

Not All Verb-Framed Languages are Created Equal: The Case of Japanese*

YUKIKO SUGIYAMA

University at Buffalo, The State University of New York

1. Two Language Types

According to Talmy (1985, 2000), languages can be classified into two types, satellite-framed languages (S-languages) and verb-framed languages (V-languages), depending on whether the path of motion (Path) is encoded by the main verb or outside the main verb. Path is encoded by the main verb in V-languages whereas it is encoded by an element associated with the main verb, or satellite, in S-languages. Formally, a satellite is defined as “a grammatical category of any constituent other than a noun-phrase or prepositional-phrase that is in a sister relation to the verb root” (Talmy 2000:102). English is a typical example of an S-language as illustrated in the sentence below.

- (1) John ran **into** the house.
 FIGURE MOTION+MANNER PATH GOAL

In (1), the satellite *into* describes the Path of the figure, *John*, moving through space and crossing a boundary into a goal, *the house*.¹ The main verb encodes motion and how the motion was executed (running). Other languages that belong to this type include other Germanic languages, Finno-Ugric languages, Chinese, Ojibwa, and Algonquian. By contrast, in V-languages, Path is typically encoded by the main verb. The following is an equivalent expression of (1) in French.

- (2) Jean est entré dans la maison (en courant).
 John be enter in the house (in running)

* I would like to thank Len Talmy for fruitful discussions in analyzing the data and Jean-Pierre Koenig for guiding me in writing this paper. I am also grateful to Karin Michelson for valuable comments. My special thanks go to Dan Slobin for insightful discussions and comments.

¹ Strictly speaking, *into* is a satellite-preposition (satprep) in Talmy’s classification, but in this paper, I will use the term satellite as a cover term for satellite and satprep. See Talmy (2000) for a more detailed discussion of satellite and satprep.

In this sentence, the Path is expressed by the main verb *entré*. When the manner of motion is expressed, it is realized by a grammatically optional element, a gerund. Typically, Manner is omitted in French unless it is important. Other languages that belong to this type are Romance and Semitic languages, Turkish, Tamil, Nez Perce, and Japanese. Similarly, as the following sentences from Japanese show, Manner verbs cannot occur as the main verb when a sentence also contains a noun phrase that indicates the goal of motion (Matsumoto 1996).

- (3) a. Kare wa ie ni (hashit-te) hait-ta.
 he TOP house GOAL (run-CONNECTIVE) enter-PAST
 b. *Kare wa ie ni hashit-ta.
 he TOP house GOAL run-PAST
 Intended meaning: ‘He ran into the house.’

Just like the French example, Manner (*hashit-te* ‘run’) can be omitted, or both Manner and Path can be expressed by using the connective *-te* (*hashit-te hait-ta*).

As the sentences (1)-(3) show, S- and V- languages also often differ in terms of where in a clause Manner is expressed. It is encoded by the main verb in English and outside the main verb in V-languages. Slobin (personal communication) claims that if a notion, like Manner, is easily expressible in a language, there will be two consequences: 1) the notion will be more frequently encoded, and 2) the language will develop more means of encoding that notion. In other words, the syntactic fact that Manner verbs can easily occur as the main verb leads to more frequent encoding of Manner in S-languages. Over time, speakers of S-languages learn to pay more attention to Manner, which facilitates the development of more means of encoding it. Expanding the lexicon size for Manner verbs is one option to encode more Manner. In fact, Slobin (2005) found that the S-languages he examined have two to three times as many types of Manner verbs as V-languages. In Chapter 6 of *The Hobbit*, Tolkien uses 26 different Manner verbs. While translations into four S-languages use an average of 25.6 types, V-languages use an average of 17.2 types (Slobin 2004). Interestingly, this pattern did not change when adverbial expressions of Manner were included for Spanish, Turkish, and English (Slobin 2005).

Although Japanese is a V-language, it seems to diverge from this typical typology in two respects. First, the language has a large inventory of colloquial compound verbs that can be used to express Manner. In addition, as Slobin (1997b) points out, the language has a large collection of mimetics that are capable of describing subtle nuances of Manner.

2. Expressions of Manner in Japanese

In Japanese, Manner can also be expressed by compound verbs and mimetics.

2.1. Compound Verbs

Japanese has many colloquial compound verbs that are essential to the basic vocabulary of the language, providing it with vivid and lively expressions (Tagashira and Hoff 1986). While the sentence in (4a) is a plain description of a fact, (4b) is a more dynamic description of how he fell.

- (4) a. Kare wa kaidan kara ochi-ta.
he TOP stairs from fall-PAST
'He fell down the stairs.'
- b. Kare wa kaidan kara koroge-ochi-ta.
he TOP stairs from roll-fall-PAST
'He rolled down the stairs.'

The semantic structures of compounds vary from expressions that are relatively transparent, as in (4b), to ones that are highly idiomatic. For example, *kake-tsukeru* (run-attach) is a more idiomatic expression, which means to rush to some place.

There is another way of combining two verbs by using the connective *-te* (*te*-form hereafter). Although the focus of this paper is compounds, it is worth mentioning in passing some of the differences between compounds and *te*-forms, since some examples to be discussed in a later section include *te*-forms. While compounds and *te*-forms apparently look similar, their syntactic structures are distinct. When the connective *-te* is used to combine two verbs, the second verb (V2) marks tense and the first verb (V1) takes the infinitive conjugational form (*ren-yookei*). In compounds, the V2 also marks tense and the V1 takes the *ren-yookei* form, often ending with *-i*. However, unlike *te*-forms, there is no morpheme intervening between the two verbs. The second stem is generally considered the head. Matsumoto (1996) claims that the kinds of verbs that can occur as V2 in *te*-forms are deictically conditioned, but Himeno (1999) states only that the meanings of compound verbs tend to be more lexicalized than that of *te*-forms. Syntactically, the connection between the two verbs is looser for *te*-forms. While *te*-forms allow the insertion of some material between V1 and V2 (5a), compounds do not (5b).

- (5) a. Taro wa arui-te kouen o mawat-ta.
Taro TOP walk-te park ACC go.around-PAST
'Taro walked around the park.'
- b. *Taro wa aruki kouen o mawat-ta.
Taro TOP walk park ACC go.around-PAST
Intended meaning: 'Taro walked around the park.'

2.2. Mimetics

Another way of expressing Manner is to use mimetics (onomatopoeia). Japanese mimetics are powerful means of describing sounds that animals and objects make. They are also used to describe human emotions and states of nature that normally do not create a sound. Kita (1997) argues that the semantic representation of Japanese mimetics is modality-specific and evokes a subjective image of “re-experience.” Native speakers feel that mimetics have a natural sound-meaning relation. For example, *gatagata* is used to describe shaky objects. It is typically used to describe tables and chairs that do not have good balance. Compared to simply saying “this desk is poorly balanced,” when the mimetic is used, Japanese speakers have a more concrete idea of what kind of shakiness is being referred to.

3. Information Packaging

By examining motion event descriptions in which intransitive verbs were used in Chapter 6 of *The Hobbit, Out of the frying pan into the fire*, by Tolkien (1937), this paper investigates how Japanese uses verb compounds and mimetics to express Manner. First, an English motion event description that involves a relatively long trajectory is compared with its French and Japanese translations. Then, verb phrases that express motion events in English and Japanese are analyzed. Although all motion event descriptions cannot be discussed, I will try to cover as varied a selection of examples as possible to provide a broad picture of Japanese motion event descriptions.

The chapter begins with Bilbo, a small human-like creature, wandering in the woods looking for his companions.

- (6) He still wandered on, out of the little high valley, over its edge, and down the slopes beyond.

Sentence (6) exhibits some of the characteristics of an S-language. First, it only uses one verb *wander* to describe a motion event that involves more than one Path.² Second, when the protagonist passes a landmark, *the little high valley*, *its edge*, or *the slopes*, a satellite is used, *out of*, *over*, and *down*, respectively, to indicate his Path. By contrast, in French, the main verb encodes the Path. As a result, every time the protagonist crosses a boundary, it needs a new Path verb (cf.

² Slobin classifies *wander* as a Manner verb (e.g. Slobin 2005), but it seems to consist of a constellation of semantic elements: an aimless state of mind of not knowing where one is going (Concomitance), non-straightness of Path, and perhaps stopping and starting again on the way, looking at things around (Manner), and so on (Talmy, p.c.). Not all the elements have to be present, but the first element, the aimless state of mind, seems to be the most salient one. Indeed, a substantial number of Manner verbs convey attitude, sometimes even more than motor pattern. It is sometimes the attitude attributed to the figure (e.g. *stroll*, *saunter*) and sometimes the evaluative attitude of the speaker towards the figure (e.g. *swagger*, *stut*) (Slobin, p.c.). See Talmy (2000) for a detailed discussion of Concomitance.

Japanese Manner Expression in The Hobbit

Aske 1989, Slobin 1997b). Note that the sense of wandering is expressed by an adverbial phrase, *au hasard*.

- (7) Il continua d'avancer au hasard, sortit du haut vallon, en franchit le bord et descendit la pente au-delà.

Although Japanese is also a V-language, the translation of sentence(s) into Japanese gives a somewhat different picture.

- (8) Birubo-wa yama-no chiisana tani-o nori-koe sonosaki-no
Bilbo-TOP mountain-GEN small valley-ACC get.on-cross ahead-GEN
kudarizaka-o dondon tadot-te iki-mashi-ta.
descending.slope-ACC on.and.on follow-CON go-POLITE-PAST

In the Japanese translation, the sense of wandering is left out. Unlike the French translation, the translation uses only two verb phrases: *nori-koeru* and *tadot-te iku*. The compound verb *nori-koeru* is an example of a non-transparent compound. The verbs mean to get on (*nori-*) and to cross (*koeru*) when they are used as independent verbs, but as morphemes of a compound, they mean to cross a border or barrier by making an upward movement. The Japanese translation, *nori-koeru*, as it were, combines two Path elements expressed by *out of* and *over* in English. In describing the descending motion, Japanese uses the noun phrase *kudari-zaka* 'descending slope' instead of a verb phrase. It seems that the overall impression of the motion event is different between French and Japanese. While the French translation segments the event into four components of advancing (*avancer*), exiting (*sortir*), crossing (*franchir*) and descending (*descendre*), Japanese segments the event into a larger unit by using a compound verb (*nori-koeru*) and a *te*-form (*tadot-te iku*). This three-way comparison suggests that although there is a substantial difference in the way in which motion events are encoded between typical S- and V-languages, there may be some variations within languages that belong to the same type.

4. Motion Events in English and Japanese

In this section, motion events described by various types of verbs and verb phrases in English are compared with their Japanese translations. First, motion events described with a single element, i.e. a verb without satellites, are examined. Then, event descriptions that use two elements, a verb and satellite, are examined.

4.1. Manner Verbs

There were only six motion events described solely by a Manner verb in English (Table 1). In the underlined notation below, the capital letter *M* indicates the type of verb used in English. The capital letter *P* after the arrow indicates the type of

Yukiko Sugiyama

verb used in Japanese. The capital letters *M* and *P* represent a Manner verb and Path verb, respectively. The words in the squared brackets at the beginning of each example indicate the moving object (figure).

M → P

(9) [Bilbo] creep still nearer → naomo ‘still’ chikaduku ‘approach’

In this sentence, the Manner expressed in English is totally omitted and the Manner verb is replaced with a Path verb in Japanese. In the Japanese translation, the Manner of crawling is mentioned in the preceding paragraph (using a subordinate clause). It is left to the reader’s inference to determine the Manner employed in approaching.

M → M

(10) [eagle] fly only a short way → sukoshi no aida ‘for a short period’ tobu ‘fly’

The English manner verb is literally translated into its Japanese equivalent. Since the original sentence *this time he flew only a short way* does not specify a goal location, a Manner verb can occur as the main verb in Japanese.

M → M + P (compound)

(11) [Dori, a hobbit] jump for the branches → sono eda e ‘for the branch’ odori-agaru (dance-ascend) ‘spring up’

When an English expression encodes Manner and a goal location, one way to deal with it in Japanese is to make use of a compound verb. The primary sense of V1 of the compound, *odori-*, is ‘to dance’ when it is used by itself. It is used in a figurative sense here and the compound describes the vigorous and quick upward movement of Dori. Although Japanese also has the compound *tobi-agaru* (jump-ascend) ‘jump up’, which is also familiar, *odori-agaru* describes a more dynamic motion. It suggests that the branches were high up in the tree and Dori had to make a big jump to reach them.

(12) Table 1: Translating Manner Verbs

“Type of verb” indicates the type of verb used in the Japanese translation.

“M + P” indicates a compound verb.

Type of Verb	Number found
P	1
M	1
M + P	2
Other	2
Total	6

The table above summarizes how the motion events described by English Manner verbs were translated into Japanese. Manner verbs were used half of the times that English used Manner verbs. However, since the total number of occurrences is only six, this result should be taken with caution.

4.2. Path Verbs

There were only two cases where an English Path verb was used as the main verb without a satellite. Since Japanese is a Path-predominant language, translating Path verbs is fairly straightforward, although the translation is not necessarily literal. Translating English Path verbs into Japanese does not require undoing the mapping between syntactic and semantic expressions and reorganizing them. For illustrative purposes, the two instances of use of Path verbs are indicated.

P → P

(13) go → *susumu* ‘advance’

(14) come → *deru* ‘exit’

4.3. Manner Verb + Satellite

Using a Manner verb and satellite was the most common way to describe motion events in English. As shown in Table 2, Japanese employs a variety of constructions to translate them. Manner was totally dropped in some of the translations, but in most cases, Manner was maintained through the use of compounds, mimetics or both.

M + Sat → P

(15) [Dori] climb down (to the bottom branch) → *ichiban shita no eda made* ‘to the lowest branch’ *oriru* ‘descend’

(16) [Bilbo] creep forward → (*jimen o* ‘on the ground’ *hai-nagara* ‘while crawling’) *chikayoru* ‘approach’

In (15), the Manner is totally omitted in Japanese. Slobin (1997a) found that only English and German use a Manner verb. In most languages, the verb corresponding to ‘climb’ can be used only for an upward movement and a verb corresponding to ‘descend’ is used for a downward movement. Given the fact that Dori is in a tree, the manner of motion is easily inferable. In (16), the Manner is only mentioned in a subordinate clause in the Japanese translation, and the main verb is a Path verb *chikayoru* ‘approach’.

M + Sat → M + P

(17) [wolves] run about → *hashiri-mawaru* (run-go.around) ‘run around’

(18) [Bilbo] scuttle about → *hashiri-mawaru* (run-go.around) ‘run around’

(19) [eagle] sweep off → *habatakishi-te* ‘flap.wings-CON’ *tobi-agaru* (fly-ascend) ‘fly up’

In (17)-(19), motion events are expressed by a Manner verb and satellite in English. This construction was most commonly translated by using compound verbs consisting of Manner and Path verbs. The first sentence is a description of the scene where wolves catch fire and run around here and there in panic.

When English uses a basic Manner verb as in (17), a Japanese compound can translate the Manner and Path without losing information. The V1 *hashiri-* of the compound corresponds to *run* and the V2 *mawaru* corresponds to the satellite *about*. However, when a more expressive Manner verb is used in English, it is difficult to translate it with a Manner verb in Japanese. In (18), Bilbo is running around desperately to escape from the wolves. English has a variety of verbs that describe a running-like motion: *scurry*, *trot*, *run*, *scramble*, *dash*, *scamper*, *scutter*, *hurry*, etc. Since Japanese does not have such colorful Manner verbs, it uses a neutral manner verb *hashiru* ‘run’. Similarly in (19), the exact nuance of Manner expressed by *sweep* is lost in Japanese. While the English Manner verb suggests an eagle’s big wings, the plain Japanese Manner verb *tobu* ‘fly’ only describes the fact that the eagle is in the air. Although the Japanese translation also uses an additional phrase to describe the eagle’s flapping its wings, it is still neutral with respect to the size of the wings, and it fails to express a forceful flapping of the eagle. Although a Path is not explicitly expressed in English, a Path verb is used in Japanese. When directionality is highly inferable, it seems that Japanese is more “comfortable” using a Path verb. Apparently, it is contradictory why directionality should be explicitly indicated when it is obvious from the context. However, for some reason, the Japanese translation sounds more natural when the compound is used rather than a Manner verb alone.

M + Sat → mimetic + M

(20) [wolves] roll over and over → *gorogoro-to* (mimetic) *korogaru* ‘roll’

When Japanese Manner verbs are not expressive enough, one effective way to express Manner is to use mimetics. In (20), a motion event described by a Manner verb and satellite in English was translated with a mimetic and Manner verb in Japanese. It comes from the same scene as (17), but this time, wolves roll all over the ground to put off the fire around them. The mimetic *gorogoro-to* evokes the image of a heavy entity rolling at a regular cycle repetitively while making a rumbling sound (cf. Chang 1990). If the entity was light, *korokoro-to* would be used. In general, mimetics with voiced consonants depict the slow movement of a heavy object. To give another example, *gorogoro-to* could be used to depict a cart filled with apples moving on an unpaved rough road. If the cart is empty, or the motion takes place on a smooth seamless surface, *gorogoro-to* would no longer be appropriate. Although the Japanese Manner verb describes a very similar motion to the English Manner verb, the mimetic helps to evoke a vivid image to the reader’s mind as if they were actually observing the scene. Since the event described is not bounded spatially and temporally, a Manner verb can occur as the main verb in Japanese.

Japanese Manner Expression in The Hobbit

M + Sat → mimetic + M + P

(21) [wolves] rush round and round the circle → wa no mawari o ‘around the circle’ guruguru-to (mimetic) hashiri-mawaru (run-around) ‘run around’

This is one of the most elaborate event descriptions found in Japanese, which is also from the fire scene. The mimetic *guruguru-to* is used for an iterative circular motion. Just like the previous mimetic *gorogoro-to*, it also has a voiceless consonant version, *kurukuru-to*. Compared with *kurukuru-to*, *guruguru-to* suggests that the entity is heavier and moving at a slower speed. The Japanese Manner verb *hashiri-* is close to the English Manner verb *rush*, but does not convey the sense of hastiness. The Japanese translation elaborates the description of the physical movement of the figure (wolves) by using the mimetic, but it does not reflect the urgent state of mind of the wolves described in English. By contrast, a mimetic and compound translate the original expression fairly closely in the next example.

(22) [Lord of the Eagles] sweep down → sat-to (mimetic) mai-oriru (dance-around) ‘fly down’

The mimetic *sat-to* is used for a swift, light action (Chang 1990). Although *mai-* originally means ‘to dance’, it is also used to describe an object, often a light one, such as birds, butterflies, dust, etc., moving in the air as if floating. The Japanese mimetic and compound express the rapid motion described by the English Manner verb.

(23) slide away → gougou garagara-to (mimetic) suberi-ochiru (dance-descend) ‘fly down’

In this example, Japanese uses two mimetics. Each mimetic is a familiar one, but the combination of the two is rather unusual. This is the scene in which a landslide occurs as hobbits and other creatures slide down a slope. The first mimetic *gougou* describes a roaring sound of rubbish and pebbles rolling away. The second mimetic normally describes a sudden fall of multiple hard and heavy objects, such as bricks, and not of animate or small objects as it does here. Nevertheless, the mimetic is used effectively to depict the big confusion that results from the landslide. Kita (1997) argues that the association between form and meaning of mimetics is conventionalized and people usually do not improvise a new mimetic on the spot. This is evidenced by the availability of mimetics dictionaries (e.g. Chang 1990). At the same time, however, speakers also have some flexibility in adapting to a mimetic’s usage creatively as long as it makes sense. As Tsujimura (2005) argues, the meanings of mimetics are partly dependent on the context in which they are used. The flexibility of mimetics is probably due to their iconicity. Even if they are not used in their conventional sense, they still serve their function as long as the speaker/writer and the listener/reader can relate the sound (signifier) to what it describes (signified).

Yukiko Sugiyama

In summary, when a Manner verb and satellite are used in English, Japanese expresses the Manner information in the V1 of a compound, a mimetic, or in the combination of the two. As Table 2 shows, out of 27 English event descriptions that used a Manner verb and satellite, Manner information is totally dropped only in three Japanese descriptions. The “other” category at the bottom of the table indicates that, in four cases, other verbs than Path and Manner verbs were used or the translation was not literal. Even leaving out three cases where only Path verbs were used and four “other” cases, Manner information was included 20 out of 27 event descriptions in Japanese.

(24) Table 2: Translating Manner + Satellite

Type of verb, mimetic	Number found
P	3
M + P	13
M + P-te P	1
mimetic + M	1
mimetic + M + P	2
M-te + P	3
Other	4
Total	27

5. Do Compounds and Mimetics Completely Complement English Manner Verbs?

The preceding sections have shown that Japanese compound verbs and mimetics are effective means of expressing Manner. In this section, a further analysis of Japanese Manner expressions is provided on the variety of Manner verbs and the ease with which Manner is expressed in Japanese. In the Japanese translation of Chapter 6 of *The Hobbit*, there were only 13 different intransitive Manner verbs. In fact, this does not reach the average found in the translations into other V-languages (17.2 types), much less the average of S-languages (25.6 types) (Slobin 2004). The list below includes Manner verbs that occurred as the main verb as well as V1 of compounds.

- (25) Japanese Manner verbs (13types): *haneru* ‘jump’, *hashiru* ‘run’, *hau* ‘crawl’, *kakeru* ‘jog’, *kogogaru* ‘roll’, *mau* ‘dance, flutter’, *neru* ‘twist’³, *noboru* ‘climb’, *odoru* ‘dance’, *yojiru* ‘cling to’, *suberu* ‘slip’, *tobu* ‘fly’, *tobu* ‘jump’

Most Manner verbs used in Japanese are fairly basic Manner verbs. Were only this list considered, Japanese would look like one of the poorest Manner-

³ Although the verb *neru* ‘twist’ itself is a transitive verb, it was used in the compound verb *neri-komu* (twist-enter) to describe Bilbo’s motion.

Japanese Manner Expression in The Hobbit

expressing languages. However, when one turns to compound verbs, Japanese used 22 types. The scarcity of colorful Manner verbs and pervasiveness of compounds leads to a rather curious consequence. That is, while Manner expressions are relatively frequent in Japanese, they do not have as many distinctions as English Manner verbs do. As some of the earlier examples indicate ((17), (18) and (21)), fine-grained distinctions of Manner in English verbs are neutralized when there are no corresponding mimetics and Manner verbs in Japanese. The following is another example of neutralization. Three different English Manner verbs are translated into a single basic Manner verb *tobu*- 'fly' in Japanese.

- (26) a. [eagles] leap up → *tobi-tatsu* (fly-leave)
b. [eagles] fly away → *tobi-tatsu* (fly-leave)
c. [eagle] sweep off → *tobi-agaru* (fly-ascend)

While the elaboration and frequency of Manner expressions tend to be positively correlated in most languages (e.g. Slobin 2005), they do not seem to be in Japanese.

6. Conclusion

Japanese is characteristic of V-languages in its predominance of Path verbs and scarcity of elaborate Manner verbs. However, unlike typical V-languages such as French and Spanish, Manner can be easily expressed by compounds and mimetics. Although they are not syntactically required, they are so readily available that they can be used without hurting the natural information flow of the language. On the contrary, they make Japanese event descriptions more colloquial and natural with vivid descriptions. The examination of Japanese translations shows that although Japanese may not be as rich as English in Manner expressions, it is more so than typical V-languages. What remains to be investigated is why compounds and mimetics can be used so readily, when using most other modifying expressions such as subordinate clauses is not favored unless it is relevant.

In future studies, the scope of analysis should be broadened from verb phrases to larger units. There is more than verb phrases involved in encoding motion events in a language. Other elements such as construction types, tense, aspect, and ultimately narrative structure are also relevant. There is also growing evidence that static scene-descriptions play an important role for V-languages. While S-languages contain more Manner and Path elements in motion event descriptions, V-languages elaborate scene-descriptions in which motion events take place, allowing for inference of Manner and Path (e.g. Slobin 1997a, Slobin 2005). I hope that this paper will contribute to a further understanding of motion event descriptions in Japanese.

Yukiko Sugiyama

References

- Aske, Jon. 1989. Path predicates in English and Spanish: a closer look. *BLS* 15:1-14.
- Chang, Andrew. 1990. *A Thesaurus of Japanese Mimetics and Onomatopoeia: Usage by Categories*. Tokyo: Taishukan.
- Himeno, Shoko. 1999. *Fukugoudoushi no kouzou to imiyouhou*. Tokyo: Hitsuji Shobo.
- Kita, Sotaro. 1997. Two-dimensional semantic analysis of Japanese mimetics. *Linguistics* 35:379-415.
- Matsumoto, Y. 1996. Subjective motion and English and Japanese verbs. *Cognitive Linguistics* 7:183-226.
- Slobin, Dan. 1997a. Manual for Coding of Motion Events in Texts: Dept. of Psychology, University of California, Berkeley.
- Slobin, Dan. 1997b. Mind, code, and text. In J. H. J. Bybee and S. A. Thompson, eds., *Essays on Language Function and Language Type: dedicated to T. Givón*. Oxford: Oxford University Press.
- Slobin, Dan. 2004. Relating narrative events in translation. In D. Ravid and H. Shyldkrot, ed., *Perspectives on Language and Language Development: Essays in Honor of Ruth A. Berman*. Dordrecht: Kluwer.
- Slobin, Dan. 2005. Linguistic representations of motion events: what is signifier and what is signified? In O. F. C. Maeder and W. Herlofsky, eds., *Iconicity Inside Out: Iconicity in Language and Literature*. Amsterdam/Philadelphia: John Benjamins.
- Tagashira, Yoshiko, and Jean Hoff. 1986. *Handbook of Japanese Compound Verbs*. Tokyo: The Hokuseido Press.
- Talmy, Leonard. 1985. Lexicalization patterns: semantic structure in lexical forms. In T. Shopen, ed., *Language Typology and Lexical Description: Grammatical Categories and the Lexicon*. Cambridge: Cambridge University Press.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics, vol. 2*. Cambridge, MA: MIT Press.
- Tolkien, J. R. R. 1937. *The Hobbit or There and Back Again*. Boston/New York: Houghton Mifflin Company.
- Tsujimura, Natsuko. 2005. Giongo · gitaoto no gengogakuteki juuyousei to nihongokyoouiku. In M. Minami, ed., *Gengogaku to nihongokyoouiku* 4. Tokyo: Kuroshiyo Publisher.

Yukiko Sugiyama
Department of Linguistics, 609 Baldy Hall
University at Buffalo, The State University of New York
New York, NY 14222

ys8@buffalo.edu