Lexicalization Typology and Event Structure Templates:

Toward Isomorphic Mapping between Macroevent and Syntactic Structures

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2. The Gist of the Whole Thesis

This thesis has proposed the revision of Talmy's famous dichotomy of motion lexicalization between satellite-framed and verb-framed languages.

The configuration of motion events has posed riddles to linguists, most notably semanticists. In particular, Talmy's typological dichotomy has been espoused by many linguists and applied to diverse languages, amassing a cornucopia of linguistic findings.

According to Talmy, the manner of motion is lexicalized as a main verb and the path is expressed by adpositional phrases in satellite-framed languages like English, German and Chinese. This is exemplified by the sentence *John walked into the room*. On the other hand, in verb-framed languages such as Japanese and French, the path is lexicalized as a main verb and the manner of motion is, if necessary, expressed by adpositional phrases. This is illustrated by the Japanese sentence *Taro-wa (arui-te) heya-ni hait-ta [Taro entered the room (, walking).*] However, more intriguingly, the latter lexicalization pattern is possible also in satellite-framed languages like English, as shown by the English translation *Taro entered the room*. Then what causes this asymmetry? This provides a starting point for this thesis.

First, we have pointed out the asymmetry between satellite-framed and verb-framed lexicalization patterns. More specifically, we have stated that verb-framed lexicalization is ubiquitous and in principle possible in almost all languages unless they lack vocabulary to lexicalize it, whereas satellite-framed lexicalization is possible only in satellite-framed languages.

We have then motivated the asymmetry by associating it with the difference in isomorphism between the two lexicalization patterns. We have shown that the structure of macroevents is mapped isomorphically onto syntactic structure in verb-framed lexicalization, but this isomorphism is not true of satellite-framed lexicalization. In particular, the main-subordinate relationship in semantics is reversed in syntax in satellite-framed encoding, in that the subordinate manner event in semantics is lexicalized as the main verb in syntactic structure.

Furthermore, we have explained the asymmetry in terms of lexical semantics based on event structure templates. In particular, we have adopted the event coidentification as an add-on mechanism to reconcile the deviations in satellite-framed mapping between semantics and syntax. The process of event coidentification is proposed by Levin and Rappaport in order to allow the semantic amalgamation between manner of motion verbs and goal prepositional phrases without violating the Argument-Per-Subevent Condition, which they argue are imposed on event structure templates.

We have tried associating the process with the configuration of Talmy's macroevents, and have assumed that this conceptual apparatus amalgamates the path and the ground in motion events (that is, the main event or the framing event in Talmy's terms) into the subordinate manner event, and as a result, the ex-subordinate event absorbs the ex-main event and is automatically promoted to the main event, which is finally mapped isomorphically to syntax. In other words, satellite-framed lexicalization is made possible by this add-on module equipped only with so-called satellite-framed languages. On the other hand, verb-framed lexicalization is essentially isomorphic in mapping, and is consequently possible in almost all languages when they have lexical resources. And this difference in isomorphism is assumed to give rise to the asymmetry between satellite-framed and verb-framed lexicalization patterns.

Finally, in order to bolster up our argument, we have cited examples of the manner of motion verb *walk* that have been culled from a variety of novels written in English, together with their Japanese, French, German and Chinese translations. In doing so, we have confirmed the characteristics of satellite-framed and verb-framed encoding options. In particular, we have demonstrated that satellite-framed languages such as German and Chinese sometimes use verb-framed encoding options to translate satellite-framed expressions in English. We have argued that this fully justifies the basicness and ubiquity of verb-framed lexicalization. In other words, we have successfully exemplified the asymmetry of Talmy's binary opposition between satellite-framed and verb-framed lexicalization patterns.

3. The Summary of Each Chapter

Chapter 1 is the introduction, and we have begun by outlining the rationale behind this thesis. Then we have stated the structure of chapters and their contents.

In chapter 2, we have argued that Talmy's well-known dichotomy between satellite-framed and verb-framed languages should be superseded by the view that verb-framed encoding is all-pervasive and thus in principle possible in almost all languages unless they lack vocabulary to encode it, whereas satellite-framed lexicalization is made possible by an add-on module that is included only in so-called satellite-framed languages. More specifically, in section 2.3.6, we have put out the following three statements: (i) verb-framed expressions are linguistically more basic than satellite-framed ones; (ii) more basic verb-framed lexicalization options are observed in almost all languages; (iii) satellite-framed conflation is an add-on to the basic verb-framed lexicalization ubiquitous in the language system; thus it is possible only in certain languages conventionally characterized as satellite-framed. In brief, we have clarified the asymmetry between satellite-framed and verb-framed lexicalization patterns.

In chapter 3, we have chronicled the advancements made in Levin and Rappaport Hovav's theory in terms of event structure templates. First, after covering the basics of aspectual classification and the origin of lexical decomposition, we have introduced the original version of event structure templates proposed by Rappaport Hovav and Levin (1998). Next, we have reviewed the divergence of their theory from aspectual notions. We have seen that Levin and Rappaport Hovav have advanced the concepts of scalar and non-scalar changes as viable alternatives to aspectual characterization of event structure templates. Finally, we have suggested that by identifying manner with a non-scalar change consisting of complex changes, it is deduced that manner can be informationally richer than result, which encodes a simple scalar change in the values of an attribute, and that less informative result can be incorporated or integrated into more informative manner, but not vice versa.

In chapter 4, we have associated event structure templates with motion macroevents proposed by Talmy (1991, 2000) by using as a catalyst the process of event coidentification advanced by Levin and Rappaport Hovav (1999) and Rappaport Hovav and Levin (2001). After introducing the Unaccusative Hypothesis proposed by Perlmutter (1978), we have redefined event structure templates in terms of the hypothesis. Next, we have looked back at Levin and Rappaport Hovav (1992), a paper published before the advent of event structure templates and dealing with verbs of manner of motion and directed motion. We have argued that it is difficult to incorporate its findings into event structure templates. Then we have scrutinized the process of event coidentification, which explains semantic amalgamations between manner of motion verbs and goal prepositional phrases. After that, we have created the event structure representation of goal prepositional phrases, and integrated the concept of scalarity into the process of event coidentification. Given these, we have proposed an event structure template representing the resultant coidentified event. Furthermore, we have connected event coidentification with the configuration of Talmy's motion macroevents, and have shown that event coidentification is conceptually equivalent to the structuring function carried out by framing events. Finally, we have demonstrated that event coidentification is more favorable than lexical subordination in terms of event structure templates.

In chapters 5, we have examined how the verb *walk* in English novels is translated into Japanese, French, German and Chinese. First, in section 5.1, we have confirmed that when walk occurs with no prepositional phrase, it can be in principle translated as a semantically similar manner of motion verb in all the languages mentioned above. In section 5.2, we have considered cases in which walk takes a goal prepositional phrase headed by the preposition into or to. Then in section 5.3, we have looked at examples in which walk is followed by a directional phrase headed by the preposition toward. Finally in section 5.4, we have studied how the phrase walk away is translated. Adding everything up, we can say that the manner of motion tends to get lost in translation into verb-framed languages, and in addition that even in satellite-framed languages, the manner of motion is sometimes left out of the translations. This means that satellite-framed languages such as German and Chinese sometimes use verb-framed encoding options to translate satellite-framed expressions in English. This supports the conclusion we have reached at the end of chapter 2, namely that verb-framed expressions are possible even in satellite-framed languages, because satellite-framed conflation is an add-on to the basic verb-framed lexicalization ubiquitous in the language system. Or to put it another way, this chapter illustrates the asymmetry of Talmy's bipartite opposition between satellite-framed and verb-framed lexicalization patterns.

Chapter 6 is the recapitulation. After reviewing each chapter, we have shown that there are four main conclusions to be drawn from the discussions up to this chapter.

4. The Summary of Results (Considerations and Implications)

There are four main conclusions to be drawn from the discussions in this thesis. The first conclusion is concerned with the modification of Talmy's famous typological dichotomy between satellite-framed and verb-framed languages, and it can be summarized as follows:

- (1) (i) Verb-framed expressions are linguistically more basic than satellite-framed ones.
 - (ii) More basic verb-framed lexicalization options are observed in almost all languages.
 - (iii) Satellite-framed conflation is an add-on to the basic verb-framed lexicalization ubiquitous in the language system, and is therefore limited to the languages traditionally classified as satellite-framed.

The second conclusion refers to the difference in mapping between satellite-framed and verb-framed expressions. In particular, we have argued that only satellite-framed languages have the mechanism that makes possible a non-isomorphic mapping between the macroevent and syntax. This can be described in the following way:

- (2) (i) In the case of verb-framed expressions, the configuration of the macroevent is isomorphic to the syntactic structure.
 - (ii) In the satellite-framed pattern, the components of the macroevent are related but not isomorphic to the syntactic constituents.
 - (iii) Satellite-framed languages have a special conceptual apparatus that can simplify the structure of the macroevent so as to make possible a more straightforward mapping. The apparatus is the process of event coidentification, which alters the hierarchical structure of the macroevent by embedding the framing event in the subordinate event as a path scale.

The third conclusion is about the mechanism of event coidentification. More specifically, we have argued that the concepts of scalarity and the amount of information are involved in this process. This is given essentially as follows:

- (i) In the process of event coidentification, the scalar change denoted by the goal subevent gives a scale to the non-scalar change encoded by the running subevent.
 - (ii) When two types of changes are combined, the simple scalar change is associated with one of the multiple changes comprising the non-scalar change.
 - (iii) The goal subevent, which contains only abstract information, is overshadowed by and absorbed into the running subevent, which encodes substantial information.

The fourth conclusion has to do with the relation between event coidentification and Talmy's motion macroevents. Contrary to Talmy's characterization of framing events, we have argued that framing events lose their privileged status when event coidentification occurs. We can express this in the following way:

- (4) (i) The subordinate event and the framing event in Talmy's macroevents roughly correspond to the running subevent and the goal subevent in the process of event coidentification, respectively.
 - (ii) Event coidentification is a scale addition, and can be regarded as an instantiation of the structuring function the framing event exercises over the subordinate event.

(iii) When event coidentification is applied to motion macroevents, counter to Talmy (2000), the framing event loses its status as a discrete semantic entity and is integrated into the subordinate event, which in turn is mapped isomorphically onto syntactic structure. In other words, the process of event identification removes irregularity by subordinating the framing event to the (ex-)subordinate event.

The proposed theory undermines a very widespread concept of binary opposition between satellite-framed and verb-framed lexicalization. The conventional view, which was put forward by Leonard Talmy more than twenty years ago, has gained recognition among linguists (in particular, cognitive linguists and lexical semanticians) and has been applied to multifarious languages. It has created a cornucopia of linguistic findings for linguists who are interested in language typology based on lexicalization patterns. However, the assumption of mutually exclusive dichotomies has been challenged in many places, and sometimes it has been shown to be untenable.

As we have seen in section 2.3.6, both Talmy (1985: 75) and Beavers et al. (2010: 350-351) inadvertently refer to the inherent asymmetry between satellite-framed and verb-framed encoding patterns, and it is lamentable that they have not made this irregularity more explicit. But whether they delve more deeply into the issue or not, we cannot ignore the fact that verb-framed expressions are much more prevalent in the whole language system. And this is just what this study takes as its point of departure. But where do we go from here?

The overall picture of motion verbs is still incomplete. In particular, a further study of verbs of directed motion, or the *arrive* verbs, should be conducted. We tentatively assume that the *arrive* verbs and goal prepositional phrases are semantically amalgamated not by the process of "event coidentification", but by the process named "event fusion". The latter does not involve a complicated mechanism of scale addition, but just fleshes out the unspecified destination of the directed motion denoted by the *arrive* verbs. In addition, it is necessary to provide a systematic and detailed analysis of motion verbs that are assumed to denote neither manner nor direction of motion, such as *move, travel, shift*. The findings would not only contribute to our understanding of motion verbs, but also to the research into manner/result complementarity.

5. Main References

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