verbs	✓	✓	✓
Action-oriented manner-of-motion verbs	*	*	*

### 6.2.2. The Pragmatic Condition on Path Coercions

Let us now turn to the pragmatic condition on path coercions. English sometimes requires a context suggesting that a moving entity is outside the place denoted by the locative expression in a motion expression, in order to eliminate the ambiguity between the locative and directional uses of the locative Ps. For example:

- (8) a. John ran in the house from the outside.  
 b. [Standing just outside the room]  
 John ran in the room.

The underlined PP in (8a) guarantees that the locative phrase *in the house* is interpreted as the goal of motion. Likewise, the contextual support in (8b) confirms that John's running ends up in the room. Although these contexts support to eliminate the ambiguity between the locative and directional readings of the locative Ps, they are not a necessary condition for a locative PP to be interpreted as a goal of motion. By contrast, path coercions in Japanese are closely associated with the pragmatic restriction. As we have seen in Chapter 4, path coercion in Japanese can be accepted in a context where the motion event is construed from the omniscient narrator's perspective. The omniscient narrator's perspective functions to suspend the constraint of empathy, thus suppressing deictic verbs such as *iku* 'go' and *kuru* 'come' in this type of context. Hence, manner-of-motion verbs are judged compatible with goal *-ni* phrases in the omniscient narrative. In fact, locative *-ni* phrases used with manner-of-motion verbs cannot be interpreted as goals of motion when the sentence includes expressions related to the speaker-hearer interpersonal relationship like the sentence final particle *yo* 'I tell you', as in (9a), and the polite verb *-masu*, as in (9b), or is embedded in the complement of the verb *omou* 'think', as in (9c).

- (9) a. \* Kooban-o            de-ta            hutari-wa            mugon-no-mama  
           Police.box-ACC exit-PAST the.two-TOP wordless-GEN-as  
           eki-ni                aru-ita-yo.  
           station-LOC        walk-PAST-I.tell.you

- b. \* Kooban-o de-ta hutari-wa mugon-no-mama  
 Police.box-ACC exit-PAST the.two-TOP wordless-GEN-as  
 eki-ni aruki-masi-ta.  
 station-LOC walk-POL-PAST
- c. \* Kooban-o de-ta hutari-wa mugon-no-mama  
 Police.box-ACC exit-PAST the.two-TOP wordless-GEN-as  
 eki-ni aru-ita to watasi-wa omot-ta.  
 station-LOC walk-PAST QUOT I-TOP think-PAST

As we have seen in the previous subsection, English and Japanese share the semantic condition on path coercions. However, the pragmatic condition seems to be imposed on only Japanese. In fact, the acceptability of a goal *-ni* phrase used with a manner-of-motion verb is not affected at all by the contextual support we have seen in (8b). This is exemplified in (10).

(10) [Standing just outside the room]

\*Taroo-wa heya-no naka-ni hasir-imasi-ta  
 Taro-TOP room-GEN inside-to run-POL-PAST  
 ‘(Standing just outside the room,) John ran in the room.’

Regardless of the context, the sentence in (10) is judged infelicitous because of the presence of the polite verb. The path coercions in English are also insensitive to the pragmatic condition found in Japanese. Consider the following examples:

- (11) a. (I must tell you that) the children ran in the room from the outside.  
b. (I thought that) the children run in the room from the outside.

The acceptability of the two sentences is not affected by their being embedded in the complements of the verb *tell* and *think*. The locative phrases in (11) can be interpreted as goals of motion because of the PP *from the outside* denoting the source of the transition.

### 6.2.3. Interim Summary

The comparison of the semantic and pragmatic conditions on path coercions in English and Japanese raises two questions, as summarized in (12).

- (12) a. Why should English and Japanese share the same semantic condition on path coercions?  
b. How can we explain that the pragmatic condition is strongly imposed on Japanese?

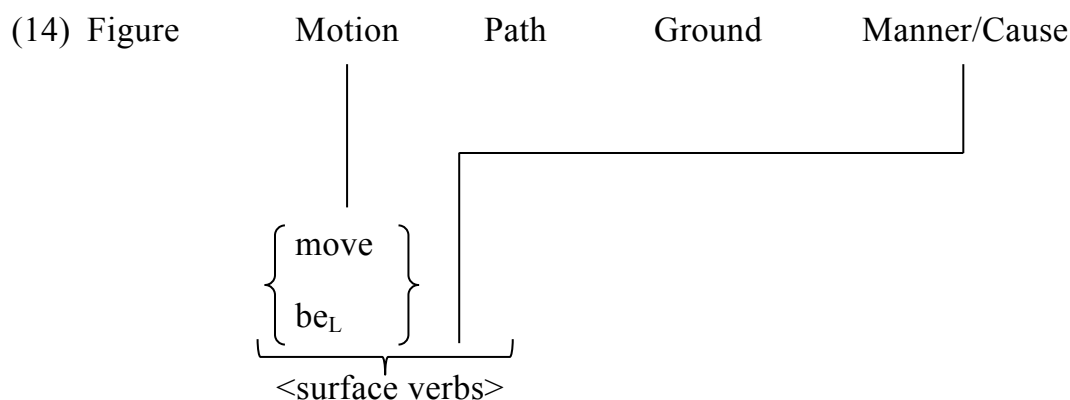
To answer these two questions, we briefly overview in the next section the motion typology proposed by Talmy (1985, 1991, 2000).

### 6.3. Talmy's Motion Typology

Before entering into his typology, let us survey how Talmy (1985) defines motion events. Talmy assumes that a motion event generally consists of four linguistic conceptions, as summarized in (13).

- (13) a. Figure: the entity that is moving or located  
 b. Ground: the entity which acts as a spatial reference point for the motion/location of the figure  
 c. Path: the path of the figure  
 d. Manner: the manner of motion by which the figure moves along the path
- (Croft et al. (2010:202))

Talmy (1985) is mainly concerned with what semantic component the verb lexicalizes together with Motion. Investigating various languages, he proposes three lexicalization patterns of motion verbs. In the first type of conflation pattern, the verb expresses at once both the fact of Motion and either its manner or its cause. Talmy (1985:62) represents this conflation pattern as shown in (14):



(Talmy (1985:62), with slight modification)

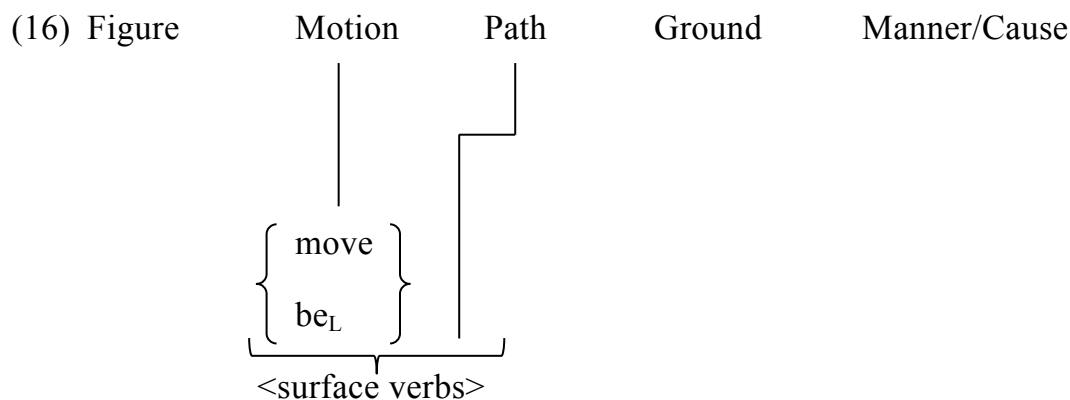
(14) shows that Motion is conflated with Manner or Cause, and that these are expressed by a single surface verb. This type of conflation pattern is exemplified by the English sentences, as shown in (15), where the verb denotes both Motion (or Location) and

Manner.

- (15) a. The lamp {stood / lay / learned} on the table.  
b. The rock {slid / rolled / bounced} down the hill.

(Talmy (1985:62))

In the second type of conflation pattern, the verb root at once expresses both the fact of Motion and the Path. Talmy schematically represents this conflation pattern as below:



(Talmy (1985:69), with slight modification)

In (16), Motion is semantically combined with Path to be expressed by a single surface verb. This type of conflation pattern is exemplified by, for example, the Spanish and Japanese sentences below, where the motion and the path are encoded by the verb, and the manner is encoded by an additional gerundive clause.

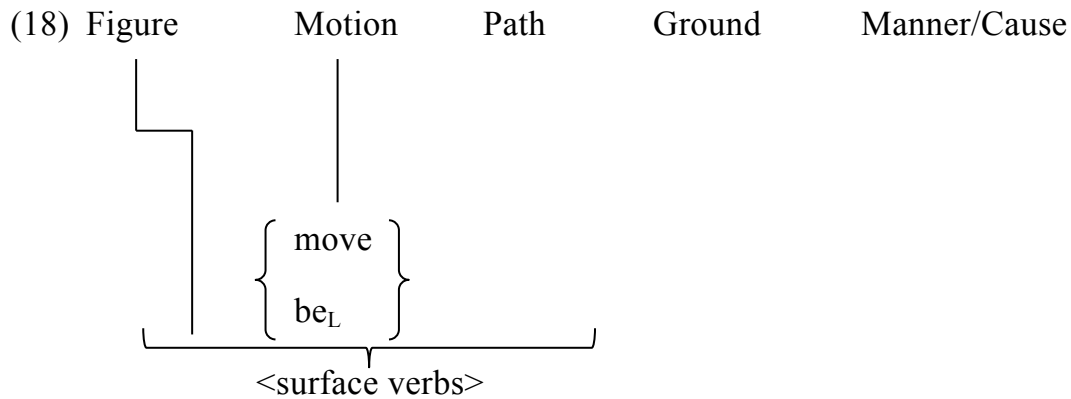
- (17) a. La botella entro a la cueva (flotando)  
the bottle moved.in to the cave (floating)  
'The bottle floated into the cave'

(Talmy (1985:69), cited from Demizu (2015:18))

- b. Taro-wa heya-ni (aruite) hait-ta.  
Taro-TOP room-to (walking) enter-PAST  
'Taro entered the room (, walking [the while])'

(Demizu (2015:18))

In the third conflation pattern, Figure is conflated with Motion. Talmy schematically represents this conflation pattern as shown in (18).



(Talmy (1985:73), with slight modification)

English, although not having so many examples, has a few that conform to this conflation pattern, as shown in (19).

- (19) a. It rained in through the bedroom window.  
b. I spat into the cuspidor.

(Talmy (1985:73))

In (19), the Figures, which refer to moving entities such as rain and spit, and Motion are



denoted by the verbs. As Talmy states, this conflation pattern is observed exclusively in a few languages like Atsugewi, a Hokan language of northern California and Navajo, in which we can find many verb roots encoding information of moving entities, as exemplified in (20).

- (20) a. *-lup-*: ‘for a small shiny spherical object (e.g. a round candy, an eyeball, a hailstone) to move/be-located’  
b. *-caq-*: ‘for a slimy lumpish object (e.g. a toad, a cow dropping) to move/be-located’  
c. *-qput-*: ‘for runny icky material (e.g. mud, manure, rotten tomatoes, chewed gum) to move/be-located’

(Talmy (1985:73))

Talmy (1991, 2000) develops his typology of motion expressions into the typology of event integration. This typology is predominantly concerned with how several events are integrated or conflated into a complex event, a combination of which, termed a macro-event, is represented by a single clause. A macro-event consists of two sub-events: a framing event, which plays a central role in the macro-event, and a co-event, which “constitute[s] an event of circumstance in relation to the macro-event as a whole and perform[s] functions of support in relation to the framing event” (Talmy (2000:220)). Let us briefly overview them in turn.

A framing event is composed of the following four semantic components:

- (21) a. **Figural entity**: the component on which attention or concern is currently most centered.

- b. **Ground entity**: the entity conceptualized as a reference entity, with respect to which the condition of the figural entity is characterized.
- c. **Activating process**: a process by which the figural entity either makes a transition or stays fixed with respect to the ground entity.
- d. **Association function**: a function that sets the figural entity into a particular relationship with the ground entity.

(Talmy (2000:218))

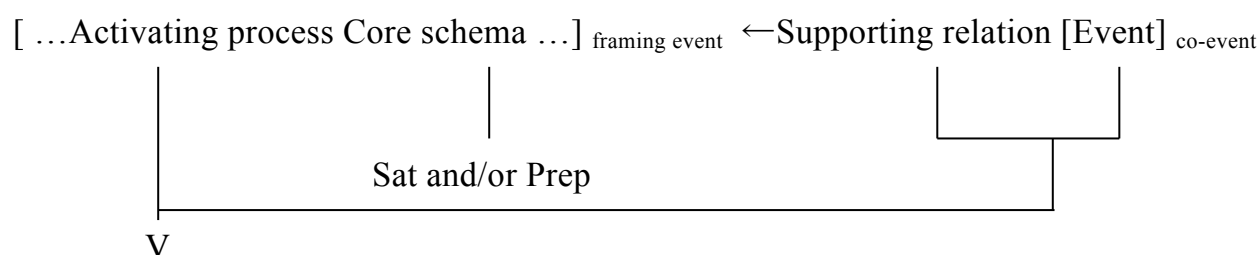
The bold-faced concepts in (21a), (21b), (21c), and (21d) are equivalent to Figure, Ground, Motion, and Path in Talmy (1985), respectively. What should be noted here is that the association function is assumed to play the most important role in the framing event, relating the figural entity with the ground entity, because “this portion most determines its particular character and distinguishes it from other framing events (Talmy (2000:218))”. Hence, it is considered to be the schematic core of the framing event, which is named the core schema. In a motion event, the core schema is the path alone or the path together with the ground entity, which is subsumed under the association function.

The co-event bears a support relation to the framing event. It includes Precursion, Enablement, Cause, Manner, Concomitance, Purpose, and Comstitutiveness. For example, in the motion event denoted by the sentence *The bottle floated into the cave.*, the floating event is considered to be the co-event bearing the specific support relation to the framing event of the transition of the bottle into the cave.

Based on the event integration, Talmy (1991, 2000) posits an intriguing two-way typology depending on where a language characteristically encodes path, what is subsumed under the association function, termed the core schema. In some languages

manner is characteristically encoded in the verb and path in a satellite to the verb, where satellites subsume primarily particles and verb affixes. These languages are called satellite-framed languages including most Indo-European minus Romance, Finno-Ugric, Chinese, Ojibwa, and Warlpiri. The syntactic mapping of macro-event in satellite-framed languages is illustrated as in (22).

(22)



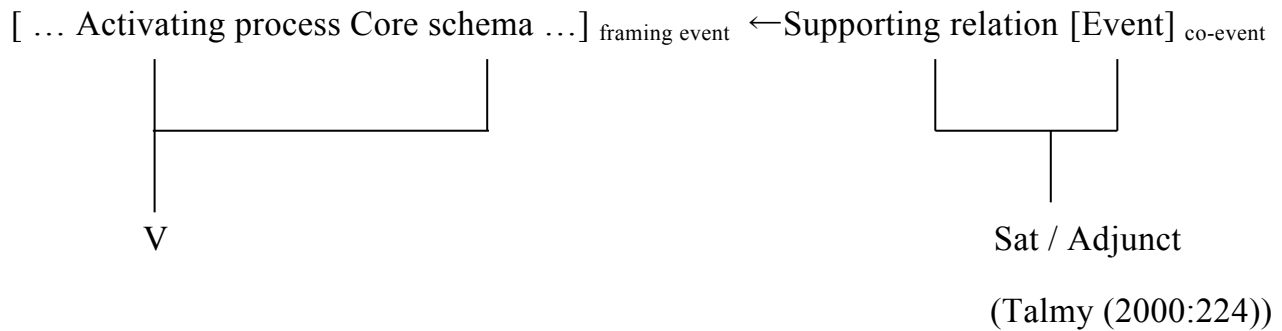
(Talmy (2000:224))

(23) John walked into the room.

Taking the English sentence in (23) as an example, a figural entity is encoded in the subject, a motion as the activating process and a manner in the co-event are encoded in the main verb, a path and a ground entity, which is included in the core schema, are encoded in the prepositional phrase.

Conversely, in other languages path is characteristically encoded in the verb, with manner encoded via a separate adjunct clause or a satellite. These are called verb-framed languages including Romance, Semitic, Japanese, Tamil, Polynesian, Bantu, some branches of Mayan, Nez Perce, and Caddo. The syntactic mapping of macro-event in satellite-framed languages is illustrated as in (24).

(24)



(25) Taro-wa heya-ni (aruite) hait-ta.

Taro-TOP room-to (waking) enter-PAST

Crucially, verb-framed languages lack satellites that encode the core schema. Thus, with a few exceptions, it is only the verb that encodes the core schema in verb-framed languages.

Before moving on to our proposal in the next section, let us reconsider the concept of satellites. Talmy's notion of satellites are summarized below:

(26) [S]atellites are certain immediate constituents of a verb root other than inflections, auxiliaries, or nominal arguments. They relate to the verb root as periphery (or modifiers) to a head. A verb root together with its satellites forms a constituent in its own right, the 'verb complex' ... In some cases, elements that are encountered acting as satellites to a verb root otherwise belong to particular recognizable grammatical categories; therefore, it seems better to consider the satellite role not as a grammatical category in its own right but as a new kind of grammatical relation.

(Talmy (1985:102))

Satellites on this conception include English particles, for example. Thus, Talmy considers the element in boldface in the sentences below to be satellites.

- (27) a. Come **right back down out** from up in there!  
b. I ran **out** of the house.

(Talmy (1985:102-103), with slight modification)

It should be noted here that in (27b) *out* is considered to be a satellite, whereas *of* is not. According to Talmy (1985), the ground is optional with a satellite, but not with a preposition. Thus, some English prepositions like *in* and *on* can be satellites, while other prepositions like *into* and *onto* are only prepositions. Then a satellite is a sister to the verb root and does not require the obligatory presence of a ground element.

As Beavers et al. (2010:338) point out, however, the English elements that Talmy labels satellites are not always sisters to the verb. They apply *it*-clefting constituency test to the sentence *I ran out of the house*, and confirm that the combination of the satellite *out* and the PP *of the house* is a constituent, whereas the satellite *out* alone is not.

- (28) a. It was out of the house that I ran, not into the house.  
b. \* It was out that I ran of the house, not in.

(Beavers et al. (2010:338))

Additionally, as we have seen so far in this study, there are cases where the core schema is encoded in a PP alone. However, as Beavers et al. point out, PPs are neither satellites nor verbs under Talmy's definition. Here, we adopt Beavers et al.'s

suggestion that “we employ the term ‘satellite’ in a broader sense: any constituent that is sister to or adjoined to the verb (root)” (2010:339).

In sum, we have briefly looked at Talmy’s typological system. Talmy (2000) replaces his former tripartite typology with the two-way typology including satellite-framed and verb-framed languages. Given his typological perspective, the next section attempted to give an account for the similarity in the semantic condition and difference in the pragmatic condition between English and Japanese.

#### **6.4. A Pragmatic Repair Strategy**

We are now in position to answer the two questions posed in (12), repeated as (29). Our answer to each question is summarized below:

- (29) a. *Why should English and Japanese share the same semantic condition on path coercions?*

In motion events, a path is the schematic core, which plays a central role in the macro-event. This means that it is impossible for a path to be absent in a motion event. Consequently, regardless of typological differences between the two languages, the sentence must include a route component and a place function to be conceptually integrated into a path.

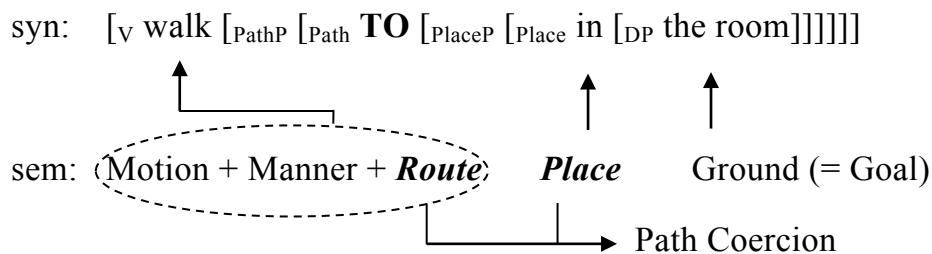
- b. *How can we explain that the pragmatic condition is strongly imposed on Japanese?*

Japanese is classified as a verb-framed language, which lacks a satellite to encode the core schema of a motion event. Given this, we can

assume that unlike English, Japanese lacks a phonologically null Path head TO, which makes the syntactic structure of a manner-of-motion verb with a directional *-ni* phrase grammatical. To override the syntactic violation, Japanese path coercions need a pragmatic or contextual support.

English is a satellite-framed language, where the core schema (i.e., a path) is characteristically encoded in a satellite. It should be noted here that in a motion event the core schema is encoded in an English PP alone. Given this, we can safely assume that the event conflation is permitted syntactically as well as semantically in English. In fact, we have assumed that in English path coercions a phonologically null Path head TO is merged with the PlaceP, as represented in (30).

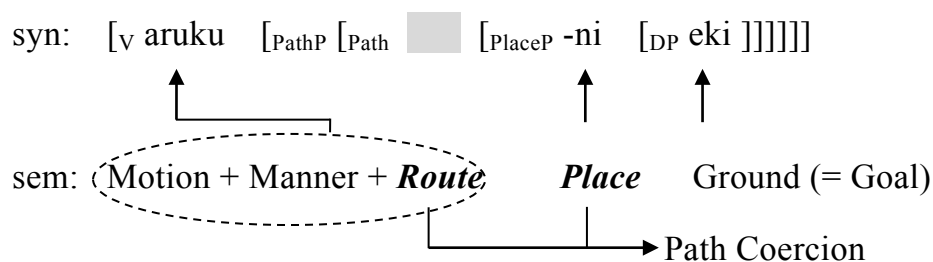
(30) *walk in the room* (under the directional interpretation)



By virtue of the resource of the phonologically null Path head TO in English, the syntactic structure of (30) is judged fully acceptable, as is the case with *walk into the room*. However, this null element is required to receive semantic support from the verb in order to make the sentence acceptable, because *dance in the room* does not mean entering the room by dancing. Hence, the semantic condition is imposed on English path coercions.

In contrast to English, Japanese is classified as a verb-framed language, which lacks a satellite to encode the core schema. As seen in the previous section, in Japanese the verb is the only element to encode the core schema. This applies to the syntactic property of Japanese. Unlike English, Japanese is assumed to lack a phonologically null path head TO. This is illustrated in (31).

(31) *eki-ni aruku* (in an appropriate context)



This syntactic structure is going to be judged ungrammatical because of the absence of the Path head. To override the syntactic violation, Japanese path coercions need a pragmatic or contextual support. We will call this strategy “pragmatic repairing strategy”.

(32) Pragmatic repairing strategy

A pragmatic or contextual support enables a sentence to override a syntactic violation.

More specifically, in Japanese the path coercion can be accepted in a context where the motion event is construed from the omniscient narrator’s perspective. The omniscient narrator’s perspective can function to suspend the constraint of empathy, whereby deictic verbs such as *iku* ‘go’ and *kuru* ‘come’ are suppressed in this type of context.



A consequence of our proposal is that path coercions can be observed in other verb-framed languages like French, Spanish, and Italian, given an appropriate context. In fact, the literature have pointed out that in these three different languages a manner-of-motion verb *is* compatible with a locative phrase despite the absence of a linguistic element encoding a path (Cummins (1996), Aske (1989), Stringer (2003), Kopecka (2006), Nikitina (2008), Morita (2008), Beavers at al. (2010), Yoshinari (2017), among others).

Take a case of French as an example. It has been pointed out in the literature that in French a manner-of-motion verb is not compatible with a goal phrase, as exemplified in (33).

- (33) a. \* Anne a marché à la Tour Eiffel  
 Anne walked.PAST to the Eiffel Tower  
 ‘Anne walked to the Eiffel Tower.’
- b. Paul a marché dans la rue.  
 Paul walked.PAST in the street.  
 ‘Paul walked (on) the street.’

(Cummins (1998:62))

The locative phrase *dans la rue* in (33) is interpreted as a location in which Paul walked, not as a goal of motion. However, some types of manner-of-motion verbs can be used with a locative phrase interpreted as a goal of motion in an appropriate context. This is exemplified in (34).

- (34) a. La neige vole dans la pièce.  
the snow fly.PRES in the room  
'(Lit.) The snow flies into the room.'

(Morita and Ishibashi (2017:279))

- b. Jean a couru dans la flaque.  
Jean run.PAST in the puddle  
'(Lit.) Jean ran into the puddle.'

(Rossi (1999:271))

According to Kopecka (2006), the manner-of-motion verbs licensing the goal interpretation of a locative phrase include *courir* 'run', *glisser* 'slide', *rouler* 'roll', and *sauter* 'jump'. Likewise, in Spanish and Italian, as exemplified in (35a) and (35b) respectively, certain types of manner-of-motion verbs are judged compatible with locative phrases interpreted as goals of motion in an appropriate context.

- (35) a. Mi ejercicio consiste en caminar a la biblioteca dos veces al día.  
'My exercise consists of walking to the library twice a day.'

- b. La palla rotolò sotto il tavolo (in un secondo).  
'The ball rolled under the table (in one second).'

(Nikitina (2008:177))

It should be noted here that even in the three languages co-occurrences of manner-of-motion verbs with locative phrases interpreted as goals of motion need a pragmatic support to be judged acceptable. This suggests that a pragmatic repairing strategy is available in the other verb-framed languages. We leave open what kind of

contextual or pragmatic support the path coercion in each language needs.

## **6.5. Conclusion**

In this chapter, we have tackled the challenging question of why the pragmatic condition is imposed on only Japanese. Based on the motion typology proposed by Talmy (2000), we have proposed a pragmatic repairing strategy in which a pragmatic or contextual support enables a sentence to override a syntactic violation. Since English is a satellite-framed language, where the core schema (i.e., a path) is characteristically encoded in a satellite, path coercions do not strongly require to a pragmatic support. On the other hand, Japanese is classified as a verb-framed language, which lacks a satellite to encode the core schema. It is for this reason that the pragmatic condition is imposed on Japanese path coercions.

## Notes to Chapter 6

<sup>1</sup> There are differences in semantic and syntactic conditions on path coercions between English and Japanese. As we have seen in Chapter 3, directional *in* phrases are disfavored if the location denoted by the complement of *in* lacks a well-defined boundary, as exemplified in (i).

- (i) a. He walked in the {room / backyard / store}.  
b. ?? He walked in the {city / field / mountain}.

However, the acceptability of goal *-ni* phrases seems to be insensitive to types of locations denoted by the *-ni* phrase, as shown in (ii).

- (ii) a. Taro-wa heya-ni arui-ta.  
Taro-TOP room-to walk-PAST  
b. Taro-wa mati-ni arui-ta.  
Taro-TOP city-to walk-PAST

This difference can be attributed to the conception of a goal and the semantic functions of the preposition *in* and the postposition *-ni*. A location conceptualized as a goal needs a well-defined boundary intrinsic to the goal. Although its semantics includes the boundary distinguishing the interior from the exterior, the preposition *in* does not profile the boundary by itself. Thus, the conception of boundary has to be supplemented with the complement of *in*. By contrast, in Japanese *-ni* phrases are interpreted as goals of motion only when the verb encodes a path in general. Putting it

another way, it is a path meaning component that licenses *-ni* phrases to be interpreted as goals of motion. Thus, goal *-ni* phrases have no semantic restriction on the complement of *-ni*.

Another difference includes the adjacency condition. As we have seen in Chapter 3, when an English locative PP is interpreted as a goal of motion, the PP must appear in the verbal complement position, and stay VP internally and adjacent to the verb as exemplified in (iii). By contrast, Japanese path coercions seem not to be subject to this syntactic condition, as in (iv).

- (iii) a. \* John ran at top speed in the house.  
b. \* In the concert hall the orchestra ran.
- (iv) a. Taro-wa ie-ni zensokuryoku-de hasit-ta.  
Taro-TOP house-to top.speed-by run-PAST
- b. ? Eki-ni hutari-wa arui-ta.  
station-to the.two-TOP walk-PAST

I have to leave this issue for further research.

## Chapter 7

### Conclusion

#### 7.1. Summary

The investigation of this thesis began with the following questions:

- (1) I. What makes the zero encoding strategy available in a given language?
- II. Are the conditions for the zero encoding strategy shared among languages?
- III. How can we explain the similarity and/or difference in the conditions for the zero encoding strategy among languages?

In the course of seeking answers, I explored path coercions in English and Japanese. In so doing, I mainly considered what the semantic and discourse-pragmatic factors are and how these are correlated with each other. Here I briefly review the main findings of this investigation.

Chapter 2 has discussed the validity of manner/result complementarity, which is proposed by Levin and Rappaport Hovav (1991, 1992, 1995, 2013) and Rappaport Hovav and Levin (2010). This hypothesis rests on negative evidence; it is the lack of verbs lexicalizing both manner and result that supports the hypothesis. Thus, it is an effective way to take a close look at manner-of-killing verbs that Beavers and Koontz-Garboden (2012) and Husband (2011) view as a counterexample to the hypothesis. The main points of this chapter can be summarized as follows: First, as

Husband (2011) showed, the absence of a result meaning component in Class II manner-of-killing verbs is borne out by the acceptability of an interruptive interpretation of the *for X times* modification, and their compatibility with the resultative phrase *to death*. Second, I explained that the unacceptability of an interruptive interpretation of the *for X times* modification to Class I manner-of-killing verbs can be attributed to their aspectual property of semelfactive. Third, I confirmed that Class I manner-of-killing verbs do not give rise to a contradiction with result-denial clauses when an appropriate context is given. Fourth, I pointed out that the Class I manner-of-killing verb *guillotine* is incompatible with the resultative phrase *in two pieces*, which can be used with result verbs denoting a cutting or breaking event. Finally, I revealed that the result state denoted by a sentence with a Class I manner-of-killing verb is reduced to the property of what we call the statal passive, not to the verb itself. These arguments lead us to conclude that all of the manner-of-killing verbs do not lexicalize a result. Although they may strongly evoke or imply a result state when the patient of an action is human, they do not entail any result states: a resulthood meaning comes from a pragmatic inference that the patient generally die at the end of the process denoted by the manner-of-killing verb.

Chapter 3 has discussed English locative PPs interpreted as goals of motion. On the basis of the meaning components of directed motion events, I have proposed a new encoding pattern of directed motion events. First, the conception of path can be decomposed into a route meaning component and a place function. Second, some manner-of-motion verbs encode a route meaning component as well as a motion and a manner. Third, the route meaning component encoded by the verb and the place encoded by the locative PP can form a path along which an entity moves. Based on this approach, we can safely say that when the locative PP is interpreted as the goal of

motion, the verb encodes a route meaning component and the locative PP encodes a place meaning component. For a place to be a goal, these meaning components need to be conceptually unified. It is the syntactic adjacency relationship between the verb and the locative PP that is required by the conceptual unification of the two meaning components.

Chapter 4 has discussed Japanese locative *-ni* phrases interpreted as goals of motion. On the basis of the meaning components of directed motion events, I have argued that the new encoding pattern of directed motion events proposed in the previous chapter can apply to Japanese path coercions. First, the conception of path can be decomposed into a route meaning component and a place function. Second, some manner-of-motion verbs encode a route meaning component as well as a motion and a manner. Third, a route meaning component encoded by the verb and a goal encoded by the locative *-ni* phrase can form a path along which an entity moves. For a place to be a goal, these meaning components need to be conceptually unified. I have also attributed the contextual constraint on path coercions to the necessity of the omniscient narrator's perspective. In my analysis, path coercion is licensed by the omniscient narrator's perspective, which suspends the constraint of empathy that applies to ordinary language use.

Chapter 5 has dealt with Japanese path coercions in causative constructions. We have revealed that (i) route-oriented manner-of-motion verbs can be used with *-ni* phrases interpreted as goals of motion in causative constructions, while action-oriented manner-of-motion verbs cannot: and (ii) co-occurrences of manner-of-motion verbs with goal *-ni* phrases are allowed only in the *-o* version of causative constructions. The former is attributed to the conceptual unification of a route and a place to form a path, which is the schematic core in the motion event. The latter leads us to suggest that the



function of the *-o* version supports the process of the path coercions in causative constructions. In the *-o* version of causative constructions, called direct causation, the caused event is pragmatically presupposed to be carried out regardless of the causee's volition. In causative constructions consisting of manner-of-motion verbs with goal *-ni* phrases, the achievement of the caused event indicates the change of location. Thus, the direct causation functions to pragmatically guarantee the resultant of the caused event, which makes path coercions available.

Chapter 6 has tackled the challenging question of why the pragmatic condition is imposed on only Japanese. Based on the motion typology proposed by Talmy (2000), we have proposed a pragmatic repairing strategy in which a pragmatic or contextual support enables a sentence to override a syntactic violation. Since English is a satellite-framed language, where the core schema (i.e., a path) is characteristically encoded in a satellite, path coercions do not strongly require a pragmatic support. On the other hand, Japanese is classified as a verb-framed language, which lacks a satellite to encode the core schema. Thus, the pragmatic condition is imposed on Japanese path coercions.

## **7.2. Issues for Future Research**

Now, all the discussions in this thesis enable us to offer the following generalizations:

### *(2) Generalizations about Path Coercions:*

#### *a. The Semantic Condition on Path Coercions*

A locative expression can be interpreted as a goal of motion iff the verb

encodes a path or a route along which a moving entity moves. There is no difference in this point among languages.

b. *The Pragmatic Condition on Path Coercions*

Verb-framed languages require a contextual support, because of the absence of the phonological null path element, whereas satellite-framed languages need not.

As I have argued in Chapter 6, in motion events a path is the schematic core, which plays a central role in the macro-event. This means that it is impossible for a path to be absent in a motion event. Consequently, regardless of typological differences between languages, even in the zero encoding strategy the sentence must include a route component and a place function to be conceptually integrated into a path: hence the generalization in (2a). The semantic condition on path coercions is taken into consideration after the sentence in question is structured grammatically. I have argued that it is a phonologically null path head that licenses the unaccusative structure of manner-of-motion verbs with locative phrases interpreted as goals of motion, and assumed that the phonologically null path head is intrinsic to satellite-framed languages. To override the syntactic violation, path coercions in verb-framed languages need a pragmatic or contextual support: hence the generalization in (2b).

To show issues for future research, I would like to slightly address path coercions in two languages; Dutch as a satellite-framed language and Spanish as a verb-framed language. Take Dutch as an example firstly. Consider the following:

- (3) a. Willemijn zwom het meer in.  
Willemijn swam the lake in

‘Willemijn swam into the lake.’

(Gehrke (2008:91))

b. Willemijn zwom in het meer.

Willemijn swam in the lake

‘Willemijn swam in the lake.’

(Gehrke (2008:90))

To refer to a motion in a goal direction, Dutch generally uses the locative Ps *in* ‘in’ and *op* ‘on’ in postposition, as shown in (3a). The prepositional phrase headed by *in* in (3b) can refer to a location where an event takes place (under the directional reading) or to the final location of a directed motion event (under the locative reading), although the judgments are variable. Interestingly, when the verb *danste* ‘dance’ in (4b) is used with a locative P like *op*, the ambiguity between the directional and locative readings are eliminated and the locative P refers to only a location where an event takes place.

(4) a. Brigit danste het podium op.

Brigit danced the stage on

‘Brigit danced onto the stage.’

(Gehrke (2008:92))

b. Brigit danste op het podium.

Brigit danced on the stage

‘Brigit danced on the stage.’

(Gehrke (2008:91))

I have revealed in Chapters 3 and 4 that the manner-of-motion verbs *swim* from English

and *oyogu* from Japanese have a route meaning component, whereas *dance* and *odoru* do not. Given this, we can assume that *zwom* in (3), but not *danste* in (4), also has a route meaning component. In addition, as Gehrke (2008) mentions, the sentence in (3b) under the directional reading does not require specific contexts. If these observations are true, these phenomena in Dutch also support the generalizations in (2). Needless to say, I need to take a close look at other manner-of-motion verbs.

The following Spanish examples may also support the generalization in (2).

- (5) a. ? El herido se arrastró a la cama.  
           the injured crawl.3sg.PAST to the bed  
           ‘The injured person crawled to the bed’
- b. \* Bailó a su habitación canturreando.  
           dance.3sg.PAST to his room humming  
           ‘He danced to his room, humming (the while).’

As slightly mentioned in Chapters 1 and 6, Spanish is a verb-framed language, where manner-of-motion verbs are not directly used with locative phrases interpreted as goals of motion. Thus, when uttered out-of-the-blue contexts, (5a) is judged to be infelicitous. However, according to one of my informants, it can be judged acceptable in a narrative context, although the judgments are variable. On the other hand, (5b) including *bailó* ‘(he) danced’ is judged to be unacceptable regardless of contexts. Based on my proposal that *crawl* and *hau* are classified into route-oriented manner-of-motion verbs, the generalization in (2a) is assumed to apply to Spanish. By investigating what kind of context (5a) requires, we will be able to make a more detailed analysis of path coercions in Spanish.

Although these issues remain to be resolved, the path-coercion approach employed in this thesis is a promising way to explore zero encoding strategies in various languages.

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