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# Talmian Motion Event Typology: Similarities and Differences in the Sequence of Motion Predicates of Vietnamese and Japanese Domains

Ly Thi Phuong Tran[a*], Long Kim Le[b]

*a Professor in Faculty of Linguistics, Social Science Education Department, Saigon University, Ho Chi Minh City, Vietnam. Email: ttply@sgu.edu.vn*

*b Professor in Faculty of Japanese, Hung Vuong University, Ho Chi Minh City, Vietnam. Email: le.mrkobayashi.kimlong@gmail.com*

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## Abstract

Motion is a universal concept in common human perception. In the word system of a language, verb is inherently a very complex real word, both in terms of grammar and semantics, that complexity is due to the influence of the semantics of this word. However, in most of the previous studies, the authors often only focused on studying single word units, while the predicate sequence was often considered by the authors as a preposition to indicate direction, without mentioning from the perspective of functional grammar or cognitive linguistics. In this article, based on Talmy's approach according to the type theory of cognitive geometry, we have investigated and researched in detail the similarities and differences between the series of motion predicates. Vietnamese and Japanese languages with survey data of 130 moving predicates in Vietnamese were collected through the *Vietnamese Dictionary* (Phe, 2003) and 178 moving predicates in Japanese collected through the *National Japanese Dictionary* (Iwanami, 2019). Through qualitative and quantitative methods, the grammatical, semantic and cognitive structural features of the predicate represented the mode of motion; predicate expressing direction of motion; predicate expressing the cause of motion (Vietnamese) and the predicate of complex motion; spatial motion predicate; The fictitious moving predicate (Japanese) together with the sentence structure of each type of predicate sequence in both languages were analyzed to clarify the similarities and differences in the two languages. Vietnamese forms the situation in the form of a sequence of moving predicates, while Japanese mainly relies on the monovalent form or a combination of grammatical structures, a system of auxiliary verbs to form a predicate sequence that has been established by the author. On that basis, the paper also makes suggestions for making use of motion theory in teaching two languages, Vietnamese and Japanese.



***Keywords:*** Sequence of Motion Predicates, Talmy, Vietnamese, Japanese, teaching languages

## Introduction

Motion is central to the human experience, it is pervasive in our daily lives and in our communication needs (Baker, 1989; Collins, 1997; Givón, 2009; Li & Thompson, 1981; Noonan, 1985; Talmy, 1985, 2000a, 2000b; Tao, 2009). However, it is a clear fact that motion itself has an objective existence that is mapped

* Corresponding Author.
Email: ttply@sgu.edu.vn
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through human perception of the changing position of a subject in space. Although space carries a universal concept in human perception, due to different conditions of geographical, cultural, and linguistic characteristics, there are differences in the expression of motion according to language. Motion is easily encoded in verbs in satellite-framed languages, while it is optional in verb-frame languages, particularly in predicate sequence. Defining the concept of a predicate sequence, Collin (1993) believed: "A serial verb construction is a succession of verbs and their complements (if any) with one subject and one tense value that are not separated by any overt marker of coordination or subordination". (p. 91). In addition, there are many linguists such as: Li and Thompson (1981), Li and Gao (2010), Thang (2005), Noonan (1985), Baker (1989), and Givón (2009), who stated that the predicate string structure was a two-dimensional syntactic structure. or more than two predicates combined to form a complex predicate to express a sequence of related actions in a single sentence.

Talmy (1985) is considered to be the one who laid the first foundations in the field of study of motion in language. Talmy's famous works have generated much research and debate in the motion description literature over the past two decades and have inspired much research on motion description. His research shows that the main difference between satellite framing languages and verb framing languages lies in their distinct encoding of motion. In addition to providing such differences, the theories proposed by Talmy can also be used for teaching Vietnamese and Japanese as a foreign language.

However, little research attention has been paid to the "path" component, the core component of the situation in motion, encoded in verbs or in satellites, making linguistic analysis less the inherent richness of language. The theoretical foundations laid out by Talmy (1985) have proved useful in analyzing and explaining the formation of sequences of motion predicate structures in different types of languages. In this paper, on the basis of the theory proposed by Talmy (1985), the sequence of motion predicate in Vietnamese and Japanese was studied with the premise that the comparative study of the motion predicate sequence of the two languages belongs to the two languages.

The research questions to be solved in this paper were: What are the similarities and differences in grammar, semantics, perception of the sequence of motion predicates in Vietnamese and Japanese? How is the general model of the structure of the movement predicate of the two languages established? What is the difference in the way of encoding events in motion in these two languages? What problems should we pay attention to in teaching and learning motion predicate sequences in these two languages? The results obtained from the paper would help users to have an overview of the nature of movable predicates, providing basic models of grammatical structure, semantics of predicate sequences in Vietnamese and Japanese language and helps users to effectively and accurately apply to problems related to grammar and semantics of motion predicate sequences.

## Literature Review

Leonard Talmy was one of the pioneers in the field of cognitive linguistics in the 1970s. one of his favorite areas of research was the semantics of motion. In 1972, he produced *Semantic Structures in English and Atsugewi*, which initially sketched out a primitive theory of things in motion (Talmy, 1972). Talmy believed that: a moving thing was an event in which a moving object moved along a direction and it was a complex composed of four intrinsic components: moving object, reference point. projection of motion, direction of motion, and cause of motion. The concepts and distinctions given by Talmy are specific and clear. It was from his premised work that Talmy gradually built a solid basis for later studies on language and language types. In 1985, inheriting the results of the 1972 thesis, Talmy published the work *Lexicalization Patterns: Semantic Structures in Lexical Forms (Vocabulary patterns: semantic structure in lexical forms).* This work proved a turning point marking the research results of Talmy's movement, gained influence and interest by researchers, and was recognized as an issue that needed to be studied deeply, seriously in the field of languages.

The most important factor in Talmy's works was that the term "translatory situation" was officially replaced by Talmy with the term "motion event," consisting of four intrinsic components, namely a moving object (figure), reference point of motion (ground), direction of motion ("directional" changes to "path") and cause of motion ("motive" changes to "motion"). Subsequent to his seminal work, Talmy published follow-up studies including *Towards a Cognitive Semantics: Typology and Process in Lexical Forms (Towards cognitive semantics: classification and process in lexical forms, 2000).* In this work, Talmy proposed to divide languages into two main groups: "Satellite – framed languages" (expressing core components of motion), i.e. path or trajectory of motion, in satellite) and "Verb – framed languages" (often expressing the path in the main verb). This division represented how different elements of a movement were mapped into linguistic elements and how they combined with predicates to form a predicate when describing moving things:

Following Leonard Talmy, the subject of situation in motion was examined by many other linguists globally, including Jackendoff (1976), Noguchi (2011), Berman (1997), Berman (2004), Berman and Slobin (1994), Slobin and Hoiting (1994), Özçalışkan and Slobin (1999), Slobin (1996a, 1996b, 2004), where, outstanding linguist Slobin, through his research work, especially in the work *Thinking for Speaking* (1987)

found that depending on the way native speakers perceive, each language is different. Each other will have different encoding methods of motion and direction of motion. It is from this that Slobin (2004) proposed to add to the research results of Talmy (2000) a third group of languages called "Equipollently - framed languages" (group of languages that frame both satellites and verbs: i.e., in the grammatical form of the predicate there is simultaneous encoding between the direction of motion and the mode of motion) (Tao, 2009).

On the basis of aforementioned facts, this study proposed to examine Talmy's Motion Event Typology and similarities and differences in the sequence of motion predicates of Vietnamese and Japanese languages, and their applications in teaching these languages. For this purpose, Talmy's theory of motion was premised as the theoretical framework of this study. The aim was to find out how the concept of preconditions of motion determined the sequences of predicates in both languages.

## Theoretical Framework

This study's framework was based on the concepts, core elements, analysis and classification of Talmy's theory of motion (1972, 1985) and (Talmy, 1991, 2000a, 2000b). Talmy (2000a) regarded motion having an objective existence, reflecting through human perception based on the change of a subject in space. However, depending on the characteristics of location, geography, culture and language, each ethnic group has different ways of perception. A basic motion event, according to Talmy, consists of an object moving or positioning with respect to another object (reference object or reference point). Talmy (2000b) identified four basic semantic elements as components that make up a situation movement: *Figure*, a moving object; *Ground*, a reference point of motion; *Path*, direction of motion; and *Motion*.

A *Figure* is a subject that moves in space, in a moving situation, the moving object has a specific role and value to factors related to the reference point of the motion, the direction of motion. The moving object is usually marked with a noun in the sentence and it can be the agent of the action, though, it can also be the subject of the action and manifest in the sentence. In addition, there are also cases when the figure is not expressed in a sentence. The second element of *Ground* is the reference point of motion which is a reference entity, located and related to the frame of reference. The motion path of the moving object is determined in relation to this reference entity, helping us to recognize the existence of motion. The reference point can also be the source of the motion or a reference point on the path of the motion and can also be the destination of the motion.

The third element of *Path,* according to Talmy (2000b), is the direction of motion in spoken language. It includes three components Vector (direction component), Conformation (geometric structure) and Deixis (output component). A Vector indicates the direction of motion of the moving object, relative to the reference point of the motion, which can be a source, a landmark or a destination. A vector can also represent movement from a starting point, through or along a waypoint, and towards or towards a certain destination. Conformation is related to the geometrical structure of the reference point, which can be generalized as points, containers. Deixis is clearly defined by Talmy (2000b) as follows: The output-only component of the motion-directing element has only two related concepts: that is, the movement towards the speaker or move in a different direction from the speaker. Of these three components, Vector is the most characteristic component of the direction of motion.

The final element of *Motion* gives direction to a moving object, which is positioned with the reference point of motion. The element of motion also refers to the presence on each movement or position in the matter. In addition to these internal components, a moving event may be associated with an external partner to denote its behavioral or causal relationship (Talmy, 2000b). Motion is a concept used to describe a change in the position or state of a moving object, which is an important element and a necessary condition in a sentence to form a moving situation. marked with a predicate. The moving element is always associated with the figure. However, this element does not indicate the direction of motion and does not specify the nature of the motion.

In addition to the four components constituting a moving event, a moving event can also be related to a *Co-Event*, usually expressing the manner or cause of the motion. A Co–Event, which was also known as a subordinate event, is an event that is simultaneously present with the moving event; it performs supporting functions and provides additional information related to the moving event. It is possible to add to or promote the thing, and most often the relationship with the thing in motion in relationship with the mode or the cause of the motion (Talmy, 2000b). Explaining the mode of motion, Talmy further added that the mode of motion can be understood as an action or an auxiliary state that can be expressed simultaneously with the main action or state, or the mode of motion is the way in which motion takes place. (Talmy, 2000b). Motion thus can also refer to those elements that cause motion. Depending on the type of language, the cause of motion is implicit in the semantics of the motion predicate or may not be expressed on the surface of the language.

In volume II of *Towards Cognitive Semantics* (Talmy, 2000b), Leonard Talmy delves into exploring the systematic relationships in language between meanings and overt linguistic forms, in other words, he focuses on into the lexicalization process. His basic assumption was that we could isolate elements or components

separately in terms of meaning and within linguistic expression. Then, the next step a semanticist must take is to examine which semantic elements are represented by which linguistic elements. Talmy observes that the relationship is not one-to-one; a combination of semantic elements can be expressed by a single linguistic element, and a single semantic element can be expressed by a combination of linguistic elements. Furthermore, semantic elements of different types can be represented by the same type of surface element, and the same semantic elements can be represented by several different surface elements. Finally, Talmy offers two directions that can be used to explore the expressive-language-meaning-meaning relationship: classification into three types based on verb stem and classification into a second type (Talmy, 1972, 1985). This dimension was based on the direction of language.

**Table 1.** *Classification of situation movement based on verb stem*

| Types of situation movement | Elements expressed on the surface of language | Language group |
|---|---|---|
| Motion + Co-event | Verbs that often express Motion and Action at the same time (usually by mode of motion or Cause of Motion) | Finno-Ugric, Chinese, Ojibwa, Warlpiri and all branches of Indo-European languages (except Romance languages) |
| Motion + Path | Verbs that include both Motion and Direction of motion | Semitic, Polynesian, Romance, Korean, Turkish, Tamil, Nez Perce and Caddo |
| Motion + Figure | Verbs Containing Motion and The Figure | Navajo and Hokan |

This type of classification is the result of looking at which semantic components are lexicalized, typically in the verb roots of some languages. The three main types of vocabulary typical for verb stems are presented by: verb stem expressing agreement (mode of motion or cause of motion), direction of motion or moving object in a moving situation.

### *a. The first classification: Motion + Co-event*

In a group of languages, which includes Finno-Ugric, Chinese, Ojibwa, Warlpiri and all branches of Indo-European languages (except for the Romance subsystem), verbs often express simultaneous movement and co-operation. condition (usually by mode of motion or cause of motion). English is a prime example of this group. Here, the terms motion without impact, with impact, and with self-actualization can be understood as follows: First, motion without impact relates to situations in which where entities are not capable of moving on their own or performing some movement. Second, affected motion refers to a moving event whose object is moved by the agent; The agent causes movement, but the verb can express the cause or the way in which the object moves. Finally, self-actualizing motion refers to situations in which objects can move on their own.

### *b. Second classification: Motion + Path*

In the second classification of expressions of motion, verbs include both motion and direction of motion. Languages such as: Semitic, Polynesian, Romance, Korean, Turkish, Tamil, Nez Perce and Caddo fall into this category. Movement verbs in Spanish are good examples of this type. In many languages, aside from Spanish, the expression of the mode of motion or the cause of motion in a moving factual sentence that is confusing to the listener is often overlooked. In contrast, verb roots in English are easy to understand and agree, so the direction of motion is rarely used. Therefore, this lexical model is not typical of English.

### *c. The third type of classification: Motion + Figure*

In the third classification, the verb stem connotes motion and the object in motion. Languages of this type are the Navajo and Hokan languages (such as Atsugewi). Talmy uses Atsugewi (a Northern California polysynthetic language) as a prototype for moving object languages. In Atsugewi, verb stems tend to show movement of objects, body parts, and clothing.

Languages can sometimes share the same semantic classification, but in very different ways.

Two-dimensional classification is the result of analysis of morpheme elements - the syntax commonly used to encode a directional element in a moving event. Talmy has based on the direction of motion to divide into two types:

### *a. Verb framing language*

Verb-framing languages refer to languages where the element indicating the direction of motion often appears at the verb stem in structures expressing movement. The following example in Spanish we will analyze to see how the element of motion is usually encoded in the language of verb framing.

### *b. Satellite framing language*

In contrast, languages where motion direction elements are often encoded with modifiers in motion-statement constructs are called by Talmy as satellite framing languages. The term "satellite" (satellite) is defined by Talmy as follows: "satellite" is a grammatical category of any element that has a parallel relationship with the verb stem (Talmy, 2000b). Satellites can be binding affixes or free words, in which,

English sub-adverbs, separable or indivisible verb prefixes in German, verb prefixes in German Latin or Russian, verb modifiers in Chinese, composite affixes around verb stem in Atsugewi, can encode the direction of motion (e.g. *English out, into, away* etc.).

**Table 2.** *Classification of situation movement based on the Direction of Motion*

| Types of situation movement | Elements expressed on the surface of language | Language group |
|---|---|---|
| Verb framing language | Only languages where the directional element usually appears at the verb stem in structures expressing movement. | - Romance subsystem: Catalan, French, Galician, Italian, Portuguese, Spanish<br>- Semitic subsystem: Arabic, Hebrew<br>- Turkic subsystem: Turkish<br>- Basque<br>- Japanese<br>- Korean<br>- Sign language subsystem: American Sign Language, Dutch Sign Language |
| Satellite framing language | Only languages where the Motion Direction element is usually coded with modifiers in the constructs that represent motion. | -Danish subsystem: Dutch, English, German, Icelandic, Swedish, Yiddish<br>-Slavic subsystem: Czech, Polish, Russian, Serbo-Croatian, Ukrainian<br>-Finno-Ugric subsystem: Finland, Hungary<br>-Chinese: Mandarin<br>-Australian: Warlpiri |

This study is based on the analysis of lexicalization models of motion-indicating elements in different languages around the world, based on the classification of verb framing languages and satellite framing languages as outlined by Talmy (2000a, 2000b) and Slobin (2004), who provided a theoretical outline for framing major languages and satellite languages. From this theoretical basis, this study analyzed the grammatical, semantic and cognitive characteristics of the sequence of motion predicates in Vietnamese and Japanese to find out the similarities and differences.

## Methodology

This paper focused on studying the sequence of motion predicates in Vietnamese and Japanese, which were approached on the basis of Talmy's theory. The scope of the study was limited to issues related to the similarities and differences of the predicate sequences in Vietnamese and Japanese on specific aspects of grammar, meaning and perception. Using the mixed method approach, the quantitative part was used to calculate the frequency of occurrence of motion predicate sequences in the survey corpus and to classify motion predicates according to criteria such as mode of motion, direction of motion and cause of motion. The activities were based on survey corpus sources taken from the Vietnamese Dictionary (Phe, 2003) and the Japanese Dictionary (Iwanami, 2019). The qualitative method was used to clearly describe the grammatical and semantic features of various types of motion predicate string structures in Vietnamese and Japanese and to compare the coding model of motion events in the two languages to find out the similarities and differences in the sequence of motion predicate of two languages Vietnamese - Japanese and the characteristics related to thinking and culture.

## Results

The results of the study are classified into two parts: the first part presents the findings of the situation movement in Vietnamese; and the second part (B) summarizes the situation movement in Japanese. Each section examines the classification of groups of moving predicate sequences, grammatical, semantic and cognitive structure of complex motion predicates expressing the mode of movement and structure of a sentence with a predicate sequence representing the mode of movement. There is also reference to grammatical, semantic and cognitive structure of predicate expressing the cause of motion and structure of a sentence with a predicate sequence showing the cause of motion in both languages, Vietnamese and Japanese.

### *(A) Situation movement in Vietnamese*

Vietnamese is an isolated language in which the predicate sequence is a common structure in communication activities to encode a situation. For example:

(1) Nam **đi**$_{(vị\ từ\ 1)}$ **vào**$_{(vị\ từ\ 2)}$ nhà.
(Nam goes $_{(predicate\ 1)}$ inside $_{(predicate\ 2)}$ the house.)
(2) Máy bay **đáp**$_{(vị\ từ\ 1)}$ **xuống**$_{(vị\ từ\ 2)}$ đường băng.

(The plane lands (predicate 1) down (predicate 2) the runway.)

From (1), (2) we see that the predicate sequence in Vietnamese is a grammatical structure formed from two or more predicates and often manifests itself on the surface of the language to describe a situation in a sentence. In such a situation, a word or a phrase holds the central position of the predicate. From the survey of moving predicates in the Vietnamese Dictionary, we have counted 130 moving predicates, and classified them into three groups of moving predicates according to the criteria of modal, direction and cause. Table 3 and Figure 1 present this classification, with their amount and ratio.

**Table 3.** *Classification of groups of moving predicates in Vietnamese*

| Moving Predicate Group | Amount | Ratio |
|---|---|---|
| Show Movement Modal | 71/130 | 54.6% |
| Show Movement Direction | 38/130 | 29.2% |
| Show Movement Cause | 21/130 | 16.2% |

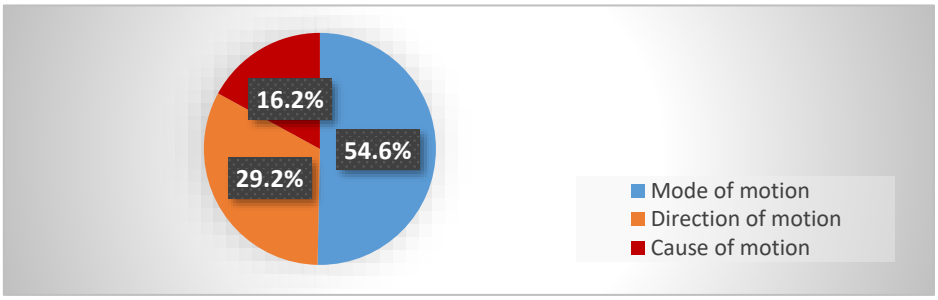


**Figure 1.** *Classification of groups of moving predicates in Vietnamese*

From the classification, it is evident that a group of predicates express the mode of movement accounts for a large proportion of 54.6% of the total in Vietnamese. In second place is the group of predicates expressing the direction of motion, accounting for 29.2%, while 16.2% of the remaining motion predicates belong to the group showing the cause of motion.

Based on this classification, each group of predicate was analyzed to discover the grammatical and semantic characteristics of the predicate sequences of motion.

*i. Grammatical, semantic and cognitive structure of predicate expressing the mode of movement and structure of a sentence with predicate sequences representing the mode of movement*

According to Talmy (2000b), a mode of motion can be understood as an action or an auxiliary state which can be expressed simultaneously with the main action or state, or it can be said that the mode of motion can be understood as an auxiliary action or state. For an isolated language like Vietnamese, the mode of motion is displayed on the surface of the language, expressed in the form of a predicate, whose connotation indicates the manner in which the movement takes place. This group of predicates makes up the majority of motion predicates in Vietnamese (54.6%), which provide information about how motion takes place. Typical for this group of predicates are predicates expressing movement activities such as: *ào, bay, cán, chảy, chạy, đá, đạp, giơ, khom, lật, ngã, quay*…. (*rushing, flying, rolling, flowing, running, kicking, kicking, lifting, stooping, flipping, falling, turning*....)

(3) Hắn **đạp**.
(He kicks.)
(4) Lá **bay**.
(The leaves fly.)

In (3) the predicate “đạp” (kick) represents the mode of motion (action) that the subject “hắn” (he) performs; while in (4) the predicate "bay" (fly) is modal movement without any action. This group of predicates belongs to the group of intransitive verbs, so when they function in the sentence, they act as monovalent predicates. The predicate expressing the mode of motion can be combined with a predicate expressing the direction of motion to form a sequence of predicate expressing the mode of motion.

(5) Hắn **đạp vào** cửa.
(He kicks to the door.)
(6) Lá **bay xuống** mặt đất.
(The leaves fly down the ground.)

In (5) and (6), the predicate expresses the method of “đạp”, “bay” (kick, fly) combined with the predicate expressing the direction “vào”, “ xuống” (to, down). Semantically, the modality predicate has the function of showing clearly how the motion takes place, while the direction predicate indicates the connection point relative to the motion's reference point. When combined, the following predicate - the predicate expressing

direction will take on the main semantic role. Grammatically, the two predicates will follow a certain order in which the predicate expressing the method is always first and the predicate expressing the direction will come after as shown below:

String predicate= Predicate $_{method}$ + Predicate $_{direction}$

Cognitively, depending on the style in spoken or written language, or intended use of the speaker, we can use it flexibly. If we want to emphasize the manner in which a thing moves, we only use the predicate expressing the monovalent mode of motion, but if we want to express more fully the meaning of the direction of motion, we use the sequence. The predicate combines the predicate expressing the method with the predicate expressing the direction of motion to encode a moving event in accordance with the proposed communication purpose.

Sentence structure with a predicate sequence representing the motion method is composed of arguments such as moving object, motion direction, and motion reference point.

(7) **Tôi** chạy vào *nhà*.
(I ran into the house.)
(8) **Chiếc thuyền** trôi xuống *hạ lưu*.
The boat drifts downstream.

In (7), (8) the term "tôi", "chiếc thuyền" (I, boat) is a Figure. "Tôi" acts as an agent and the "chiếc thuyền" is non-agentive, both of which are evident in the sentence. "Vào" (into) represents the direction of motion of the moving object relative to the reference point and this is the destination point. "Xuống" (down) is the direction of the object's movement from a starting point along the waypoint and towards the destination. The terms "nhà" (house), "hạ lưu (downstream) are the destination, and also the reference point of movement. An overview of the grammatical and semantic structure of a sentence structure with a predicate sequence showing the mode of movement is shown below:

Grammar: → Noun + Predicate 1 + Predicate 2 + Noun
Semantics: → Figure + Predicate $_{method}$ + Predicate$_{direction}$ + Ground

*ii. Grammatical, semantic and cognitive structure of predicate expressing movement direction and sentence structure with predicate sequence showing motion direction.*

According to Talmy (2000b), the direction of motion (path) in spoken language includes three components: Vector (direction component), Conformation (geometric structure) and Deixis (output component). The vector component is the most characteristic component of the direction of motion. For an isolated language like Vietnamese, the direction of motion is shown on the surface of the word and expressed in the form of a predicate, whose connotation includes the meaning of indicating the direction of movement in space. The findings of this study revealed that, in Vietnamese, the moving predicates that showed the direction of motion accounted for 29.2% of the motion predicates in Vietnamese.

Specifically, there are thus motion predicates expressing the motion direction. For instance, verbs like *bốc, chìm, chúi, đáp, đến, đổ, hướng, lại, lặn, lên, lún, nâng, ngả, qua, ra, rơi, rớt, sà, sang, tiến, tới, trồi, trượt, tuột, tụt, vào, về, vô, xuống,...* (*pick up, sink, stoop, land, arrive, dump, direct, return, dive, up, subside, lift, fall, pass, out, drop, swoop, forward, advance, come, emerge, glide, slip, fall, into, come, in, down…*) have predicates that indicate the direction of the subject's movement in space and are related to the reference point of the motion. This group of predicates has the character "dynamic" and "intentional" or "involuntary". When functions act as single predicates, it is possible to chain with a predicate of direction or a predicate of cause. In Vietnamese, when combining two motion predicates express the direction of motion to form a predicate string, there are motion predicates in this group that are able to combine most flexibly, as evident in words of direction: *lên, xuống, vào, vô, ra (up, down, into, in, out)".*

Within this subsection, let us analyze the possibility how a motion predicate representing the direction of motion combines with a motion predicate of the same group to form a sequence of motion predicates representing the direction of motion. For example:

(9) Con giun **trồi lên** mặt đất.
(*The worm emerges from the ground.*)
(10) Nước **chảy xuống** ao.
(*Water flows into the pond.*)

The sentences (9) and (10) are a combination of two predicates expressing direction, if "trồi" (emerge) shows the direction of movement from the inside or from below, it protrudes and emerges completely on the surface, when combined with the predicate "lên" (from),which clarifies the direction of movement and fully complements the meaning of the sentence. However, with the predicate "chảy" (flow), the direction of motion is to flow, without the support of the predicate "xuống (into)", it is difficult to form a complete meaning for the sentence. Semantically, both direction predicates function to indicate the direction in which motion will take

place. When combined together, the predicate expressing the following direction will assume the task of clarifying the meaning for the predicate showing the preceding direction, in other contexts will play the main semantic role.

Grammatically, the two predicates motion will be combined in a certain order. The predicate expressing the main direction of movement is always behind, acting as the predicate phrase as the center of the sentence, as presented below.

Predicate sequence = Predicate $_{\text{direction 1}}$ + Predicate $_{\text{direction 2}}$

In terms of perception, the predicate expressing the direction of motion in space has a lot of interesting points, because it is a common concept in human perception, but in general, it depends on how each ethnic group perceives landmarks or determines orientation in space. The predicate of the direction of motion makes it possible to determine, simulate the path, and trajectory of the motion in the process towards its reference point.

The structure of a sentence with a predicate string showing the direction of movement is made up of three arguments: Figure, Path and Ground.

(11) **Cậu bé** tuột xuống khỏi cái cây.
(*The boy slips down from the tree.*)
(12) **Chiếc lá** rơi xuống *mặt hồ.*
(*The leaf falls down the lake surface.*)

The moving object argument is a noun, with different meanings. In (11), the "cậu bé (boy)" is the subject of a deliberate movement that has a bodily function. On the contrary, the "chiếc lá (leaf)" in (12) is the subject of a motion without the effect of being. The motion direction argument "tuột xuống" (slips down), "rơi xuống" (falls down), is a combined predicate string between two motion predicates representing direction. In "Tuột xuống" (slips down), if the second predicate is omitted, the semantic meaning of the sentence is still guaranteed, in this case the second predicate plays an auxiliary role in the meaning of the first predicate. However, as for "rơi xuống" (fall down), if one of the two predicates is omitted, the sentence will not be guaranteed in terms of content, in this case the second predicate will assume the main semantic role. Moreover, the motion reference point argument is marked with a location noun and holds functions such as source, destination, or waypoint. In (11) the "cái cây" (tree) acts as a landmark to mark the movement beyond that landmark while in (12) "mặt hồ" (lake surface) is the destination to which the object of the situation moves.

From the above analysis, we generalize the grammatical and semantic structure of the sentence structure with the predicate sequence showing the movement direction as below:

Grammar: → Noun + Predicate 1 + Predicate 2 + Noun
Semantics: → Figure + Predicate $_{\text{method}}$ + Predicate $_{\text{direction}}$ + Ground

### *iii. Grammatical, semantic and cognitive structure of predicate expressing the cause of motion and structure of a sentence with a predicate sequence showing the cause of motion.*

When talking about a moving event, Talmy mentions that a moving event, in addition to its four components, can also appear as a moving partner (Co - Event), which is also known as a subordinate event (Talmy, 2000b). Most often, the relationship to the motion event is the relation of the mode or cause of the motion (motion has action). According to Talmy, motion causes predicates that may or may not have a causal expression on the surface of language. These predicates indicate only a process of physical action on an object and cause motion. The predicate expressing the cause of motion in Vietnamese according to the current survey accounted for 16.2% of the total number of motion predicates surveyed and specifically included verbs like: *bắn, cán, chuyển, cuốn, dẫn, dọn, đá, đâm, đưa, giật, húc, kéo, lay, lắc, lăn, lấn, lật, nâng, ném, phi, phóng, rút, va, xô (shoot, roll, transfer, coil, lead, tidy, kick, stab, give, jerk, ram, pull, waggle, shake, roll, encroach, flip, lift, throw, hurl, launch, withdraw, bump, shove).*

(13) Minh **đá** cái bàn.
*(Minh kicked the table.)*
(14) Minh **đá** trái bóng vào khung thành.
(*Minh kicks the ball into the goal.)*

In (13) the predicate "đá" (kick) does not indicate the cause of motion, only the mode of motion. However, in (14) when placing it in the cause sentence structure, the meaning in terms of cause is clearly indicated (the ball entered the goal because Minh made a "kick" action). Therefore, when considering the grammatical structure, the semantics of the predicate expressing the cause of motion, we will put it in the sentence structure with a predicate string showing the cause of motion. Sentence structure includes four parameters: the object causing the movement, the object being affected, the direction of motion and the reference point of the movement. The object argument here causes the movement and the object that affect factors that play a key role in the moving situation.

The moving object argument is the one that causes the change in the position of the affected object because this effect is the cause that causes the affected object to move its position according to a trajectory which may or may not be the intent of the object causing the motion.

(15) **Nam** ném hòn đá vào tường.
*(Nam throws a stone against the wall.)*
(16) **Con sóng** xô thuyền vào bờ.
*(The wave pushed the boat to the shore.)*

In (15) and (16), "Nam", "Con sóng" (Nam) and (The wave) are the functional entities with the function of being a noun in the sentence. "Nam" is an entity that exerts a force that causes the "stone" to move according to a certain purpose. Meanwhile, "The wave" is a natural agent that exerts a force on the object subject to the "boat" impact, causing them to move without a certain purpose. The difference between the physical agent and the natural agent lies in the intentionality of acting on the object. The object argument is grammatically affected. This argument acts as the direct modifier noun of the predicate expressing the cause. The arguments "hòn đá" (stone), "thuyền (boat)", are subject to a force acting by agents that lead to motion. These organisms have the attribute [± biotic].

The motion direction parameter represents the trajectory in which the object will move, this trajectory can be decided by the agent argument when it is an entity agent and not by the agent argument when it is a natural agent. Grammatically-semantic, the direction of motion is encoded in the second predicate (the predicate represents the direction). In (15) the direction of motion is encoded in the predicate "in" which has been determined by the entity agent "Nam" when performing an action. Meanwhile, the agent causes movement in (16), the "con sóng" (wave) is a natural agent, so it is impossible to determine the direction of the object's movement, thanks to the predicate "vào" (in) to help us perceive the direction which the movement is directed. The characteristic feature of the predicate sequence showing the cause is that the two motion predicates do not go side by side but will be linked by a subject noun. The motion reference point argument helps us to recognize the existence of motion. In sentences (15), (16) the noun "tường (wall)", "bờ (shore)" is after the predicate expressing the direction that plays the role of the destination of the movement.

From the above analysis, we generalize the grammatical and semantic structure of the sentence structure with the predicate sequence showing the causes of motion as given below:

Grammar: → Noun + Predicate 1 + Noun + Predicate 2 + Noun
Semantics: → Figure $_{(moved)}$ + Predicate $_{cause}$ + Figure $_{(effected)}$ + Predicate $_{direction}$ + Ground

Thus, according to the Talmy's point of view, motion implies a physical or mechanical displacement by which an object moves or locates with another object in space or time. That entity object appears at various locations on the motion trajectory and at different times in the time course. A moving thing is universal, so in any language there are lexical or grammatical tools to express a moving thing. However, depending on the type of language, a moving situation will be encoded in different ways. This difference is formed due to the way each ethnic group perceives language in terms of space, time or point of view. For example,

(17) Bị cáo hãy *đi lên trước* vành móng ngựa.
*(Defendant come to the front of the horseshoe, please!)*


In the above example (17), if viewed from the point of view of the word the character "defendant" must perform the action of moving forward of the "vành móng ngựa" (horseshoe) (i.e., standing behind the horseshoe). But if viewed from the point of view of the character "bị báo" (defendant), "đứng trước vành móng ngựa" (in front of the horseshoe) will now be perceived as a position opposite to the position that the chairman spoke. Thus, it can be seen that how a moving event is coded depends on the context and perception.

The situation of movement in Vietnamese is often used in a way that combines two predicates together to link strings in a linear order. As in a motion situation with a sequence of predicates representing the mode, the first predicate contains the mode of motion and the second predicate represents the direction of motion.

Example (18): Nam *đi bộ đến* nhà ga.
(*Nam walks to the station.)*

In the above example (18), the mode predicate "walk" is combined with "to" the direction predicate and create a moving situation. This form is quite commonly used in Vietnamese. The predicate sequence shows the direction of movement, Vietnamese tends to encode information that is easy to perceive rather than information that is difficult to perceive, and in a sentence structure with a predicate sequence showing direction, most of the target arguments will appear more than the source argument. In another example:

(19) Mai *chạy vào* nhà.
*(Mai runs into the house.)*
(20) Mai *chạy từ ngoài* sân *vào* nhà. / Mai *chạy vào* nhà *từ ngoài* sân.
*(Mai runs from the yard to the house. / Mai ran into the house from the yard.)*

Both sentences (19) and (20) are two moving events showing direction. However, the event in (20) is more difficult to perceive than in (19). The frequency of occurrence according to the description of (19) will be more natural and common.

Vietnamese tends to encode information that is received first, and that which is received later is encoded later. As in a sentence with a predicate string expressing the cause, the object argument that causes movement and the object argument that is affected are the two arguments that are received first, so they will be described first, and the results received later should describe them later. For example:

(21) Hắn bẻ gãy cành cây.
(H*e breaks the branch.)*
(22) Nam lật vạt áo lên.
*(Male flips his shirt up.)*

In (21) and (22) are two sentences with a predicate string express the cause to lead to the result of a situation. "bẻ", "lật" (break, flips) represents the cause of the situation, which is the action that is foreseen and should be described first, and "gãy", "lên" (break, up) is the result of the situation.

### *(B) Situation movements in Japanese*

According to Talmy's two-dimensional classification, by analyzing morpheme elements - syntax is often used to encode the element indicating direction in a moving event. Talmy classified the direction of motion into two types: Verb-framed languages and satellite-framed languages. According to this classification, Japanese can be classified into a group of languages that frames verbs, meaning the direction of movement is encoded in the verb stem. From the above theoretical approach, combined with the survey of motion predicates in the Japanese Dictionary, we synthesized 178 motion predicates divided into three groups as seen in Table 4 and Figure 2:

**Table 4.** *Classification of groups of moving predicates in Japanese*

| Moving Predicate Group | Amount | Ratio |
|---|---|---|
| Complex movement predicate | 79/178 | 44.4% |
| Space motion predicate | 72/178 | 40.4% |
| Fictitious motion predicates | 27/178 | 15.2% |

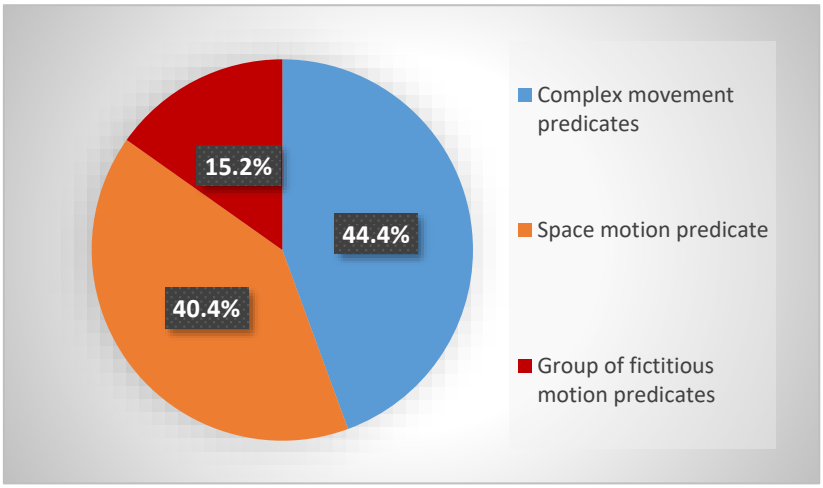


**Figure 2.** *Classification of groups of moving predicates in Japanese*

In Japanese, the group of complex motion predicates and the group of spatial motion predicates dominate the motion predicate, accounting for 84.8% of the total. The remaining number of motion predicates belong to the group of fictitious motion predicates. Let us analyze the grammatical and semantic features of the movable predicate in Japanese according to the above classification.

*i.Grammatical, semantic and cognitive structure of complex motion predicates and sentence structure with complex predicate strings*

Complex motion predicates are predicate strings composed of two predicates, combined in a certain conventional order, in which two predicates must appear at least as one motion predicate. Based on this ,there can be at least three common and widely used types of compound predicate sequences in Japanese:

***(a) Conjunctive motion predicate + Motion predicate.***

For example:
(23) あるき＋まわる　　＝　あるきまわる
(Walk + around = walk around)

In this type of complex predicate sequence, a combination of two motion predicates is required. However, it must follow a fixed order. As in example (23) the predicate of motion （あるく）must come before the predicate of motion （まわる）to make sense. The direction of motion will depend on the following direction predicate. We cannot combine in the reverse order (まわりある) to create a complex predicate sequence, so it can be seen that for the complex predicate sequence as in the above example, there will be special limitations for with the position of the predicate and the following predicate.

It is also evident from the current study that the predicate behind the majority are the predicate expressing the direction of motion. Through the frequency of combinations we see predicates like あるく・まわる・わたる・ぬける・おりる・さる・つく・でる as predicates expressing the direction of motion that are able to combine with other predicates in the most flexible and common way. This can be summed up by the following expression:

**「移動動詞の連用形」＋「移動動詞」**

Predicate (mode of the conjunction) + Predicate (direction)

***(b) Conjunctive movement predicate + Predicate expressing continuity, continuity.***

For example:
(24) はしり＋はじめる　＝　はしりはじめる
(Run + start = start running)

Compound predicates such as （はしりはじめる）in (24) are a combination of a motion predicate representing a mode with a predicate representing a time. In the structure of this predicate sequence, it must also follow a certain order. In particular, the predicate of motion must be preceded and followed by a predicate expressing the time, usually, this second predicate is usually a fixed predicate such as （はじめる・つづける. The compound word is therefore encoded in the second predicate, the time predicate, to emphasize the time at which the movement takes place. The motion predicates preceded by 「はじめる」 are mostly motion predicates expressing the method, indicating the way in which the action takes place. From here, it can be asserted that 「はじめる」 will basically combine with predicates expressing the mode of motion and is the main predicate in the semantically dominant sequence of the predicate sequence, representing the time period, the starting point of the displacement action.

Besides, the movement predicates before 「つづける」 can be modal predicates like （あるく・かける・およぐ。。。） or positional change predicates like くだる・のぼる・すすむ） when combined with 「つづける」 creates a series of predicates that have the meaning of continuing to move or repeating the movement. It can be generalized into the following expression:

「移動動詞の連用形」＋「ハジメル/ツヅケル」のように動きの開始、続きの局面を表す動詞

Predicate mode of connection + Predicate Hajimeru / Tsudukeru

***(c) Motion predicate て(Te) + いく(Iku)・くる(Kuru)***

For example:
(25) あるいて＋くる　＝　あるいてくる
(Walk + approach the speaker = Walk towards the speaker)

The example (25) is a combination of a motion predicate expressing modal with a motion predicate （いく・くる）[go , to]. The special feature of this complex predicate sequence is that （いく・くる） is both a predicate expressing movement direction and a grammatical structure. Therefore, the meaning of the predicate string will be more grammatical than the original meaning of the predicate.

It is evident that most of the motion predicates can be combined with the 「いく」・「くる」 predicate, most of which are predicates expressing the mode of motion. Predicates indicating a change in the position of origin tend to precede the predicate 「いく」, and predicates indicating a change in the position of the destination tend to precede the predicate 「くる」.

The survey results show a feature that there are predicates that are easy to combine with「いく」・「くる」but there are predicates that are difficult to combine with 「いく」・「くる」. We generalize to the following expression:

「移動動詞のテ形」十「イク/クル」

Predicate (Te form mode) + Predicate IKU / KURU

However, as mentioned above because ・くる） is also a predicate with a grammatical function, but in examples (26) ,(27) and (28), when ・くる） is combined with other predicates, it will have different grammatical meanings. For example:

(26) かって＋くる ＝ かってくる
(Buy + Come = Buy and come back)
(27) わかって＋くる＝ わかってくる
(Understand + Come = Understand)
(28) ふえて＋いく ＝ ふえていく
(Increase + Go = Increase more)

In (26) when （くる） is combined with an action predicate, the predicate sequence will emphasize the reference point to which the action is directed. In (27), when くる）combines with a predicate expressing a state, it will denote a arising state that has never appeared before. In this case, くる） just acts as a semantically auxiliary predicate. However, いく）in (28) combines with the predicate expressing the state of development, which is the predicate of movement expressing the direction also only has an auxiliary function expressing the meaning "from now on, it will be more and more increase" of the time point from the present to the future.

Thus, it can be seen that due to limitations and regulations in the usage of Japanese words or ways of perception, the same form of the predicate sequence will have different meanings and perceptions and be related to predicate classification. So in this subsection. We divide into three structural forms of the complex predicate sequence as above.

As mentioned above, the sentence structure with complex motion predicate is composed of three arguments: *Figure*, *Path* and *Ground*. In Japanese, there is a special point because the argument of moving object is「わたし(I)」so if the expression omits the parameter 「わたし」, the meaning of the sentence will not be affected, according to the perception of the person. In Japanese communication, humility and respect for each other are very important. Therefore, when the subject is "I", it is often omitted to show the humble attitude. The moving object argument in a sentence with a complex motion predicate sequence is an element in the sentence and exists in the form of a noun and will be connected to the predicate element by a particle「じょし」. This particle has the function of signaling that the element before it is the subject of the moving situation. Specifically, these auxiliary verbs are usually「は(wa)・が(ga)・も(mo)」. From the above analysis, we generalize the grammatical and semantic structure of the sentence structure with the predicate sequence. complexity using the following diagram:

Grammar: → **名詞＋助詞＋場所名詞 +助詞＋複合動詞**
[Noun + Particle + Place Noun + Compound Predicate]
Semantics: → Figure moved+ Auxiliary Modifier + Ground + Auxiliary Modifier + Predicate Complex

- *Grammatical, semantic and sentence structure with spatial motion predicate*

In Japanese, the predicate motion in space means the change in the position of a moving object with the property of [± biotic] from a starting point to an ending point of motion. Movements [+organic] are movements that the subject has a will. Movement [-living] is the movement of concrete objects without a will. The reason we predicate spatial motion based on two characteristics of the subject [±organism] is because of their ability to combine with particles to create the meaning of a moving thing.

(29) かれが｛いえから・いえを｝でる。
(30) けむりが｛まどから・＊まどを｝でる。

In (29), there is a moving thing in space with the characteristic [+living] the subject「かれ(he)」 has a will, so the moving predicate 「でる (out of)」 can be combined with the noun. The term refers to the place 「いえ(house)」 through two particles, 「から(kara)」 and 「を(wo)」. However, in (30) 「けむり(smoke)」 is the subject without a will. This is a situation moving in space with the characteristic [-being]. In this case, the moving predicate「でる」can only be combined with the noun only「まど(window)」through the particle 「から」cannot be combined with the particle「を」because of the characteristics of「を( wo)」can only be associated with subjects with a will.

The structure of a sentence with a moving predicate in space is composed of four arguments: moving object, direction of motion, auxiliary and reference point of motion, as seen in the following examples (31) to (35):

(31) 高木先生は　　*教室*　　を　　さる。
*(source point)*　*(auxiliary)*　*(source point predicate)*
*（出発点）*　（助詞）　（出発意向動詞）
(Takagisenseiha ***kyoshitsu*** wo **saru**. / Teacher Takagi leaves the classroom.)
(32) タイさんは　　*橋*　　を　　わたる。
*(waypoint)* *(auxiliary)*　*(Predicate experiencing the landmark)*
*（経路店）*　助詞）　（経過意向動詞）
( Taisanha ***hashi*** wo **wataru**. / Tai crosses the bridge.)
(33)　彼は　　*部屋*　　に　　はいる。
*(destination point)*　*(auxiliary)*　*(destination predicate)*（*到着点*）　助詞）　（到着意向動詞）
( Kareha ***heya*** ni **hairu**. / He entered the room.)
(34)　彼女は　　*あっち*　　に　　むかう。
*(objective)*　*(auxiliary)*　*(objective predicate)*　*（目的地）*　（助詞）　（目的地意向動詞）
( Kanojoha ***acchi*** ni **mukau**. / She headed over there.)
(35)　*国外*　　へ　　とぶ。
*(direction)*　*(auxiliary)*　*(predicate of direction)*
*（方向）*　（助詞）　（方向意向動詞）
( ***Kokugai*** he **tobu**. / Fly abroad.)

The moving object argument is the subject of the moving event, acting as a noun marked with the particles 「は・が」. These nouns have two basic characteristics [±organism]. The spatial motion direction argument is divided into five groups based on association with the place nouns. Depending on each type of predicate combined with nouns indicating places will give different meanings and ways of perception. The auxiliary argument plays the role of an important and indispensable argument in a sentence, going with the moving predicates that carry the function of signaling the semantics that the situation is moving towards. The same moving predicate when combined with different particles will give different meanings and classifications.

The source point predicate group (出発点) goes with the particle 「を・から」 according to the following expression:

【場所名詞（出発点）＋を／から＋出発意向動詞】

The predicate group that passes the landmark (経路店) goes with the particle 「を」 according to the following expression:

【場所名詞（経由点）＋　を　＋経由意向動詞】
【場所名詞（経路）＋　を　＋経路意向動詞】

The target group of predicates (到着点) goes with the particle 「に・へ・まで」 according to the expression:

【場所名詞（到着点）＋　に／へ／まで　＋到着意向動詞】

The group of purposive predicates (目的地) goes with the particle 「に・へ」 according to the following expression:

【場所名詞（目的地）＋　に／へ／まで　＋目的地意向動詞】

The group of direction predicates (方向) goes with「の方に・の方へ」 according to the expression:

【場所名詞（方向）＋の方に／の方へ＋方向意向動詞】

Reference point argument of motion is expressed by a noun indicating a place with a grammatical task that will modify the motion predicate, showing the moving path of the subject in the reference system. The reference point argument depends on the predicate group that represents the role of a source, destination, or waypoint. Reference points are divided into five categories: source point, destination point, waypoint, target direction and direction, as shown in Figure 3.

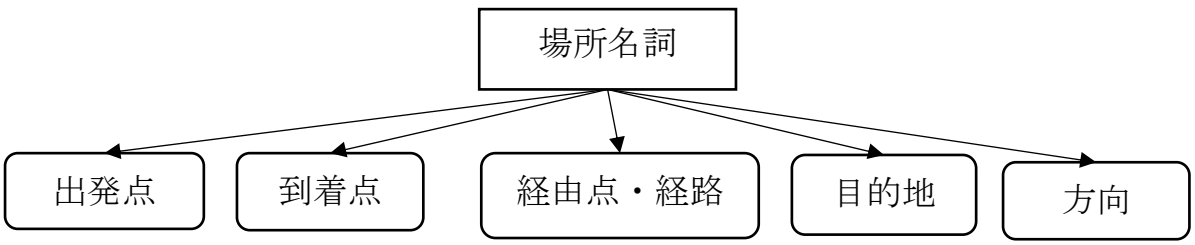


**Figure 3.** *Reference point parameter classification diagram*

Based on this, the sentence structure with spatial predicate will give the following expression:

Grammar: → 名詞 ＋助詞＋場所名詞 +助詞＋空間動詞

Semantics: → Figure $_{moved}$ + Auxiliary Modifier + Ground + Auxiliary Modifier + Predicate $_{space}$

*ii.Grammatical structure, semantics and sentence structure with complex motion predicate*

***(a) Conjunctive motion predicate + Motion predicate***

To create a predicate sequence, it is necessary to have a combination of two moving predicates in a fixed order as in (36) modal predicate（あるく）before the directional predicate （まわる）.

(36) あるき＋まわる＝ **あるきまわる** (Walk + circle = **walk around**)

The direction of motion will depend on the following direction predicate. This compound predicate sequence cannot be combined in reverse order. Thus, for the complex predicate sequence, as in the above example (36), there will be special restrictions on the positions of the two predicates. It is summed up by the following expression:

「移動動詞の連用形」＋「移動動詞」

Predicate $_{method\ of\ interchangeability}$ + Predicate $_{direction}$

***(b) Conjunctive movement predicate + Predicate expressing continuity, continuity***

(37) はしり＋はじめる＝ **はしりはじめる** (Run + start = start running)

The compound predicate （はしりはじめる）in (37) combines the predicate movement indicating mode with the predicate indicating time. The structure of this predicate sequence follows a certain order of positioning the movement word first, followed by a time predicate, basically this second predicate is a fixed predicate such as （はじめる・つづける. The meaning of the complex predicate sequence in (37) is encoded in the time predicate to emphasize the time at which the shifting action takes place. It is summed up by the following expression:

「移動動詞の連用形」＋「ハジメル/ツヅケル」続きの局面を表す動詞

Predicate $_{conjugation\ method}$ + Predicate $_{Hajimeru\ /\ Tsudukeru}$

***(c) Motion predicate て(Te) + いく(Iku)・くる(Kuru)***

(38) あるいて＋いく＝ あるいていく(Walk + away from speaker = Walk away from speaker)
(39) あるいて＋くる＝ あるいてくる (Walk + near speaker = Walk towards speaker)

The examples (38) and (39) combine a modal motion predicate with the motion predicate （いく・くる）. This predicate sequence is both a predicate expressing the direction of motion and a grammatical structure. Therefore, the meaning of the predicate sequence will be more grammatical than the original meaning of the predicate, being influenced by the second movement predicate emphasizing the direction of movement towards or away from the speaker. This is summarized in the following expression:

「移動動詞のテ形」＋「イク/クル」

Predicate $_{Te\ form\ mode}$ + Predicate $_{IKU\ /\ KURU}$

Sentence structure with a complex motion predicate is composed of three arguments: moving object, motion direction and motion reference point as seen in examples (40) and (41).

(40) かれは　いえの　あちらこちらを　あるきまわる。
Subject　Reference Point　Directional predicate
(41) このでんしゃは　とうきょうを　はしりまわる。
Subject　Reference Point　Directional predicate

The moving object argument is a noun depending on whether the subject combines the predicate belonging to the group of active or inactive. This argument is connected to the predicate element by an auxiliary. The motion direction argument is combined of two predicates to form a complex predicate sequence, in which two predicates must have a predicate representing the direction of motion. The meaning of the moving situation is assumed by the predicate expressing this direction. The motion reference point argument is marked with a place noun and holds functions such as source, destination, waypoint, or route to add meaning to the motion predicate and precedes the transition predicate. motion.

The sentence structure with compound predicate can be summed up in the following expression:

Grammar: → 名詞 ＋助詞＋場所名詞 +助詞＋複合動詞

Semantics: → Figure $_{moved}$ + Auxiliary Modifier + Ground + Auxiliary Modifier + Predicate$_{Complex}$

- *Grammatical structure, semantics and sentence structure with fictitious moving predicate*

In the fictitious motion situation, the subject of the motion predicate is not directly expressed, but it is essential to understand that there is still the existence of the moving subject.

### *(a)* ***Constructing a fictitious motion expression with a subject in motion.***

Constituting the fictitious movement with a subject in motion includes four elements: moving object, auxiliary, motion direction, reference point as seen in (42) below.

(42) バルカン山脈 *は* ブルガリアの中央を 東西に はしる。Noun of place Auxiliary Noun phrase motion predicate
場所名詞*助詞* 場所名詞句 移動動詞
( The Balkan Mountains run through central Bulgaria from east to west.)

The argument for a moving object is a place noun with the characteristic of being a linear entity. 「は・が」is an auxiliary argument that signals the noun element where the place precedes it is the subject of the situation movement. The motion direction argument is a motion predicate that represents direction. The motion reference point argument is a noun or noun phrase with the function of modifying the motion predicate and expressing the direction the moving subject is moving towards through the particle「を」. The structure of a fictitious motion expression with a moving subject in place will be shown as follows:

Grammar: → 場所名詞 ＋は・が＋場所名詞句 ＋虚構的移動動詞
Semantics: → Figure $_{\text{moved}}$ + Auxiliary word + Ground + Predicate $_{\text{Direction}}$

### *b. Construct a fictitious motion expression with a fictitious moving subject.*

(43) 道路*をわたった* ところ *に* 郵便局がある。
Noun ( place)/ auxiliary word / motion predicate / Noun (relative)/ auxiliary word main clause 場所名詞助詞 移動動詞 相対名詞 二主節
(There's a post office across the street.)

In fictitious motion with a fictitious moving subject, the argument for a moving object is not explicitly stated in the sentence (43) but is imagined as a visual perceptual centered person. This fictitious motion expression includes three arguments: the reference point of the motion, the direction of motion, the particle.

This expression exists in the sentence as a complement clause, so the reference point argument we separate into two temporary parts called the reference point of the complement clause and the reference point of the main clause. The reference point argument of the complement clause, acts as a noun of place representing the trajectory of movement to reach the destination and modifies the motion predicate. The reference point noun of the main clause in terms of word meaning is not complete by itself, but will be semantically satisfied by accompanying the complement, this argument acts as a destination when the movement occurs. Motion direction argument, marked with a motion predicate indicating the method. The specific auxiliary argument will be「に」which acts as a link between the complement clause and the main clause, and signals the main clause to indicate a state. The structure of the expression is summed up as under:

Grammar:【場所名詞句+移動動詞のタ形+相対名詞+ニ】+【主節(存在や状況)】
Semantic: Ground + Predicate ($_{\text{Direction – simple tense}}$) + Ground +Auxiliary word + Clause $_{\text{(State or Existence)}}$

In Japanese, an ordinary motion situation consists of four basic parameters, according to Talmy theory (2000a): moving object argument, motion direction argument, motion reference point argument and motion argument. However, a feature of the Japanese language is that the motion direction argument is usually expressed by a particle 「じょし」. This particle plays an important role in expressing the meaning that the moving predicate is intended to convey. For example:

(44) わたしは がっこう へ いく。
I go to school.
(45) かのじょは こうえんを いく。
She walks in the park.

As in example (44)「わたし(me)」, as the moving object argument,「がっこう(school)」,is the motion reference point argument,「へ(moving direction)」 motion direction argument, and 「いく(go)」motion argument. In example (45) the motion direction argument「を」expressing the motion predicate will move past the landmark「こうえん」if you change one particle to another, the meaning of the motion predicate will change. For example, in this sentence (45), if we change 「を」 to「へ」, then the reference point「こうえん」will now become the destination.

The moving situation in Japanese often appears in spatial, fictitious, and complex sentences. Of these three types of sentences, the complex form is closest to the combined predicate sequence in Vietnamese. For example:

(46) アンさんは　こうえんを　*あるきまわる*

(Anne walks around the park.)

「あるきまわる」is a compound predicate formed from two simple predicates あるく(walk)」the predicate expressing the mode of movement and「まわる(around)」the predicate expressing the direction of motion. These two predicates join together according to a rule and according to certain limits.

The order of arguments in a sentence with a sequence of Japanese moving predicates just needs to ensure which elements combine with which particles without following a certain rule.

(47) a. あした　やまださんが　ここへ　くる。
1　2　3　4
b. やまださんが　あした　ここへ　くる。
2　1　3　4
c. あした　やまださんが　くる　ここへ
1　2　4　3
d. あした　ここへ　くる　やまださんが
1　3　4　2
(Yamada-san will come here tomorrow.)

Examples in (47) shows that changing the position of the participating arguments constitutes a moving situation but does not change the semantic side of the sentence.

## Discussion

Vietnamese and Japanese are two languages of two different types. In particular, Vietnamese is classified as a language that encodes both motion modes and motion directions, while Japanese is classified as a motion-oriented coding language. Besides the similarities, it is because of the difference in this type of language that leads to the difference in the grammatical and semantic structure and the way of perception of the two languages Vietnamese - Japanese.

The sequence of motion predicate in Vietnamese is presented above by the author and is divided into three groups of motion predicate strings, including: (i) The motion predicate string represents the mode of motion; (ii) The motion predicate string represents the direction of motion; and (iii) The motion predicate sequence represents the cause of motion. Corresponding to this group of predicate strings in Japanese is a complex motion predicate sentence structure.

There are similarities and differences of sentences with predicate sequences expressing the mode of movement. For example:

(48) Minh **chạy vào** phòng.
(Minh runs into the room).
Predicate (modal)
(49)　田中さんは道を**あるく**。
Predicate (modal)
(Tanaka walks on the street.)

In (48) the moving event described in the sentence is a moving event expressing the mode, coded by the predicate string structure "run into". This is the structure of a sequence of modal motion predicates, consisting of two predicates: Predicate (Modal) + Predicate (Direction). Corresponding to this form in Japanese, we have 「あるく」 a predicate expressing the mode of movement. However, this is a monovalent predicate, even though 「あるく」 according to compound expressions this predicate can be combined with another predicate in a conjugation (verb-stemming) form to complete the predicate string. However, the compound expression to connect two motion predicates needs to follow certain rules and has no form of chaining representing the method. This is because the predicate 「あるく」, with the help of the auxiliary argument「を」, has shown the direction of motion. From here, we comment on the method instance predicate string as follows:

- In terms of lexical type: Both languages have a moving predicate that expresses a mode, which describes the way in which a moving thing takes place.

- In terms of order and form of chaining: For Vietnamese, the motion predicate expressing the method will have the form of chaining with the motion predicate expressing the direction in a fixed order, namely Predicate (Modal) + Predicate (Direction). After this sequence of predicates is the reference point from which the movement takes place. For Japanese, the predicate expressing the modality is monovalent, standing at the end of the sentence and combined with the reference point through the auxiliary argument, the auxiliary argument has the role of indicating the direction in which the situation moves.
- In terms of grammar, it is expressed by the following expressions:

Vietnamese: Noun + Predicate (Modal) + Predicate (Direction) + Noun
Japanese: 名詞 ＋助詞＋場所名詞 +助詞＋移動動詞

There are also similarities and differences of sentences with predicate sequences showing the direction of movement. For example:

(50) Nam **tiến lên** khán đài.
(Nam walks up to the stage.)
Predicate (Direction
(51) かれはにわを**あるきまわる**。
Predicate (Direction
(He walks around the garden.)
(52) かれはあちこちょを**さまよいあるく**。
Predicate (Direction)
(He hangs around here and there.)

In example (50), there is a typical structure of the predicate expressing the direction of movement in Vietnamese, encoded by the predicate string "tiến lên" (forward) consisting of two predicates: Predicate (Direction 1) + Predicate (Direction2) in which the second predicate assumes the role of the central predicate of the predicate sequence. The central predicate is usually the predicate such as "vào, ra, lên, xuống (in, out, up, down)". Corresponding to it in Japanese, we have a predicate string made up of a combination of two moving predicates in the form of a connected form. Specifically, in (51) the predicate「あるく (method predicate」is combined with「まわる (direction predicate)」 or in (52) 「さまよう (direction predicate」is combined with「あるく (modal predicate)」. A special feature in this complex form is that it is possible to combine predicates: Predicate (modal) + Predicate (Direction) or Predicate (Direction) + Predicate (Mode), or also Predicate (Direction) + Predicate (Direction). However, when combined into a predicate string, it becomes a predicate string showing the direction of motion.

From here, we make comments about the predicate string representing the method as follows:

- In terms of word types: This is the most similar form to Vietnamese, both combining two moving predicates together in which a directional predicate is required.
- In terms of order and form of chaining: For Vietnamese, the motion predicate expressing the first direction will have the form of concatenation with the predicate of motion representing the second direction in a fixed order.
- Predicate (Direction 1) + Predicate (Direction 2). In which the predicate expressing the following direction plays the role of the central predicate. After this sequence of predicates is the reference point from which the movement takes place. For Japanese, the predicate expressing direction has the ability to flexibly combine in terms of position as well as predicate type, but this complex expression is limited to the meaning of direction only.
- In terms of grammar, it is expressed by the following expressions:

Vietnamese: Noun + Predicate (Direction 1) + Predicate (Direction 2) + Noun
Japanese: 名詞 ＋助詞＋場所名詞 +助詞 +「移動動詞の連用形」＋「移動動詞」

Finally, there are also similarities and differences of sentences with a predicate sequence expressing the cause of motion. For example,

(53) Tuấn **đâm** *con dao* **vào** thớt.
(Tuan stabs the knife into the cutting board.)
Predicate (Cause)
(54) 田中さんはミラーさんにノートをわたす。
(Tanaka hands the notebook to Mira.)

The example (53) is a sentence with a predicate string expressing the cause of motion in Vietnamese. The presence of the predicate represents the mode of "stabbing" in which the subject shows the manner in which the movement takes place. In (54), glancing it semantically, we can initially think that this is a sentence expressing a moving situation in Japanese. However, this type of sentence in Japanese is not classified as a moving predicate expressing cause. Because the predicate「わたす(give)」 is not listed in the group of motion predicates, but it is an action predicate in the grammatical structure of give – give. Because of this, in this section we do not compare the similarities and differences of two languages.

## Suggestions and Recommendations

In terms of movement lexicalization model, Vietnamese and Japanese have similarities and differences. These similarities and differences can be identified through the semantic expression of motion structures in Japanese. Therefore, it may be useful for Vietnamese people (who use languages that encode both direction and modal expressions) in using Japanese motion textures. In Japanese, the predicate expressing the mode of motion makes up the majority of the motion predicates. The direction of movement in Japanese is not only indicated by direction predicates, but is also heavily influenced by the particle and adverbial system. Therefore, understanding the semantic expressions of Japanese motion structures, along with identifying the differences in related issues between the two languages, will help teachers and learners use them correctly and naturally than the moving textures in Japanese.

Specifically, when teaching Japanese, it is necessary to pay attention to the three points in the structure of moving situations: First, it is necessary to determine whether the moving elements encoded in the semantic structure of the motion predicate belong to the group of complex predicate or spatial predicate or fictitious predicate; Second, it is necessary to determine whether the moving object belongs to the biotic group [+] or the biotic group [-]. This determination, will determine which group motion preposition to be used and how to use the texture; and Third, learners need to know that the particles before the predicate of motion play an important role in conveying information related to motion such as direction of motion or information related to the reference point of motion such as: source point, destination point, traversed point, or path.

When teaching motion predicates, the teacher should give priority to the group of monovalent motion predicates first, after the learners have grasped the key points of the moving predicate, they should focus on the complex predicate group. For example, the learners can give preference to monovalent predicates such as: 「いく(go)」,「くる(to)」,「かえる(go home)」,「あるく(walk)」... over predicates like :「とんでいく(fly away)」,「はしってくる(run to)」,「あるきまわる(go around)」. Since the monovalent motion predicates have similarities with Vietnamese which are easy to use, they are quickly grasped by learners. However, when going to higher levels, it is necessary to direct learners to complex predicate groups. The proficient use of this group of predicates will help learners convey the language more naturally and express many meanings to be conveyed in the same sentence.

Particles are an important and indispensable element in the grammatical structure of Japanese. This element in the motion texture, as discussed above, changes the nature of the motion. It has a huge difference with Vietnamese, making it difficult for learners to perceive this element. Therefore, teachers need to orient and help learners grasp the role, to mean position as well as separate regulations for each particle. For example:

(56) わたしは　としょかん　へ　いく。
(I will go to the library.)

The example (56) is a sentence structure with a motion predicate. In this case, the teacher needs to orient the learners about the auxiliary words used for the above sentence. The learners must pay attention to the following points to: (i) The particle 「へ(e)」is a particle that connects the reference point component of the motion and the motion predicate; (ii) This particle only comes with limited motion predicates such as 「いく(go)」,「くる(to)」,「かえる(about)」 and not commonly used with other moving predicates; (iii) This particle has the function of signaling that the reference point in front of it will be the destination point; and (iv) If you change this particle to another particle like 「を・から・に」, the nature of the movement will change.

In Vietnamese, the predicate expressing the cause of motion is classified in the group of motion predicate sequences. However, this group of predicate sequences, in Japanese, is delimited by functional grammatical structures, accompanied by action predicates and not in the group of motion predicates. Because of this, the teacher when directing learners to the movement predicate structure needs attention, so that learners can notice this difference. For example:

(57) わたしは　つくえの　うえに　ほんを　おきました。
(I put the book on the table.)

In (57) the character 「わたし(I)」 made an impact on the object「ほん(book)」with an action「おきます(put)」which caused the object to change its position in the reference point 「つくえのうえ(on the table)」. The above sentence, if we look at it briefly, we will see that it is very similar to the structure of moving events expressing cause in Vietnamese. However, in Japanese the predicate 「おきます(put)」 is not classified as a moving predicate. Therefore, this is not a sentence that denotes a moving situation in Japanese.

In Japanese, the fictitious group of moving predicates is a predicate group that is relatively difficult for learners to understand. In essence, in Vietnamese, there is inherently this predicate group. For example:

(58) **Con đường** chạy dài *quanh sườn núi*.
(The road ran around the mountainside.)

However, for Vietnamese people, they often perceive the above sentence (58) in favor of anthropomorphic meaning. In Japanese, the form of a sentence with a fictitious sequence of moving predicates often has grammatical features, describing a moving situation when towards the destination of the reference point, an object or event will exist. For example:

(59) この　みちを　あるいたところに　みせが　あります。
(Walking on this street will have a shop.)

The sentence (59) is a grammatical structure, describing the existence of a thing, when a moving situation occurs.

These suggestions can help learners to recognize the different features in the fictitious predicate sequence of Japanese and prove the opportunity to have a correct view of this type of moving predicate in the two languages.

## Conclusion

Vietnamese and Japanese are two languages that do not have the same type of domains and applications. Therefore, the process of linking arguments to form a moving situation such that the two languages have a single similarity is very difficult. After comparing the similarities and differences of the two languages, the study made a few conclusions. First, in terms of language type, Vietnamese and Japanese belong to two different languages. Vietnamese is an isolated language, while Japanese is an agglutinative language, so the perception of space by native speakers is different. If in the perception of the Vietnamese people, which one is near speaks first, which is far away is said later, or what happens first speaks first, happens later and speaks later. In contrast, in the Japanese way of perceiving space, the point of reference will always be perceived first and then the way in which things move.

In terms of semantics, Vietnamese simply uses words and connects them in an order to create a sequence of events without morphological change, while in Japanese when combining words, the language used to form the meaning of a sentence will depend on the form of the predicate as well as on the auxiliary argument system, which makes it difficult for foreign language learners because they have to remember and change many elements to form a semantically complete sentence.

Grammatically, each language will depend on how it perceives and encodes moving facts in that language. The difference in semantics leads to a change in grammar. Specifically, the predicate movement in Vietnamese is often used in the form of a chain between two single-valued predicates, whereby the mode of motion and direction of motion are usually encoded by a sequence of two predicates. In Japanese, the predicate motion is often used in a monovalent form and combined with an auxiliary argument to encode a situation of movement in a mode or in a direction. Therefore, when using two languages, users should pay attention to the distinct characteristics of each type of language to use appropriately.

Motion is a universal concept in human language. In the article, from the analysis of the situation of movement in Vietnamese and Japanese, we have clarified the similarities and differences in the two languages based on semantic and grammatical aspects. Accordingly, the basic similarity of the situation of motion in the two languages lies in the sequence of motion predicates in which the predicate of direction plays the role of the central predicate. The difference is that Vietnamese mainly forms situations in the form of a series of moving predicates, while Japanese mainly relies on monovalent forms or a combination of grammatical structures and a system of auxiliary verbs to form predicate string. The analysis of how to encode a moving situation in the language also helps to see more clearly the similarities and differences in the cultural thinking of the two Vietnamese and Japanese language communities. Through established models of the structure of the sequence of motion predicates, the author hopes to help learners and teachers of these two types of languages to have a more comprehensive and specific about motion predicate. However, due to the complex characteristics in terms of grammar, semantics and cognition of the two studied languages, we only stop at accessing universal expressions of Vietnamese and Japanese. The introduction of a radical solution in the process of language teaching and translation is also an interesting direction for future research projects.

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