THE UNIVERSITY OF ĐA NANG
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**LY NGOC TOAN**

# A COGNITIVE STUDY OF LEXICAL EXPRESSIONS DENOTING MOTION IN ENGLISH AND VIETNAMESE

**DOCTORAL THESIS IN ENGLISH LINGUISTICS**

**DA NANG- 2019**

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# A COGNITIVE STUDY OF LEXICAL EXPRESSIONS DENOTING MOTION IN ENGLISH AND VIETNAMESE

**(A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy)**

**Major: ENGLISH LINGUISTICS**

**Code: 62.22.02.01**

**DOCTORAL THESIS IN ENGLISH LINGUISTICS**

**Supervisor: Assoc. Prof. Dr. Luu Quy Khuong**

**DA NANG- 2019**

## STATEMENT OF AUTHORSHIP

Except where the reference is indicated, no other person's work has been used without due acknowledgment in the text of the dissertation.

This dissertation has not been submitted for the award of any degree of diploma in any other tertiary institution.

*Da Nang, December 26, 2019*

**Author**

**Ly Ngoc Toan**

**Da Nang, 2019**

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# ABSTRACT

Regarding a cognitive study on lexical expressions of motion (LEsM) in English and Vietnamese, the study, first, examines the semantic properties of LEsM which are associated with the semantic components (SCs) mapped onto linguistic surface forms (Su.F) to denote motion events (MEs), called ***lexicalization patterns*** (LPs). Second, the study investigates the syntactic properties of LEsM that is concerned with the logical incorporation of surface forms to constitute motion events based on the conceptual basis of grammar, the construction grammar more precisely which includes ***argument structures*** and ***event structures***. In doing so, the dissertation aims to establish several frameworks to analyze the semantics and syntax of LEsM and to elicit the similarities and differences in LEsM between English and Vietnamese in terms of semantic and syntactic properties.

Concerning data analysis, the study draws on some main methods to collect as well as analyze the data, namely deductive and inductive, quantitative and qualitative, and descriptive methods. Moreover, the comparison may help the researcher recognize the major similarities and differences in LEsM between English and Vietnamese. Besides the methods mentioned above, some other methods could be harnessed when necessary.

The study reveals that both LPs and construction grammar of LEsM in English and Vietnamese were found and emerged with the remarkable similarities and differences. The result shows that the argument structures of LEsM in English and Vietnamese are relatively similar in terms of their distribution as well as frequency. In contrast, there are considerable differences in LEsM between English and Vietnamese in terms of semantic properties. This can be expounded to be due to a variety of conceptual and cultural aspects. Therefore, the overall objective of the study is to investigate the semantics and syntax of LEsM in English and Vietnamese.

From the results above, the dissertation suggests fundamental implications for language teaching and learning, linguistic research and translation. One of the results found in the dissertation will have practical implication for each domain.

## LIST OF ABBRREVIATIONS

| | |
|---|---|
| Arg | Argument |
| AS | Argument structure |
| C | Cause |
| CR | Cognitive representation |
| SC | Semantic component |
| DI | Direct |
| F | Figure |
| G | Ground |
| INDI | Indirect |
| LEM | Lexical expression of motion |
| LEsCM | Lexical expressions of caused motion |
| LEsMM | Lexical expressions of manner motion |
| LEsPM | Lexical expressions of path motion |
| LP | Lexicalization pattern |
| Mn | Manner |
| MEs | Motion events |
| $Rel_{PATH}$ | Path relator |
| $Rel_{PLACE}$ | Place relator |
| S-framed | Satellite-framed |
| Se.E | Semantic element |
| Su.F | Surface form |
| P | Preposition |
| PP | Prepositional phrase |
| V-framed | Verb-framed |

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# Chapter 1
# INTRODUCTION

## 1.1. Rationale

Cognitive linguistics is an approach to language study originating in the 1970s, which views language as an instrument to organize, process and convey information. Due to its flexible framework to language analysis, a vast number of linguistic studies have been engendered under this title. Motion is a typical domain analyzed from distinct perspectives of cognitive linguistics. Nonetheless, these studies placed a greater focus on the analysis of semantic properties of motion verbs and spatial prepositions in isolation but discounted the analysis of motion verbs and spatial prepositions in a whole conglomeration or lexical expressions. Also, there have hardly been works exploring motion events as ***lexical expressions*** in which they consist of a conceptual category of motion verbs. As a result, these studies leave a research gap in which motion events should be analyzed based on the semantics and syntax of lexical expressions in the close correlation between motion verbs and spatial prepositions for the following reasons.

First of all, it helps to shed light on the linguistic characteritics of lexicalization patterns in which the different semantic components are conflated into each type of verbs and prepositions in denoting motion. Examine the following examples.

(1.1) a. He **left** his house at dawn.

b. The car **crashed into** the bush. (**ES09**-142)

In example (1.1a), the motion verb "*left*" simultaneously denotes the Agent's change of location "*He*" and the motion route of the Agent from the starting point "*his house*" to the destination. This verb "*left*" is termed as the ***path verbs***, and language with this property is called a *verb-framed* language *(V-framed* for short*)*. While example (1.1b) consists of the verb "*crashed*" and the preposition (satellite) "*into*", the verb simultaneously denotes the Manner and Motion of the Agent while the preposition denotes the route and direction of motion. This verb is called a ***manner verb***, and language with this property belongs to a satellite-framed language (*S-framed* for short).

Second, the analysis of LEsM in a conglomeration will uncover human's conceptual structures of motion. The following illustrative example taken from Evans & Green (2003:8) will shed light on this point.

(1.2) The cat **jumped** *over* the wall.

The conventional interpretation of this sentence is that the cat begins the jump on one side of the wall, moves through an arc-like trajectory, and lands on the other side of the wall. However, this sentence raises several puzzling issues. That is, which one of four descriptions below will be the most compatible with that example?

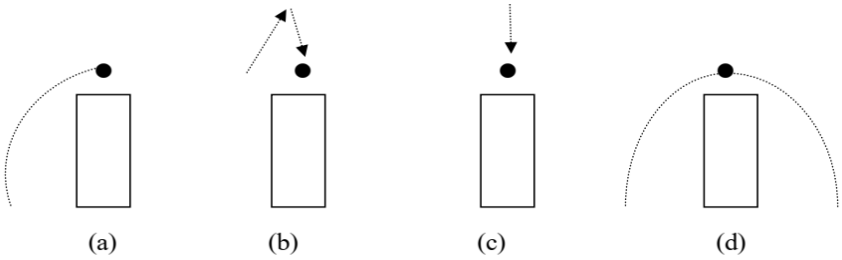



**Figure 1.1. Possible trajectories for** *The cat jumped over the wall*.

A question arises is that whether or not the lexical item *JUMP* in itself can specify an arc-like trajectory like Figure 1.1d. The answer will be impossible because if we cannot constitute the lexical item OVER for any prepositions, such as ABOVE or UP, etc., the trajectory must be not like an arc. Therefore, in order to analyze a motion complex will require a tight interaction between motion verbs and prepositions.

Last but not least, the analysis of the syntactic properties of LEsM will provide in-depth insights into the distinct models of motion in terms of spatial relation. Examine the two examples in Vietnamese below:

(1.3) a. Bọn trẻ đang **chạy** nháo nhác *trong sân trường.* (**VS02**-303)

Children are **scurrying** *in the school yards.*

b. Trời xẩm tối, cô ấy đang **rảo bước *về*** *nhà*. (**VS07**-213)

It is getting dark, she quickly **walked** home.

Example (1.3a) denotes that the motion event is taking place in the projective relation between *Children* and *the ground*. This is to say, children are moving on the ground. Example (1.3b) denotes the motion event in the directional correlation between *Cô ấy*

(she) and *nhà* (her house). That means that *Cô ấy* is moving toward her house from somewhere.

Due to these reasons, motion should be analyzed in the combination of motion verbs with prepositions through lexical expressions. It is the reason why the topic "***A cognitive study of lexical expressions denoting motion in English and Vietnamese***" was chosen as the title of this dissertation. The dissertation was conducted in the hope of making a modest contribution to language study from both theoretical and practical perspectives. More importantly, thanks to the description and comparison of LEsM between English and Vietnamese, this dissertation will have a minor implication for linguistic research, language teaching, and translation.

## 1.2. Aims of the study

The primary aim of this research is to provide an in-depth account into semantic and syntactic properties of the LEsM, then to point out major similarities and differences in LEsM between English and Vietnamese. To achieve this aim, the several objectives of the study are also posed for exploration:

- To give a clear-cut account of the semantic components conflated into motion verbs to divide LEsM into different types.
- To gain a detailed insight into LPs of motion verbs and spatial prepositions.
- To interpret the roles of spatial prepositions in denoting motion events
- To provide a thorough analysis of the argument and event structures of LEsM.
- To find out the major differences and similarities in LEsM between English and Vietnamese in terms of LPs, argument and event structures.
- To propose some fundamental implications for language teaching, translation, and linguistic research.

## 1.3. The scope of the study

- According to Talmy (2000), there are two types of motion such as *factive* and *Fictive* in which the fictive refers to the metaphorical meanings of the verbs. However, all the arguments made about the semantic properties of motion

verbs in this study only apply to the non-metaphorical meaning of the motion verbs.

- There are several theoretical frameworks related to motion such as Talmy (1985, 2000) and Langacker (1987), but this research adopts Talmy' (1985) Framework. Seeing that besides the ideas are mentioned in Langacker's framework, Talmy's framework also provides other relevant ideas to the research.
- The construction grammar adopted in this study is Goldberg's (1995) argument and event structures.
- Each motion verb has a range of meanings, but only original meanings taken from dictionaries are used for the analysis.
- To shed light on semantic and syntactic properties of LEsM, the descriptive method is mainly utilized in this research. Also, the comparative method is used to show similarities and differences as well.

## 1.4. The contribution of the study

This research may make minor contributions to language study on two aspects: theoretical and practical perspectives.

### 1.4.1. Theoretical perspectives

- Revising and grasping the previous background and frameworks to constitute the analytical frameworks for the analysis of LEsM in English and Vietnamese.
- Drawing the semantic and syntactic properties of LEsM in English and Vietnamese from the perspective of cognitive linguistics.

### 1.4.2. Practical perspectives

- Classifying LEsM in English and Vietnamese into three types including LEsMM, LEsPM and LEsPM, this classification may be useful for language learning and language research.
- Findings from comparing and contrasting LEsM between English and Vietnamese are useful to language teaching and translation.

## 1.5. Research questions

To shed light on LEsM in English and Vietnamese, on the whole, this thesis seeks to provide answers to the following general research questions:

1. *What are the semantic properties of lexical expressions denoting motion in English and Vietnamese in terms of their lexicalization patterns and event strucutres?*
2. *What is the syntactic properties of lexical expressions denoting motion in English and Vietnamese in terms of argument strucutres?*
3. *What are the major similarities and differences of lexical expressions denoting motion between English and Vietnamese in terms of semantic and syntactic properties from cognitive linguistic perspective?*

## 1.6. Organization of the dissertation

This dissertation consists of 7 chapters:

Chapter 1: *Introduction* – mentions the main reasons for choosing the topic, the aims and scope of the study, and the research questions.

Chapter 2: *Literature Review and Theoretical Background* – is a brief explanation of cognitive linguistics and extensively reviews the theoretical framework of lexicalization patterns and construction grammar. This chapter refers to the theory of motion including definitions of motion, types of motion and motion verbs. Also, this chapter revises the previous studies related to motion.

Chapter 3: *Methodology*- refers to the methodological approaches to analyze LEsM from the perspective of cognitive linguistics, and methods to collect and analyze the data. First, the methodological approaches including cognition, language and usage-based provides the researcher with the most general principles to language analysis. The specific methods will help the researcher to have deeper insights into investigating linguistic phenomena.

Chapter 4: *Lexical Expressions of Manner Motion in English and Vietnamese* – refers to the analysis of semantics and syntax of LEsMM in English and Vietnamese, and similarities and differences in LEsMM between English and Vietnamese.

Chapter 5: *Lexical Expression of Path Motion in English and Vietnamese*- refers to the analysis of semantics and syntax of LEsPM in English and Vietnamese, and silimiarities and differences in LEsPM between English and Vietnamese.

Chapter 6: *Lexical Expressions of Caused Motion in English and Vietnamese*- refers to the analysis of semantics and syntax of LEsCM in English and Vietnamese, and silimiarities and differences in LEsCM between English and Vietnamese.

Chapter 7: *Conclusion and Implications*- summarizes the main contents of the dissertation and refers to some suggestions for implication.

# Chapter 2

# LITERATURE REVIEW AND THEORETICAL BACKGROUND

## 2.1. Introduction

Initially, this chapter presents the theoretical background involving the two branches of cognitive linguistics including cognitive semantics and cognitive grammar. Next, this chapter refers to the review of several previous studies related to this topic to find out which areas of motion were investigated and which areas have not been investigated.

## 2.2. Theoretical background

Under the title of the study, the theoretical background chosen in this dissertation includes cognitive study (cognitive linguistics), motion in language and lexical expressions.

### 2.2.1. Cognitive linguistics

Cognitive linguistics is a contemporary approach to meaning, organization, language learning and change, and conceptual structures. It first emerged in the 1970s in opposition to generative syntax and truth-conditional semantics which views language as an autonomous faculty. Also, cognitive linguistics views linguistic knowledge as part of general cognition and thinking; linguistic behavior is not separated from other general cognitive abilities which allow mental processes of reasoning, memory, attention or learning, but understood as an integral part of it (Ibarretxe Antuñano, 2004). She briefly condenses cognitive linguistics in two tenets below:

*i. Language is an integral part of cognition*

Language is understood as a product of general cognitive abilities, which is based on a functional approach to language. As Saeed (1997: 300) explains, this view implies that externally, principles of language use embody more general cognitive principles; and internally, that explanation must cross boundaries between levels of analysis.

To put it differently, the difference between language and other cognitive faculties is not one of type, but one of degree. As a result, both linguistic principles must be investigated in reference to other cognitive faculties and any explanation, the different

levels of linguistic analysis (syntax, semantics, phonology) must be carried out taking into account all of these levels simultaneously.

*ii. Language is symbolic in nature*

In *Foundations of Cognitive Grammar*, Langacker (1987: 11) puts forward a general assumption about this point as follows: "language makes available to the speaker… an open-ended set of linguistic signs or expressions, each of which associates a semantic representation of some kind with a phonological representation".

Consequently, language is symbolic since it is based on the association between semantic representation and phonological representation. This association of two different poles refers to the Saussurian conception of the linguistic sign. However, it is completely different on one basic point: the arbitrariness of the sign.

Besides, upon discussing the relationship between perception and cognition, cognitive linguists explicate that the link between perception and cognition is not structured arbitrarily, but is construed on the basis of our conceptual organization. For them, language is motivated and grounded more or less directly in experience, in our bodily, physical, social, and cultural experiences because after all, "we are beings of the flesh" (Johnson, 1992: 347). The notion of "*grounding*" in cognitive linguistics is known as "*embodiment*" (Johnson, 1987; Lakoff, 1987; Lakoff and Johnson, 1980, 1999). Its basic implication is that mental and linguistic categories are not abstract, disembodied and human independent categories and they are created based on our real experiences and under the constraints imposed by our bodies. Lakoff and Johnson (1999: 103) add that embodiment is in proportionate to one of the three levels of the embodiment of concepts. This level is the phenomenological level that comprises of everything we can be aware of, especially our mental states, our bodies, our environment, and our physical and social interactions.

Following Evans & Green (2006: 50), cognitive linguistics is divided into two main branches: ***cognitive semantic*** and ***approach to cognitive grammar***, which is schematized as follows:

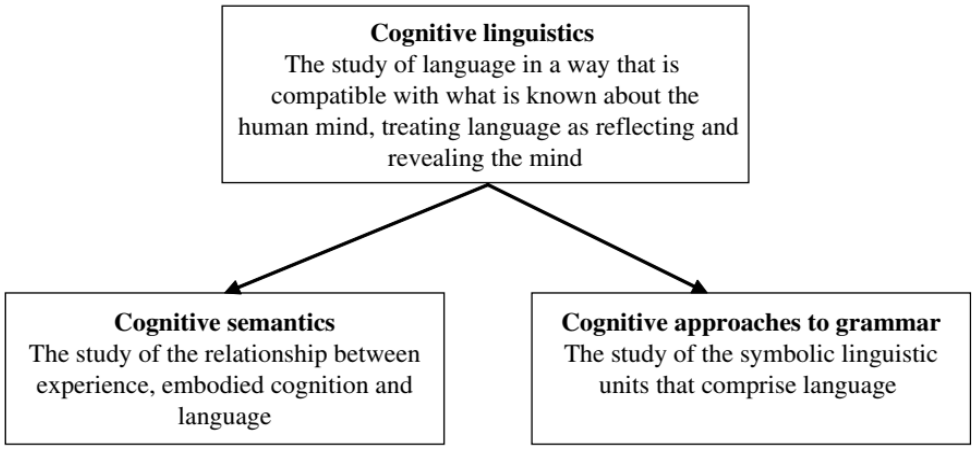



**Figure 2.1. Two branches of cognitive linguistics**

With the aims set in the previous section, the semantic and syntactic properties of LEsM in English and Vietnamese were analyzed on the basis of the two branches of cognitive linguistics for the following properties.

### *2.2.1.1. Cognitive semantics*

Cognitive semantics is primarily concerned with investigating ***conceptual structure*** and ***conceptualization*** **processes** (Evans & Green, 2006: 170). First, cognitive semantics views linguistic meaning as a manifestation of conceptual structure or the relationship between conceptual structure and the external world. Evans & Green (2006) posit that the nature of the conceptual structure is human interaction with an awareness of the external world. Therefore, a theory of conceptual structure must be built on the basis of human interaction with the physical world, which is termed as ***embodied cognition***.

Let's illustrate this point with an example below. When we are locked in a room, the room has the structural properties related to a bounded landmark which has enclosed sides, an interior, a boundary and an exterior. Due to these properties, the bounded landmark is considered as a containment: we cannot leave the room. As a result, containment is a meaningful consequence of physical relationship that humans have experienced in interaction with the external world.

Cognitive linguists call the concept of containment an ***image schema*** which presents how bodily experience gives rise to meaning concepts. For example, examine the following examples from Lakoff & Johnson (1980:32):

(2.1) a. He is **coming** *out of* the coma.

b. He e**ntered** a state of euphoria.

c. He **fell** *into* a depression.

Lakoff & Johnson argue that the examples above are the process of the metaphorical projection of the CONTAINER image schema onto the abstract conceptual domain of STATES like TROUBLE and HEALTH.

The second content of cognitive semantics is the conceptualization processes which are also called ***construal operations*** by Croft & Cruse (2004). They explain that the role of conceptualization in a single language is to provide alternative expressions for what appears to be truth-functionally equivalent situations. In addition, Lee (2001) makes a comparison between the role of traditional linguistics and cognitive linguistics, he says there is not a direct mapping of elements of the external world onto linguistic forms like traditional linguistics. Instead, he claims that a particular situation can be construed in different ways and that different ways of encoding a situation constitute different conceptualizations. Consider the following examples by contrasting between (2.2a) and (2.2b) taken from Lee (2001:2).

(2.2) a. John gave the book to Marry.

b. John gave Mary the book.

According to the traditional view, these sentences have the same meaning, but different structures. However, cognitive linguists indicate that the example (2.3a) and (2.3b) involve different ways of construing the same situation, but other cases are inappropriate or unnatural in the different situations like two examples below:

(2.3) a. John gave a new coat of paint to the fence. (Langacker, 1990:4)

b. He brought the table the wine. (Lee, 2001:2)

In conclusion, cognitive semantics, a branch of cognitive linguistics, is analyzed with respect to conceptual structure and conceptualizations, which are the key approaches to delve into the semantic properties of LEsM. Moreover, cognitive semantic theories are typically built upon the idea that semantics is amenable to the same mental processes as encyclopaedic knowledge.

### *2.2.1.2. Cognitive grammar*

Radden & Dirven (2007) say that cognitive grammar may be interpreted based on the view that grammar is the product of human cognition. Therefore, it is crucial to understand the principles of cognition that determine grammar. Evans & Green (2006) provide two approaches to identify the principles of cognition including **Talmy's conceptual structuring system model** and **Langacker's theory of cognitive grammar.**

*i. Talmy's conceptual structuring system model*

Talmy's conceptual structuring system model is concerned with examining the nature and the range of schematic or structural meanings encoded by grammatical subsystem because he argues that the schematic structure encoded by closed-class elements which can be divided into a range of different systems (Evans & Green, 2006: 514). Evans & Green illustrate this model in the diagram below:

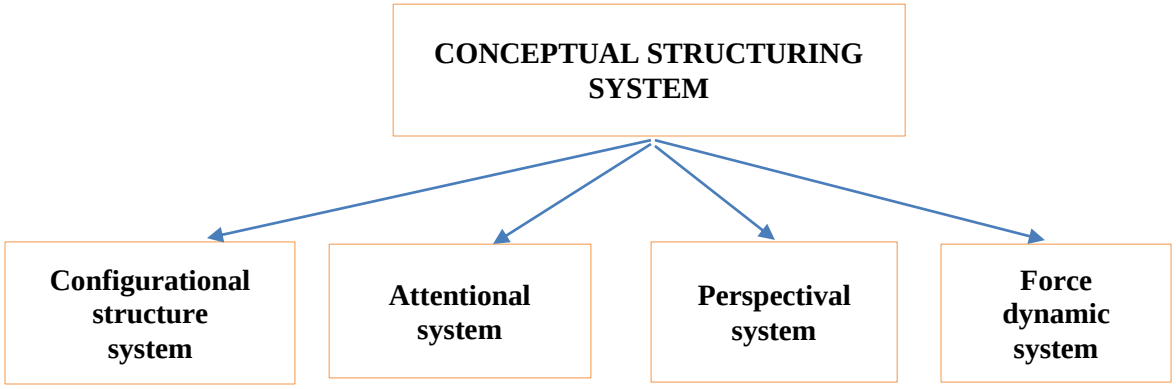



**Figure 2.2. Four schematic systems within conceptual structuring system**

First, the configurational structure system imposes structure upon the contents of the domains of SPACE and TIME. Then, closed-class elements perform an important role in encoding this configurational structure. Talmy proposes six schematic categories such as PLEXITY, DIVIDEDNESS, BOUNDEDNESS, DEGREE OF EXTENSION, AXIALITY and PATTERN OF DISTRIBUTION. For example, consider two sentences concerned with the boundedness of the configurational structure in terms of the domain of TIME, which is analyzed on the distinction between perfect and imperfect grammatical aspects.

(2.4) a. George **has left** the party.

b. George **is leaving** the party. (**EN02**-451)

The difference in two sentences is between perfect and imperfect in which the sentence (2.4a) is perfect grammatically marked by the auxiliary *have* followed by the past participle *left* and the sentence (2.4b) is imperfect grammatically marked the progressive auxiliary *be* followed by the progressive participle *leaving*. Imperfect aspect decodes an event that is ongoing and can thus be thought of as unboundedness or **atelicity**, but perfect aspect denotes a completed event thought of as boundedness or **telicity**.

Second, the attentional system is concerned with the distribution of attention over matter and action, which consists of strength and pattern factors (Evans & Green, 2006:526). The example below is associated with the focus of the attention pattern between the Figure and the Ground taken from Evans & Green (2005:526).

(2.5) a. The car **crashed into** the tree.

b. The tree **was crashed into** by the car. (**ES09**-118)

The difference in the two sentences is the distribution of attention between the Figure and Ground. In example (2.5a), attention is put on the Figure which is the agent causing action, but in the example (2.5b) attention is put on the Ground which is the agent receiving action.

Next, the perspectival system is concerned with a viewpoint from which participants and senses are viewed. In other words, this system does with the conceptual perspective point from which humans view an entity or a scene and involves (Evans & Green, 20006:28). They posit that the perspectival system involves the four schematic categories such as location, distance, mode and direction, which can be encoded by close-elements. Take the schematic category of perspectival direction as an example, this category is associated with attention and concerns the direction in which an event is viewed relative to a give perspective point. The perspectival direction can be subdivided into two directions, which are prospective and retrospective.

(2.6) a. George finished the champagne before he went home. *Prospective*

b. Before he went home, George finished the champagne. *Retrospective*

(Evans & Green, 2006: 530)

Example (2.6a) is a prospective direction because the event-sequence is always viewed from the perspective of the first event (event A in Figure 2.3). In this event- sequence, the perspective point is located at the temporally earlier event, from which the speaker looks forward to the later event. Meanwhile, example (2.6b) is called the retrospective direction because the event-sequence is viewed from the perspective of the second event (event B in Figure 2.4). In this event-sequence, the perspective point is located at the temporally later event (going home) and the speaker looks toward the earlier event.

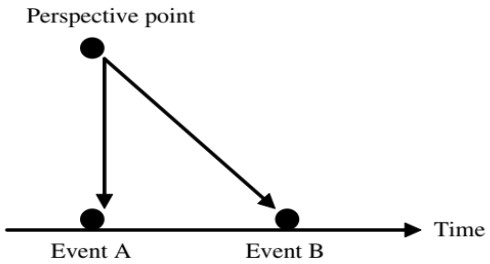



**Figure 2.3. Prospective direction** *(adapted from Talmy, 2000:74)*

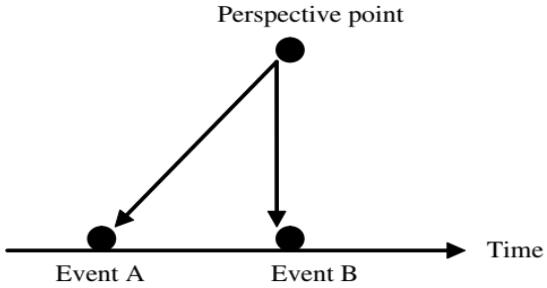



**Figure 2.4. Retrospective direction** *(adapted from Talmy, 2000:75)*

The final schematic system is the Force-Dynamics system is associated with the human experience of how physical entities interact with respect to force, including the exertion, and resistance of force, the blockage of force and the removal of such blockage (Evans & Green, 2006:531). Talmy (2000b) proposes two entities that exert force. The ***agonist*** is the entity that receives focal attention and the ***antagonist*** is the entity that opposes the agonist

In short, the conceptual structuring system has been analyzed in terms of the four schematic systems proposed by Talmy are reflected in the grammatical system of language. This will be a crucial groundwork to analyze the syntactic

properties of LEsM. Talmy (2000b:415) summarized the conceptual structuring system in Figure 2.5 as follows:

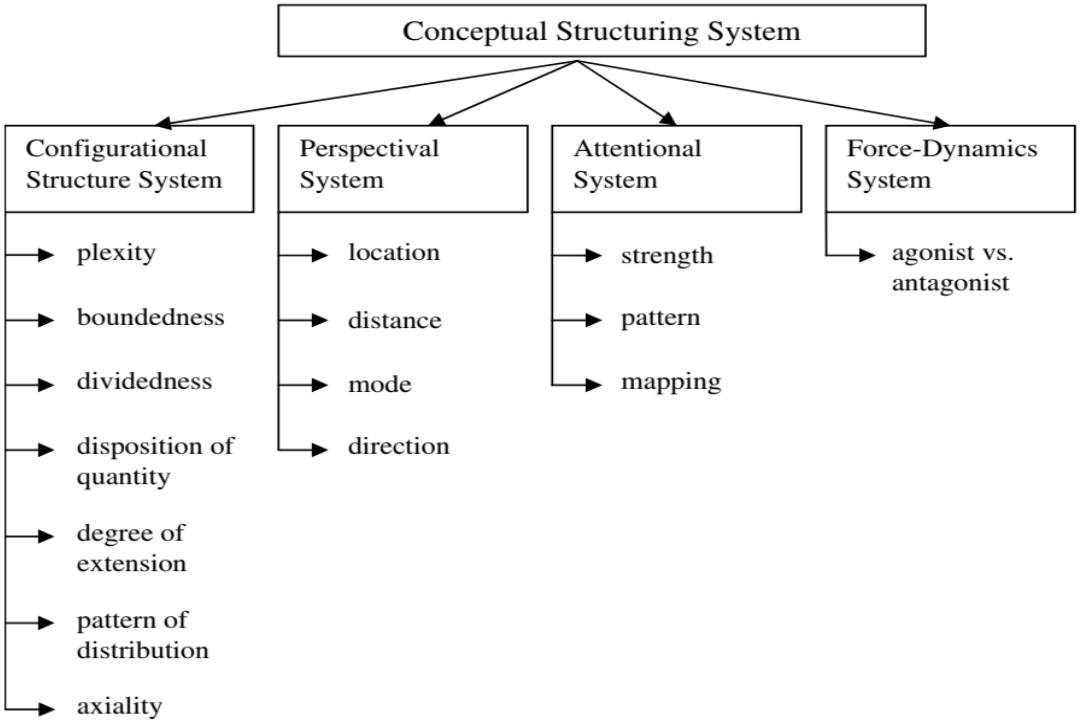



**Figure 2.5. An overview of the conceptual structuring system**

*ii. Langacker's theory of cognitive grammar*

Langacker embarks on his analysis of the theory of cognitive grammar by examining two general assumptions, which are the symbolic and usage-based theses. First, the symbolic thesis holds that the fundamental unit of grammar is the form-meaning pairing or ***symbolic unit***.

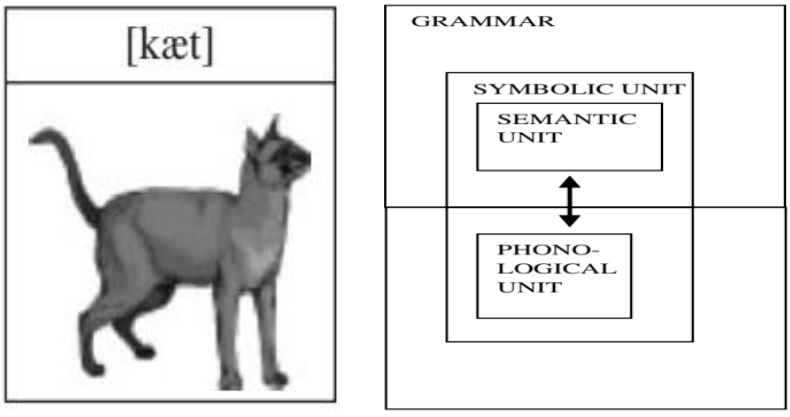



**Figure 2.6. The symbolic unit (adapted from Langacker, 1987:77)**

In Langacker's term, the symbolic unit has two poles which are a semantic pole (its meaning) and a phonological pole (its sound). For example, the visual image of the cat in the lower half of the figure represents the concept CAT that is the semantic pole of a symbolic unit. Also, the speaker's knowledge of the string of speech sounds that correspond to the concept CAT is called the phonological pole of a symbolic unit. The symbolic unit is represented in Figure 2.6.

Second, Radden & Dirven (2007) posit that cognitive grammar should be explored on three linguistic units such as ***lexical, temporal*** and ***constructional units***. However, this dissertation is not involved in the so-called THING (lexical unit), so it will not be analyzed in this section. The first domain of cognitive grammar is a temporal unit which provides information about the aspectual type of situation, the time when the situation took place, and the reality when status situation means to have.

Following Radden & Dirven (2007), the temporal unit in cognitive grammar refers to three grammatical categories such as ***aspect, tense*** and ***modality***. Nevertheless, only the grammatical category of aspect is illuminated here because it specifies the temporal structure of a situation and is part of the conceived situation itself. More importantly, aspect is the grammatical form used by a speaker in taking a particular view of a situation and viewing a situation with a maximal or a restricted viewing frame. Event is one of the typical situations mentioned here to shed light on this point. An event is a dynamic situation which involves changes in time that are subdivided into two categories: ***bounded*** and ***unbounded*** events.

*a. Bounded events*

Bounded events are viewed externally and in their entity and described as ***perfective***, which may consist of several successive sub-events. Moreover, bounded events can be distinguished through two criteria: ***duration*** and ***telicity***. To begin with, the duration is associated with the length of time for an event to last which can be distinguished from punctual events without the length of time. Telicity involves the inherently conclusive and definitive endpoint of an event which clarifies the distinction between a telic event

with an endpoint and atelic event without a conclusive endpoint. The conclusive endpoint of an event is determined on the basis of the conceptual structure of the event.

The two criteria of duration and telicity help to analyze four types of bounded events including ***accomplishments***, ***activities***, ***achievements*** and **acts**, which are presented in their time schema in Figure (Radden & Dirven, 2007: 180).

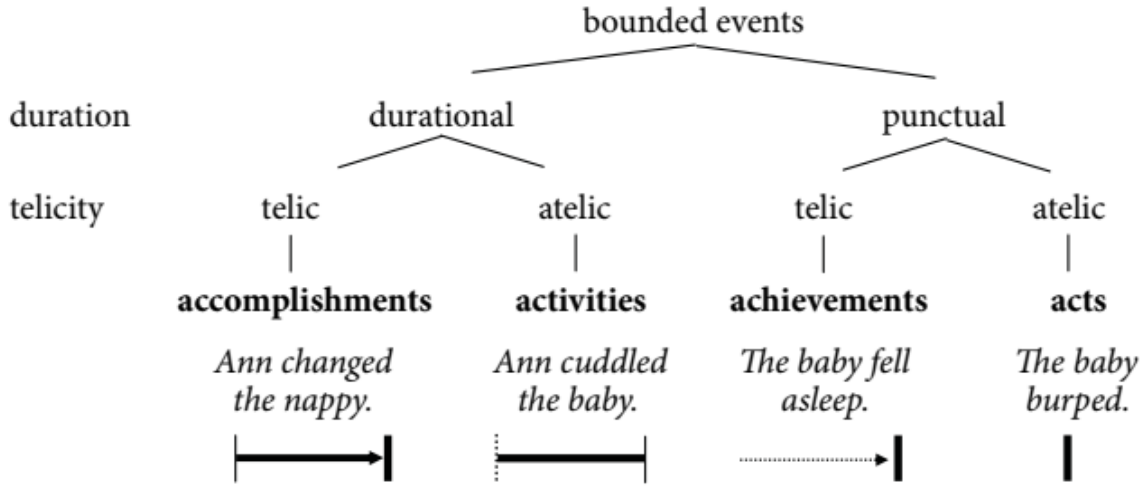



**Figure 2.7. Types of bounded events**

Radden & Dirven provide a detailed description of the types of bounded events as follows:

| | |
|---|---|
| **Accomplishments** | are bounded telic events with a certain duration for their completion. The event of accomplishments requires an energy source from humans' actions that propels the event to its endpoint. |
| **Activities** | are bounded telic and atelic events with a conclusive endpoint, which typically bounded with respect to the motion they stop. |
| **Achievements** | are bounded events in which the focus is on the punctual moment of the termination of event a preceding culminating. |
| **Acts** | are bounded atelic events with the punctual character of acts. |

*b. Unbounded events*

Unbounded events are described as ***imperfective*** and provide a close-up view on the progression of the event. Furthermore, in unbounded events with restricted viewing frame, only part of the event can be seen, and the beginning and end of the event can be implicitly understood. It goes without saying that the overall meaning of unbounded

events fit with its time schema, but the particular meaning of unbounded events stems from imposing a restricted viewing frame on the corresponding bounded event. The four types of unbounded events are diagrammed in Figure. These four unbounded events are described as activities equal to their respective bounded situation type. Radden & Dirven (2007: 181) illustrate these events in Figure below:

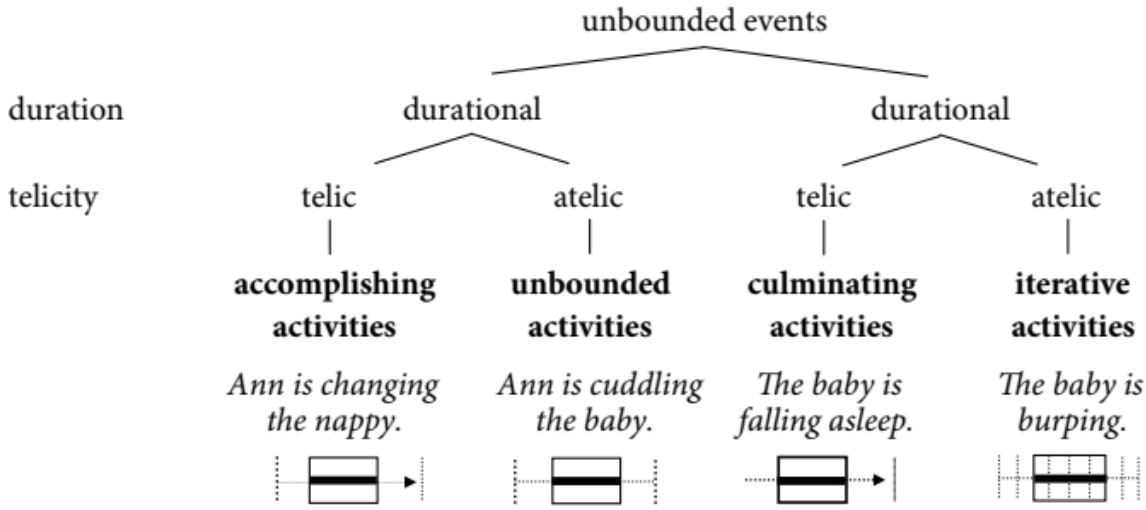



**Figure 2.8. Types of unbounded events**

**Accomplishing activities** are involved in the durational phase of an accomplishment.

**Unbounded activities** refer to the focus on the progression of the event.

**Culminating activities** are the unbounded counterpart of achievement which cannot be extended in time. Iterative activities are a quick succession of punctual acts to constitute a single durational event.

Evans & Green (2006:637) summarize the category of as aspect in cognitive grammar in Figure as follows:

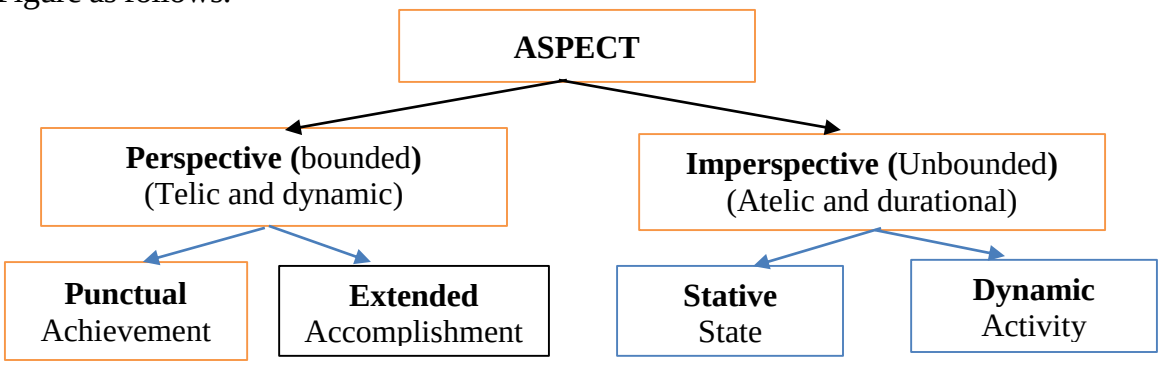



**Figure 2.9. Perfective and imperfective situation types**

With respect to the constructional unit, cognitive grammar is analyzed on the basis of clause-level grammatical constructions or ***composite structure*** consisting of some ***component structures*** referring to the number of arguments (**Arg** for short) which a verb requires to complete its meaning. For example, a verb like *die* only involves an argument as in *He died* whereas a verb like *love* involves two arguments as in *Lily loves John*. The combination of verbs with their arguments is called ***argument structures***.

For example, the sentence "*The bottle floats into the case"* is a composite structure in which the verb *flow* requires two arguments including the AGENT (the bottle) and PLACE (*into the case*). These ideas can be schematized in Figure 2.10 below:

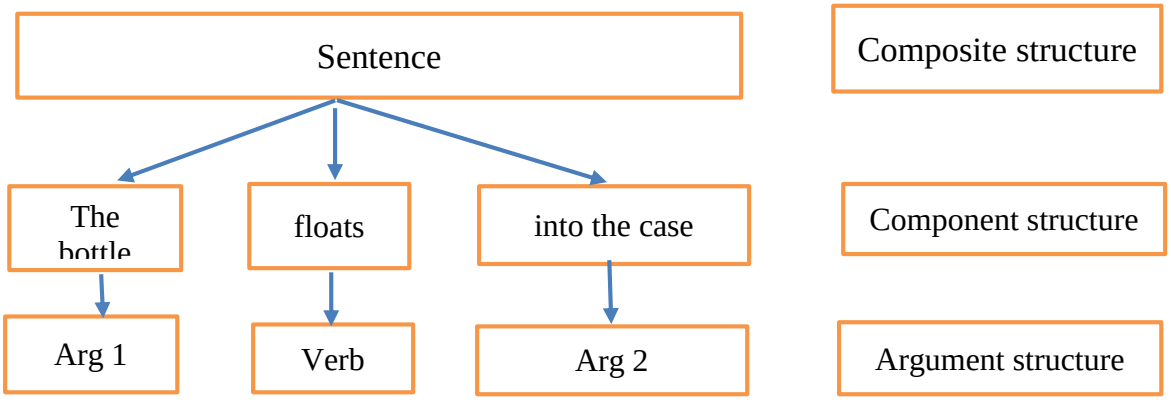



**Figure 2.10. Composite and component structure**

It goes without saying that based on the theory of image schemas referring the human interaction with the external world (embodiment), constructional units can be divided into different schemas such as ***location***, ***motion***, and ***caused-motion schemas,*** etc. First, the location schema is typically expressed by the copular verb *be* in order to indicate a theme's location. Additionally, it can be expressed by some posture verbs like *stand, sit* or *lie* to indicate the theme's bodily position. Next, motion schema refers to a theme's change along a trajectory from a place at one time to another place at a later time. From the image schema of the thing's motion, motion schema can be subdivided into three types of motion, which are object motion, self- motion and caused motion. The examples taken from Radden & Dirven (2007:278) are used o illustrate these ideas.

(2.7) a. The bottle *rolled* down the slope. [*Object motion*]

b. We happily *rolled* down the slope. [*Self- motion*]

c. They *pushed* the car down the slope. [*Caused motion*]

Finally, the caused-motion schema is associated with events in which an energetic force, typically a human agent, brings out the motion of a thing to or from a location (ibid: 292) as in (2.8).

(2.8) The storm **blew** the roof **off** the police station (**ES12**-106)

In short, from the analysis of cognitive grammar in terms of the categories of aspect and construction will provide in-depth insight into the syntactic properties of LEsM in English and Vietnamese.

## 2.2.2. Motion in language

This section presents the typical characteristics of motion in language. First, the theory of motion events is elucidated by Talmy (1985, 2000) in which he puts forward a definition of motion events and the semantic components of motion events. Second, lexical expressions of motion are characteristically described on the basis of the definitions of expression, lexical expressions and the properties of motion as well.

### *2.2.2.1. Motion events*

In order to have a valid interpretation of motion events, it is crucial to understand the core complements of events for the first place. Following Talmy, an *event* is a portion of reality that has been delimited or bounded by the human mind. He says that the human mind in perception or conception can extend a boundary around a portion of what would otherwise be a continuum, whether of space, time and ascribe to the excerpted contents within the boundary the property of being a single unit entity' (Talmy, 2000b: 215). Furthermore, an event can be conceptualized as having a particular type of internal structure and degree of complexity. Accordingly, there are complex events to make up of the main event or *framing event* and a subordinate event or *co-event*, together with the relationship that the co-event bears to the framing event. Talmy takes consideration into a situation containing motion and the continuation of a stationary location alike as a *motion event.* He explains that the basic motion event consists of one object (the **Figure**) moving or located with respect to another object (the **Ground**). Besides **Figure** and **Ground**, It is analyzed to consist of more components which are **Path** and **Motion**. The component of

**Path** is the path followed or site occupied by the Figure object in reference to the Ground object. The component of **Motion** is associated with the presence per se of motion or location in the event. Besides these internal components, a motion event can refer to an external **Co-event** bearing the relation of Manner or Cause to it (Talmy, 2000b: 25). Let us illustrate these ideas in the example below.

(2.9) Harry **walked** quietly down the stairs. (**EN01**-501)

*Harry* is the Figure, *the stairs* is the Ground and *down* is the Path. The verb, *to walk* expresses simultaneously the fact of Motion (framing event) and the Manner of motion (Co-event). Talmy provides more detailed information about these components, he explains: "The Figure is a moving or conceptually moving entity whose path or site is at issue. The Ground is a reference frame, or a reference object stationary within a reference frame, with respect to which the Figure's path or site is characterized" (Talmy, 2000b: 26). From those semantic components along with some other external components, Aske (1989:1) illustrates these semantic components in motion events in the following diagram.

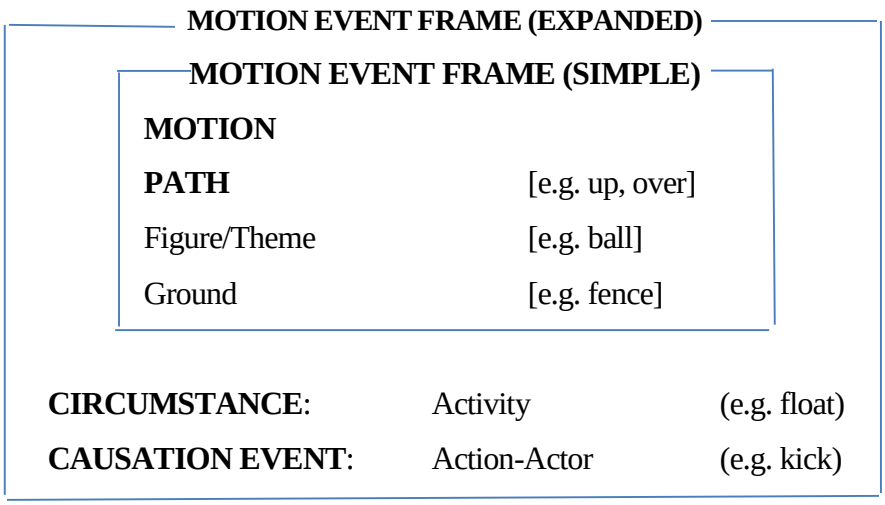



**Figure 2.11. A frame of motion events**

Following the flow of these ideas, it is essential to understand the two types of motion found in motion events: ***translational motion*** and ***self-contained motion***.

Talmy's (2000b: 35) posits that translational motion refers to an object's basic location shifts from one point to another in space. Self-contained Motion is associated

with an object which keeps its same, or "average," location. Self-contained Motion generally comprises *oscillation, rotation, dilation, wiggle, wander,* or *rest*'. Let us consider examples (2.10a), (2.10b) and (2.10c) to illustrate these notions.

(2.10) a. Ray **entered** the room = translational motion

b. The butterfly *hovered* over the flower = self-contained motion

c. Claire *slid* through the hall in her socks = self-contained + translational motion

Last but not least, from the theory of image schema which refers to language as a product of human interaction with the external world, Radden & Dirven (2007:278) consider a motion event as an image schema of that interaction. Thus, they wrap the content of motion events in a definition as follows: "a motion event is directional and tends to invoke the SOURCE-PATH-GOAL image schema which involves things or people moving from a source along a path to a goal". In this definition, Radden & Dirven clarify the essence of motion events with direction and change of position. Moreover, they put forward the typology of motion events.

In short, this section refers to the two definitions of motion events: a highly detailed account of motion events by Talmy and a superficial definition of motion events by Radden & Dirven. However, both definitions of motion events are adapted to shed light on LEsM in two languages.

### *2.2.2.2. Talmy's typology of motion expressions*

Upon examining the views available to languages for encoding directed motion events, Talmy's (1975, 2000) explains that languages fall into two types with respect to how they encode directed motion events. At this point, he investigates how the two semantic components such as Path and Manner of motion encoded and combined in a single clause in several languages. In addition, Talmy (2000) terms his idea as a two-way typology depending on where a language characteristically encodes the Path. To be more accurately, this theory is based on where the core schema is encoded, a semantic component including Path, Result, Aspect, etc that may shape the temporal structure of the event. This division is ***Satellite (S)-framed*** and ***Verb (V)-framed*** languages.

In the S-framed language, According to Talmy (1985, 2000), the Manner is mainly encoded in the manner verbs while the Path termed as a satellite to the verb is denoted by the surface forms of language including particles and verb affixes. Conversely, in the V-framed languages, the Path is encoded in the verb while the Manner is encoded via a separate adjunct clause or a satellite.

The advent of Talmy's typology of verb-and satellite-framed languages has given rise to a wide range of studies on motion event descriptions in a great number of languages in order to determine what typology their langauges belong to (French, Korean, Spanish, Turkey, etc). However, according to Slobin (2004) and Zlatev & Yangklang (2004) and some other authors, there are several languages which do not fit into Talmy's two-way typology because these languages encode both Manner and Path in the same linguistic forms like in the Vietnamese language. For example, the verb "vào" can denote both Motion as in "vào nhà" and Path as in "Chạy vào".

In the attempt to account for such linguistic diversity, Slobin (2004, 2009) proposed one more typology of motion- event construction, which is termed as a tripartite typology of motion events in a so-called ***equipollently-framed*** language. In the equipollently-framed language, the Path is normally expressed in the equivalent grammatical forms such as the path verbs, prepositions, and other linguistic units. This typology seems to fit into the Vietnamese language, thus when analyzing LEsM in Vietnamese, this typology will be adopted to elucidate some cases in which the Vietnamese language does not fit into Talmy's binary typology. Slobin (2006a: 64) suggests three subtypes of equipollently–framed languages.

*a. Serial- verb languages*

Serial- verb languages are those languages in which the serial verb construction is a syntactic phenomenon in which two or more verbs or verb phrases are strung together in a single clause.

*b. Bipartite verb languages*

Bipartite verb languages are those languages in which the verb consists of two morphemes of equal status, one expressing Manner and the other expressing Path.

*c. Generic verb languages*

Generic verb languages are those languages in which the verb is combined with satellite-like elements or coverbs, which encode both Path and Manner in the same fashion.

This typology of motion expression can accommodate languages with serial-verb constructions. The verbs in motion expressions can encode Manner termed as the manner verbs, and these expressions denote this motion type called an ***expression of manner motion***. In contrast, the verbs in motion expressions encode Path termed as directed verbs, and this expression is called an ***expression of directed motion***.

*Satellite-framed languages*

Manner is encoded in the main verbs; Path must be a satellite.

(2.11) John **limped into** the house. (**ES10**-541)

*Verb-framed languages*

Path is encoded as a main verb; Manner must be a subordinate adjunct.

(2.12) His wife **entered** the house. (**ES12**-268)

*Equipollently-framed languages:*

Manner and Path are both encoded as main verbs.

(2.13) Bọn trẻ **chạy ra** ngoài sân. (**VS03**-264)

These ideas can be wrapped in these examples by Beavers et al (2010:331-337) and schematized in Figure 2.12.


**Figure 2.12. S-framed and V-framed languages**

In short, it is Talmy's typology that is regarded as a useful tool to distinguish languages widewides. According to Talmy, English belongs to the typology of S-framed languages because English motion verbs denote the Manner. Others belong to V-framed languages because the Manner is expressed by other linguistic forms. In a special case, Vietnamese does not only fit into Talmy's binary typology (V-and S-framed languages), but it assorts with Slobin's tripartite typology (equipollently-framed language) as well.

### 2.2.3. Lexical expressions of motion

So far, there have not been any definitions of about lexical expressions of motion. Thus, in order to understand lexical expressions of motion, it is indispensable to understand what an expression is. According to Lobner (2002: 9), *an expression is just a general term for words, phrases and sentences, and expression meaning covers, in particular, word meaning and sentence meaning*. This definition provides us with linguistic features of expression including semantics and syntax. To begin with, the syntactic feature shows that expression has three levels such as word, phrase and sentence as in the examples below. Then, the meaning of an expression can be the meaning of word, phrase and sentence.

(2.14) a. walk *Word*

b. walk to school *Phrase*

c. We walk to school. *Sentence* (**ES10**-76)

Turning to lexical expressions, Payne (2011: 10) says that *lexical expression is any formal expression of a conceptual category which simply must be memorized, rather than constructed according to a pattern*. Payne explains the notion of *conceptual category* in as specific elements of meaning that speakers of a language pay special attention to in terms of grammar. For example, some conceptual categories of the verb "*kick*" may be understood as a *dynamic verb, motion verb, transitive verb* and *causative verbs*, etc.

In addition, Payne (2011) argues that in order to be a conceptual category, a particular element must determine some patterns of grammatical expressions, such as lexical expressions, morphological expressions and syntactical expressions. Therefore, a conceptual category can be a key element to understand lexical expressions. For example, in order to take in the lexical expression of "*go to school*", it requires us to interpret the conceptual categories in this expression, such as the conceptual category of the verb "*go*" means the movement from somewhere towards school, and the preposition "*to*" means direction towards school and on the way to school, etc.

More particularly, Payne supports another way to understand the conceptual category is to rely on differences in sets of roots. That is, we can identify differences in

the conceptual categories of some verbs by analyzing their roots. For example, the identification of conceptual categories of "*go*" and "*come*" is based on the different roots of "*go*" and "*come*". The verb "*go*" means the movement from the speaker to somewhere, and "*come*" from somewhere to the speaker.

As a result, stemming from the definitions of expressions and lexical expressions, lexical expressions of motion can be understood under two properties as follows: (i) a lexical expression of motion can be a word, phrases, or a sentence; (ii) a lexical expression of motion must denote a conceptual category of motion events lexicalized in the predicate of motion. Due to the scope of this dissertation, a lexical expression of motion only can be investigated on the level of a sentence which makes sure of containing a motion verb.

According to Dimkovic (2013: 185), motion verbs are understood to be verbs that express a kind of movement. Motion verbs require spatiotemporal components which mean that objects change their position or orientation over time. Huber (2017:36) provides a more detailed classification of motion verbs as Figure 2.13.

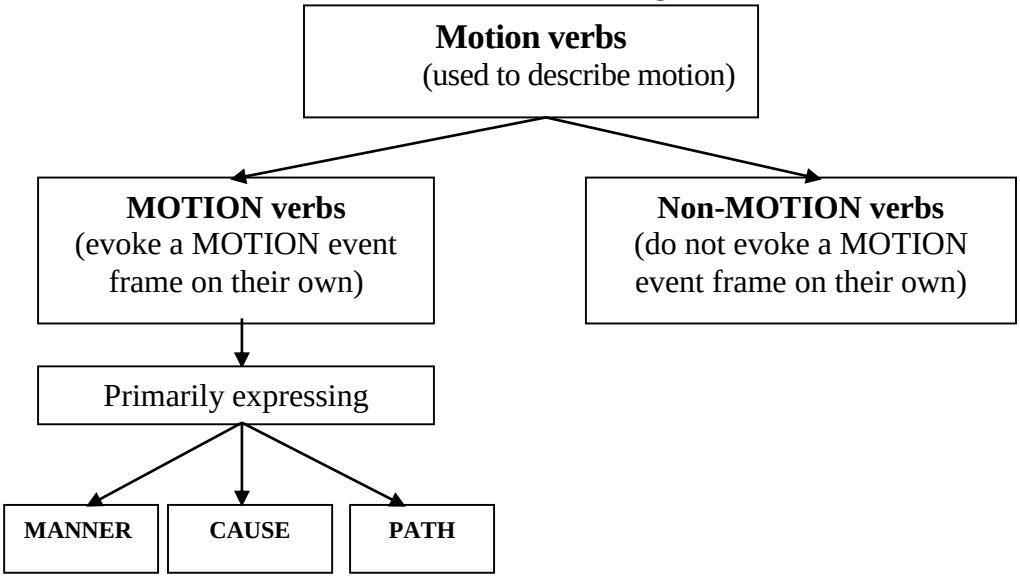



**Figure 2.13. Idealized types of motion verbs**

More particularly, Levin (1993) classifies motion verbs according to their syntactic behavior, which is taken to be a reflection of their underlying semantic properties as follows:

**Table 2.1. Levin classes of verbs involving motion**

| Path verbs | Manner verbs | Cause verbs |
|---|---|---|
| Arrive | Float | Press |
| Enter | Roll | Pull |
| Escape | Slide | Push |
| Exist | Rotate | Carry |

In short, thanks to Levin's and Huber's classification of motion verbs, lexical expressions of motion are classified according to the semantic components that motion verbs denote can be subdivided into three types as follows: (i) *Lexical expressions of manner motion* (LEsMM); (ii) *Lexical expressions of path motion* (LEsPM); and (iii) *Lexical expression of caused motion* (LEsCM)

### *2.2.3.1. Lexical expressions of manner motion*

LEsM are characteristically described on the basis of the properties of manner verbs [M]Vs, so it is essential to make sense of the [M]Vs, Drăgan (2011: 79), the ([M]Vs) are verbs whose meanings express the particular manner or means of motion of an entity which usually, though not always, undergoes displacement (e.g., *amble, bounce, crawl, creep, dash, float, glide,* etc). Drăgan elucidates [M]Vs with two typical features: (i) [M]Vs belong to the group of S-framed languages, and (ii) [M]Vs are an indispensable experiential component of a motion event because every change of location from one place to another must have been carried out in a certain manner.

With respect to classification, Snell-Hornby (1983:127) proposes four types as follows: Human Behavior, Movement and Position, Sounds and Facial Expression and Light. Movement and Position continue to be categorized into three subcategories: (i) Waking and Running (e.g., *ramble, totter,* and *hop*); (ii) Movement in air and water (e.g., *race, drip*); and (iii) Static and Negative.

According to Dixon (1991), the common roles to all motion verbs are *moving* (e.g. *swim, ran*), which are grouped into two subclasses: (i) RUN referring to a mode of motion (e.g. *walk, crawl, slide, roll, turn),* and (ii) FOLLOW referring the moving role of the subject and the locus of object (e.g., *follow, track, lead).*

Following Levin (1993), [M]Vs have meanings that consist of a concept of motion or means of motion. He proposes seven subtypes of [M]Vs, which are Roll verbs (e.g., *bounce, drift, drop),* Run verbs (e.g., *backpack, bolt, bounce, bowl, canter*), Waltz Verbs (e.g., *boogie, bop, cancan*), Chase Verbs (e.g., *chase, follow and trail*), Accompany Verbs (e.g., *accompany, conduct, escort and shepherd*), Verbs of Motion Using a Vehicle (e.g., *balloon, bicycle, bike, boat),* and Verbs That Are Not Vehicle Names (e.g., *cruise, drive, fly, oar, paddle and tack).*

Based on these properties of [M]Vs, LEsMM can be analyzed on the properties of the predicate of manner motion that include [M]Vs and circumstances. A LEMM can be schematized as follows:

<table>
<tr><th colspan="4">A lexical expression of manner motion</th></tr>
<tr><td rowspan="3">Figure</td><td colspan="2">The predicate of manner motion</td><td rowspan="3">Ground</td></tr>
<tr><td colspan="2">Manner verb</td><td>Sattelite</td></tr>
<tr><td>Motion</td><td>Manner</td><td>Path</td></tr>
<tr><td>I</td><td colspan="2">Run</td><td>from</td><td>the room</td></tr>
</table>

**Figure 2.14. Schema of LEsMM**

### *2.2.3.2. Lexical expressions of path motion*

The findings of the studies such as Hickmann (2008), Slobin (2004), 2006, 2008), Ozcaliskan (2000), Mani & Pustejovesky (2012) explain that the path verbs ([P]Vs) are typical V-framed languages and require a syntactic pattern in which the manner of motion can be optimally be expressed by additionally sentential component. When examining the spatial relation of semantic components, Mani & Pustejopsky (2012: 39) posits that [P]Vs are verbs that presuppose a specific path for the moving object (the Figure), along with a possible distinguished point or region on this path (the Ground), which is moving toward or away from. At this point, Mani & Pustejopsky identified four path predicates which the [P]Vs encode.

a. Topological path expressions: *arrive, leave, exit, land, take off.*

b. Orientation path expressions: *ascend, descend.*

c. Topometric path expressions: *approach, near, distance oneself.*

d. Topometric orientation expressions: *hover.*

As stated in the statement of V-framed language, Talmy (1985) depicts that information about a path of movement is expressed in a verb (e.g. *exit, enter, pass*). Therefore, Talmy (2000b:53-56), he identified the three main components of Path denoted in the [P]Vs as follows: (i) the *Vector*; (ii) the *Conformation*; (iii) and the *Deictic*. First, vector is associated with the direction of motion of the Figure with respect to the Ground, which can be a source, a milestone or a goal; therefore, vector can denote motion from source (e.g., *move from*), past or along a milestone (e.g., *move along*, via), and to or towards a goal (e.g., *move to*, *towards*). Second, conformation involves the geometry of Grounds, which can be conceptualized as containers (e.g., *move into, out of*), surface (e.g., *on*), points (e.g., *past*), etc. Finally, Deictic contains pragmatic meanings including toward the speaker and in the direction other than toward the speaker. These properties will help to uncover the semantic properties of Paths in terms of directions.

In short, based on the properties of [P]Vs, LEsPM are lexical expressions which have a conceptual category of [P]Vs or the predicate of path motion. LEsPM can be schematized as in Figure.

<table>
<tr><th colspan="4">A lexical expression of path motion</th></tr>
<tr><td rowspan="3">Figure</td><td colspan="3">The predicate of path motion</td><td rowspan="3">Ground</td></tr>
<tr><td>Adjunct</td><td colspan="2">Path verb</td></tr>
<tr><td>Manner</td><td>Motion</td><td>Path</td></tr>
<tr><td>He</td><td>abruptly</td><td colspan="2">entered</td><td>the room</td></tr>
</table>

**Figure 2.15. Schema of LEsPM**

### *2.2.3.3. Lexical expression of caused motion*

Radden & Dirven (2007:32) provides quite an elaborate definition of LEsCM as follows: "The lexical expressions of caused motion are characterized by a subject denoting a cause, a predicate denoting motion, a direct object denoting the moving theme, and a complement denoting the goal or source". Like the two previous expressions, LEsCM can be understood on the basis of the properties of the cause verbs ([C]Vs). Thus, it is vital to understand what [C]Vs are. Goldberg (1995:32) defines the [C]Vs as follows: "*The [C]Vs typically imply that the agent argument acts to cause a transfer of an object*

*to move*". Goldberg mainly concentrates on the analysis of the component of ***cause***s which acts on an object and causes it to move.

On the basis of lexical semantic properties, the [C]Vs are grouped into two types of causes, which are *external* and *internal* [C]Vs (Levin and Rappaport Hovav, 1995; Coopmans, et al., 2000; Rothmayr, 2009 and Aitchison2012). According to Levin and Rappaport Hovav (1995:53), the external [C]Vs express externally cause eventualities by their nature and are concerned with the existence of an external cause with immediate control over bringing about the eventuality such as an agent, a natural force, or an instrument (e.g., *blow, bring, hit, crash, throw, cram*, etc ). Next, in the case of the internal [C]Vs (e.g. *blossom*, *decay*, *invite*, *allow*, *permit, request*, etc), the eventualities described by the internal [C]Vs which bring about as a result of internal physical characteristics of their sole argument.

Talmy (1976) calls this process of causal transmission *Force-dynamic* relations. According to him, the fundamental semantic property that determines participant role ranking for argument realization is the causal structure of events, more specifically, the transmission of force relationships between participants. In terms of event structure, causation is determined with respect to one event causing another event. Based on this relation, Talmy (1972, 1976) puts forward for the most detailed semantic analysis of types of causation. He distinguished four types of causation as follows:

a. *Physical causation*: a physical object acts on another physical object.
b. *Volition causation*: a volitional entity intentionally acts on a physical object
c. *Affective causation*: a physical object acts on an entity with mental capacity, affecting, its mental state.
d. *Inductive causation*: a volitional entity intentionally acts on an entity with mental capacity, affecting its mental state.

In brief, LEsCM are lexical expressions which include all properties of the [C]Vs such Manner (e.g., *push, draw*, etc) and causes (e.g., *hit, erect*, etc) . Also, the Path is encoded in the grammatical such as prepositions (e.g., *into, out of*, etc) and paricles (*up, away, out, down*, etc). LEsCM can be characteristically illustrated in Figure 2.16.

| A lexical expression of caused motion | | | | | | |
|---|---|---|---|---|---|---|
| Agent | The predicate of caused motion | | | | | Ground |
| | Cause verb | | | Figure | Satellite | |
| | Cause | Motion | Manner | | Path | |
| *He* | *Pushed* | | | *his bag* | *into* | *the table* |

**Figure 2.16. Schema of LEsCM**

## 2.3. Review of the previous studies on motion in language

It is Talmy's two-way typology which has engendered a great number of cross-linguistic works relating to motion. Thus, the review of the previous studies on motion in language plays an important role in conducting this research with aims of (i) finding out what information has already existed in the field of current research, (ii) providing a context for our own research, (iii) identifying main ideas, conclusions, and theories and establishing similarities and differences, (iv) identifying the main methodologies and research techniques; and (v) identifying gaps in literature which need further research. As a result, the previously reviewed studies are mostly concerned with motion verbs, typology of motion, lexical expression of motion, and spatial prepositions in motion events.

### 2.3.1. Studies on the typology of motion verbs

These studies are characteristically described on the basis of description and comparison between English motion verbs and motion verbs in other languages. Thus, these studies started with exploration into the roles of verbs in decoding motion to constitute common patterns. The destination of these studies is to identify typical conflations of the semantic components into each type of motion verbs in each language.

First of all, the study related to this field is "*Path predicates in English and Spanish*" by Jon Aske (1989). His paper was conducted on Talmy's work by seeking an answer to the question of why a language accepts or fails to accept motion lexicalization patterns other than its predominant one. In particular, he contrasted the lexicalization patterns of motion in Spanish with the lexicalization patterns of motion in English. The main method used in his research was a translation. Consider the examples of English-Spanish translation (Aske, 1989:1).

| **English expressions** | **Spanish expressions** |
|---|---|
| Run out | Salir corriendo |
| Rub in | Meter frotando |
| Drive away | Irse en coche |
| Pull off | Quitar de un tirón |

Aske concluded that the parts of English complex predicates consisting of a verb plus an additional word or phrase such as "*out*" and "*in*" (Talmy calls path satellites) cannot be translated into Spanish because Spanish does not have manner-plus motion verbs. In terms of "*away*" and "*off*" (Talmy calls result satellites), Spanish prepositional system has a little bit distinction in comparison with the English prepositions because the preposition like "*away*" can be translated into "*en*", and "*off*" into "*un*". More importantly, he argues that Spanish cannot express motion as English does because English has a wide range of path prepositions and adverbs denoting directions or Paths, whereas Spanish path prepositions cannot be expressed in adverbs without a preposition object.

Second, based on Talmy's binary typology, Ozuyrek & Kika (1999) shed light on differences in speech, gesture and conceptualization by examining how Manner and Path are expressed in English and Turkish. In order to conduct this research, Ozuyrek & Kika investigate how the speakers of two typologically different languages in the two contexts use their speech as well as spontaneous gestures to denote motion events in narrative discourse by allowing 14 native English speakers and 16 Turkish speakers to watch an animated cartoon and to narrate what they saw.

The result reveals that Turkish belongs to the group of V-framed languages, which encodes the Path of motion in verbs (e.g, gir (*enter*), cik (*exist*), in (*descend*) whereas English belongs to the group of S-framed languages, which encodes the Path of motion in a satellite (e.g., *into, out, up*, etc). Therefore, when expressing manner of motion, English speakers can easily encode Manner in a verb and Path in a satellite within one verbal clause, whereas in Turkish, Path is encoded in a verb and Manner tends to be encoded as a subordinate to the main verb (e.g., yuvarlanarak iniyor (*descend rolling*)) in two verbal clauses as in Figure 2.17.

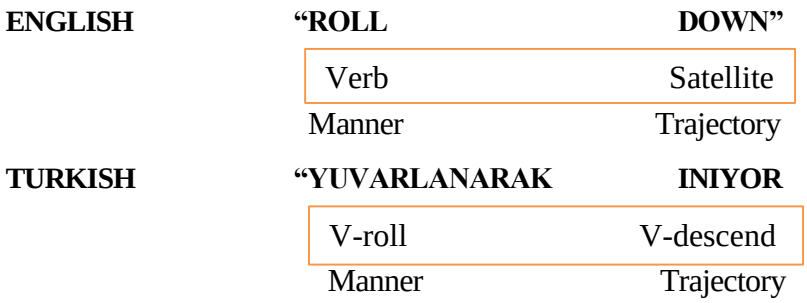



**Figure 2.17. A manner motion event in English and Turkish**

Finally, the research involving *verbs of motion and sentence production in second language* was conducted by Antonijevie & Berthaud (2009). This study aimed to examine how both English and French native speakers produced sentences in which verbs of motion were used in the second languages. In terms of methodology, the authors chose two groups of participants including (i) English native speakers and (ii) French native speakers, then asked them to describe 38 pictures with moving characters by speaking in English for French speakers and in French for English speakers. All oral productions in second languages were recorded, and then the participants in two contexts were asked to translate into their first languages to ensure that they understand the pictures correctly.

The result shows that English is dominantly manner framed whereas French is dominantly path framed language. That is to say, motion verbs in English mostly carry information about the Manner how action is performed but Path is described by grammatical elements (satellites). In French, verbs of motion encode the Path of motion while the Manner can be described by a prepositional phrase. In addition, the result indicates that speakers of either language use the structures of their first languages to produce sentences of motion in the second languages. This is because the manner verbs are far more flexible in terms of syntactic frame, which make native speakers be more successful in using this strategy for French verbs. Moreover, seeing that the path verbs are not flexible in French, French speakers always make errors when they try to use the path verbs in French in the same ways of the manner verbs in English.

To sum up, the previous studies associated with crosslinguistic motion verbs mostly focus on investigations into the characteristics of motion verbs. In addition, these

studies do with how native and non-native speakers use first languages second languages to expression motion verbs but they discount the roles of motion verbs in denoting distinct motion events.

### 2.3.2. Studies on prepositions

Most studies concerned with the issue focus on the roles of locative and directional prepositions which are termed as satellites in denoting motion (Jackendoff, 1983; Sophana, 1998; Pace, 2008; Svenonius; 2009; Zwarts & Winter, 2000; Pantcheva, 2011; Saeed, 2016). Zwarts & Winter (2000) explore a compositional semantics of locative prepositional phrases which is based on a vector space ontology. They explain that the prepositions play an important role in expressing statements about space and movement, which is divided into two grammatical categories such as locative and directional prepositions. Locative prepositions (e.g., *in, on, at, under, below,* , etc) are used to locate an object relative to another one while directional prepositions (e.g., *to, into, through, along,* , etc) are collected to a verb to express motion with a certain direction.

According to Jackendoff (1983), there are three main types of paths, which are ***bounded, directions*** and ***routes***. The bounded paths include the *source paths* typically encoded by the preposition like "*from*", the *goal paths* by the preposition like "*to*". These prepositions present the characteristic property of bounded paths as the *Place* of an extreme point of the path-both its beginning as the source paths and its end as the goal paths. The direction paths are also subdivided into two subclasses: source directions (*away from*) and goal directions (*towards*). The last type of paths is routes encoded by the prepositions (e.g., *along*, *through*). The Figure of the motion (*Place*) falls on some certain points of the path and the extreme points are left unspecified. The five classes of the paths may be schematically represented as follows:

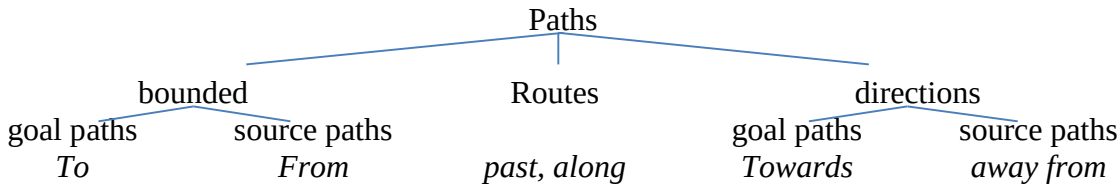



**Figure 2.18. Jackendoff's (1983) typology of paths**

To clarify Jackendoff's (1983) analysis, Pantcheva (2011) identifies eight types of paths subdivided into three canonical path types (Goal, Source and Route). She represents the typology of paths in Figure 2.19.

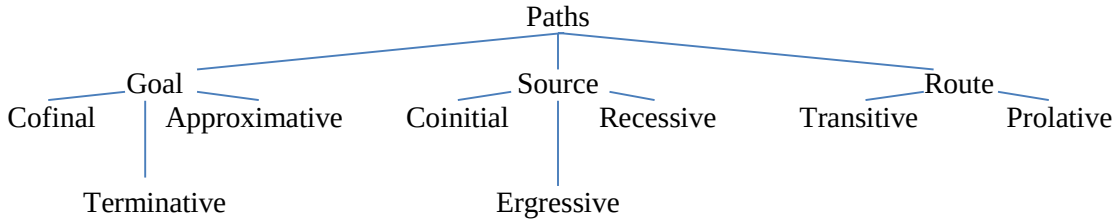



**Figure 2.19. Pantcheva's (2011) typology of paths**

Sophana (1998) conducted an investigation into prepositional and directional coverbs in Vietnamese. In this study, she continues to illuminate the syntactic properties of a list of coverbs proposed by Clark (1978) which are *qua/ sang/ lại/ về/ ra/ vào/ lên/ xuống/ đến/ tới*. She argues that these words can be divided into two types such as prepositional coverbs and directional coverbs. She explains that when these words are prepositional coverbs, they can function as a main verb as in (2.15a) or a preposition as in (2.15b) (Sophana, 1998:68-69).

(2.15) a. Tôi sắp **qua** cầu.

b. Tôi nhìn **qua** của kính. (**VS08**-223)

In addition, Sophana argues that when these words are directional coverbs, they are independent verbs which incorporate with other motion verbs and clarify their directions such as *chạy ra/ đi lên/ bơi vào/ lao xuống / phóng lên*, etc.

In brief, these studies mostly focus on the analysis of semantic and syntactic properties of prepositions in isolation. However, they seem to disregard the analysis prepositions in combination with motion verbs in the conglomeration of motion events.

### 2.3.3. Studies on lexicalization patterns

Mai Thi Thu Han (2011) conducted a study to compare lexicalization patterns of motion verbs between English and Vietnamese in terms of typological and universal principles they embody across two languages. Theoretically, this study was investigated on the basis of Talmy's binary typology in which he examines the semantic elements conflated into

the motion verbs. With respect to methodology, Han read through the story "*Harry Potter 1*" by J.K.Rowiing, and the version of the translation by Ly Lan, then picked up all sentences with motion verbs.

The result reveals that English and Vietnamese motion verbs may be both transitive and intransitive verbs, and mostly in the patterns of SV and SVO. In general, Vietnamese motion verb patterns correspond to English equivalents in terms of manner-of-motion verbs which combine with another word to express the path of motion (Han, 2011:108). For example:

(2.16) I *ran* *across* the road. (**ES09**-72)
Manner verb Path

She argues that besides the common patterns of SV and SVO, Vietnamese motion verbs tend to encode a complex motion event, which is termed as a serial-verb construction (SVCs). Following Beecher (2004), she identifies three prominent variety of SVCs in Vietnamese.

**i. Activity – Goal**:

(2.17) Tôi *đến tìm* em. (V + V)
I came to find you.

**ii. Resulative**

(2.18) Gió *thổi bay* mái nhà. (V+ V)
Wind blew the roof.

**iii. Motion – Path**

(2.19) Tôi *rơi vào* một cái hố. (V + V)
I fell into the whole.

(**VN02**-123, 201,196)

In addition, Vietnamese speakers use directional complement verbs to denote the Path of Motion (Vmanner/cause + Directional complement verbs) as in (2.20a), whereas in English, the Path of motion is incorporated in the particles (Vmanner/ cause + prepositions or particles) as in (2.20b).

(2.20) a. Xe đã ***chạy*** ***qua*** *cầu.*

*Motion* + Manner Directional verb

b. The car **ran** **across** the bridge.

*Motion + Manner* *Preposition*

In short, Han mostly adopts Talmy's two-way typology of motion to distinguish lexicalization patterns of motion verbs between English and Vietnamese through an investigation into semantic components conflated into motion verbs. She disregards the semantic and syntactic properties of distinct types of motion verbs in constituting motion events. However, she hardly provides a detailed analysis of lexicalization patterns in Vietnamese in isolation.

## 2.4. Summary

This section summaries the main contents which are concerned with cognitive linguistics, the theory of motion and the review of previous studies. First, cognitive linguistics is analyzed in terms of cognitive semantics and cognitive grammar. Cognitive semantics provides in-depth insights into conceptual structures and conceptualization which sheds light on the mechanism of constituting meanings from the interaction between language and mind. In other words, language is formed from the conceptual process which consists of embodiment, interaction or construal, etc. Thus, a remarkable crux of cognitive semantics is that semantic structure is conceptual structure. Based on the properties of cognitive semantics, Talmy (1985, 2000) examines how semantic elements are lexicalized into the surface units which is termed as lexicalization patterns. Next, the two domains of cognitive grammar such as lexical aspects and construction grammar are decomposed in this section. What is more, this section provides the panorama of motion in language including definitions, types, motion events and lexical expressions of motion. Last but not least, several previous studies are reviewed in this section in order to find out universal approaches to analyze motion and the research gap of these studies.

# Chapter 3
# METHODOLOGY

## 3.1. Introduction

This chapter focuses on the research methodology of the dissertation. In more details, this part presents the methodological approaches, research methods, the data collection procedure, the statistical analysis tool, and the data analysis procedure.

## 3.2. Research questions restated

As aforementioned, this dissertation makes attempts to answer the three questions:

1. *What are the semantic properties of lexical expressions denoting motion in English and Vietnamese in terms of their lexicalization patterns and event structures?*
2. *What are the syntactic properties of lexical expressions denoting motion in English and Vietnamese in terms of argument structures?*
3. *What are the major similarities and differences of lexical expressions denoting motion between English and Vietnamese in terms of the syntactic and syntactic properties from cognitive linguistic perspective?*

## 3.3. Methodological approaches in cognitive linguistics

The aims of the research determined in the previous section, several approaches may be used for the successful exploration into cognitive linguistics. However, there will be no specific aspect of language, cognition or usage-based approach focuses on, the original start point will find a natural anchor in one of those three variables as in Figure 3.1

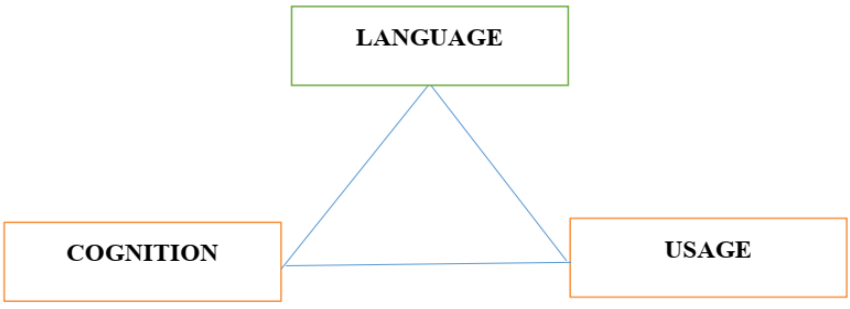



**Figure 3.1. Triangle of methodological approaches in cognitive linguistics**

Bybee (2010) has usefully proposed three specific points of focus for the optimal study of each variable in relation to cognitive linguistics. To approach the exploration of cognitive linguistics, one of three approaches may be adopted as a start point.

### 3.3.1. Language approach

In order to grasp the use of a comparative approach to exploring the relationship between language use and thought. Lucy (1997) proposes the structure-centered approach standing for a language approach which begins with an analysis of language structure and then moves to an operational characterization of reality implicit in it so that the researcher may clarify a comparison of patterns of cognitive response across language-internal structural variations (Lucy, 1992a, 86–91).

In doing so, the structure-centered approach is conducted by comparing typology of language structures and their semantics, developing thereby a rendering of reality as it appears through the window of language (Lucy, 1992b: 275). In this approach, the collective linguistic patterns of many languages are gathered to form a comparative delimit within which each .contrast can be made. As a result, the approach to comparison through language focuses on an elaborate analysis of actual systems of language category meanings within a typological framework.

Pourcel (2005:104-105) illustrates the procedure in which consists of a specific sequence of study stages for a holistic investigation into certain linguistic phenomena.

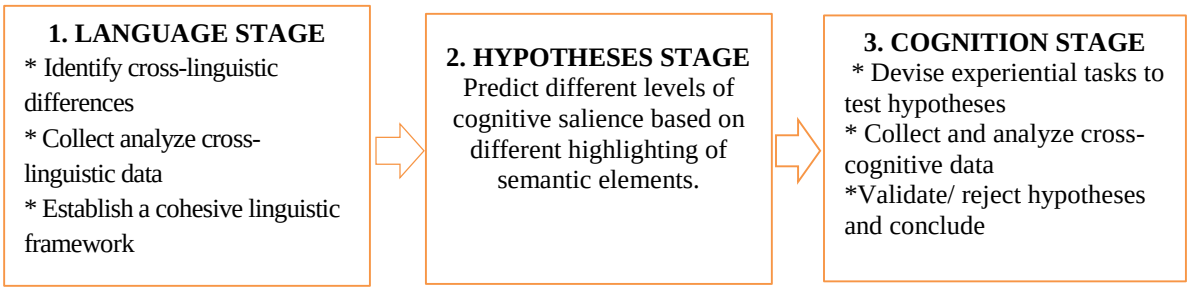



**Figure 3.2. Stages in language approach**

### 3.3.2. Cognition approach

This approach is conducted through the analysis of behavioral differences across two or more language communities, as generated by patterns of collective cognition. This is

similar to Lucy's (1979) behavior-centered approach, which delves into how language patterns may account for the differences observed in overt behavior. Therefore, this hypothesis will aim to relate behavioral patterns to linguistic patterns.

At this point, the behavior must be observed extensively to determine the causal dynamics within collective interactions, thus such observations must be implemented in at least two communities. However, the observations require the identification of specific and systematic types of behavior which have differences in manifestation from other communities. These types of behavior stand for particular ways of thinking about and speaking about the world. Accordingly, this approach aims to establish the correlation between those types of behavior and linguistic patterns. Pource (2005:117) summarizes the stages in cognition approach in a diagram below:

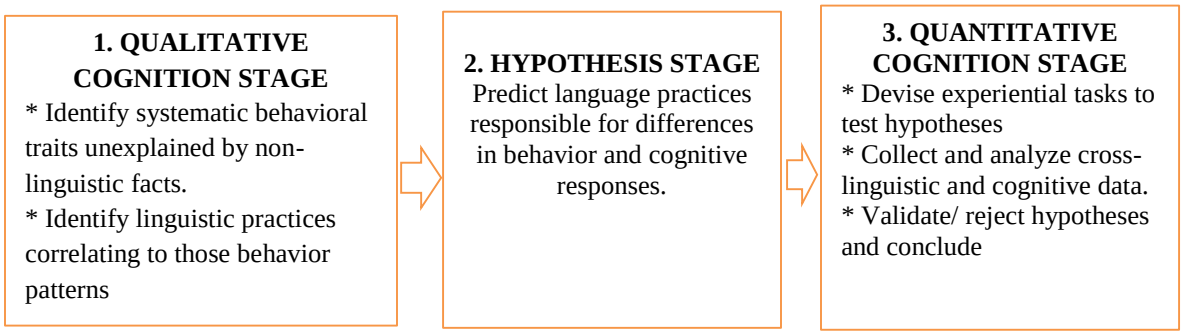



**Figure 3.3. Stages in cognition approach**

### 3.3.3. Usage-based approach

The usage-based approach or usage-based linguistics is associated with the development of a dynamic theory of language which accounts for the effects of interactive and cognitive processes on the appearance of linguistic structure and meaning. The usage-based linguists have argued that the structure and organization of a speaker's linguistic knowledge is the product of language use or performance.

One of important aspects in the usage-based analysis of linguistic structure and meaning is the frequency of occurrence because it is the frequency that boosts the representation of linguistic elements in memory, it facilitates the activation and processing of words, categories and constructions (Diesel, 1994). In addition, a fundamental principle of usage-based research is that linguistic structure consists of

constructions which may combine a particular structural pattern with a particular meaning of the function. In terms of syntactic constructions, they are related by associative connections that reflect the language users' experience with holistic grammatical patterns. The subsequent principle of usage-based linguistics is that language use and language development are driven by the same cognitive processes which include social cognition, conceptualization and memory (Diesel, 1994:7). First, the principle of social cognition depicts that language use is a particular of social interaction involving a set of cognitive processes which concern the ability to take other person's knowledge, intention and beliefs. Second, conceptualization is concerned with the construction of meaning which is inspired by general psychological research on vision termed as construal operations. Finally, memory is involved in activation, processing and organization of knowledge.

Building on the principles as well as the aspects of usage-based linguistics, the stages may be summarized in the diagram below.

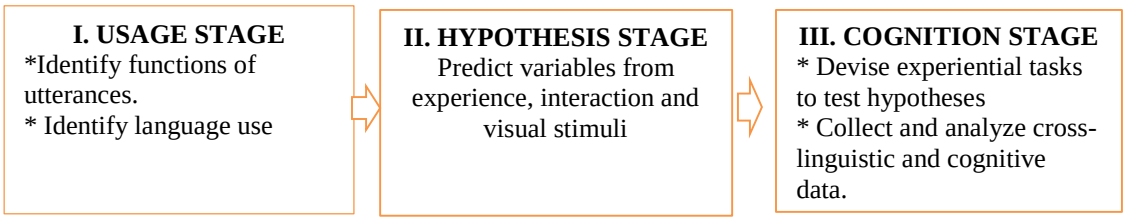



**Figure 3.4. Stages in a usage-based approach**

## 3.4. Research methods

In order to reach the aims, several methods were adopted to analyze the data and collect the data as well. These methods were grouped into two groups, which are general methods and specific methods.

### 3.4.1. General methods

These methods provide the researcher with a panorama about the analysis and collection of the data. These methods are placed in a symmetric order including *deductive* and *inductive*, *quantative* and *qualitative* methods.

#### *3.4.1.1. Deductive and inductive methods*

The first pair of methods adopted in this research are *deductive* and *inductive* methods. Nonetheless, due to the set aims of the study, the deductive method significantly

outweighs the inductive method.

*i. Deductive method*

Dudovskiy (2016: 69) explains that the deductive method is concerned with developing a hypothesis (or hypotheses) based on existing theory, and then designing a research strategy to test the hypothesis. More particularly, Steen (2007:34) refers to the use of the deductive method in cognitive linguistics, he says the deductive method is based on the causal relation between conceptual structures as a symbolic structure to conceptual structures in psychological processing. Dudovskiy (2016) summarizes the stages in the deductive method in Figure 3.5 below:


**Figure 3.5. Stages in a deductive method**

On this account, this research begins with an investigation of Talmy's (1985, 2000) LPs which are concerned with the conflation of SCs into surface forms, and Goldberg (1995) dealing with construction grammar so as to formulate theoretical frameworks and language patterns. Then, these frameworks and patterns are used to describe and analyze the semantic and syntactic properties of LEsM of English and Vietnamese. Finally, the dissertation compares the correspondence of research findings with the frameworks to put forward the specific conclusion of LEsM of both languages. Taking everything into consideration, all are done to constitute the groundwork for this research formulate the theoretical and analytical frameworks for this study in the follow-up steps.

*ii. Inductive method*

Dudovskiy (2016: 71) posits that inductive research relates to the search for pattern from observation and the development of explanations – theories – for those patterns through a series of hypotheses. In other words, the inductive method may be referred to as a "bottom-up" approach to knowing, in which the researcher uses observations to build an abstraction or to describe a picture of the phenomenon that is being studied. With respect to the use of the inductive method in cognitive linguistics, Steen (2007:34) says the inductive method is based on causal relations between conceptual structure and linguistic

form within the areas of the symbolic structure. Dudovskiy (2016) illustrates the stages in the inductive method in Figure 3.6 below:


**Figure 3.6. Stages in the inductive method**

In doing so, this research begins with the identification and collection of expressions of motion from the stories and novels which are called linguistic forms. Then, linguistic forms of motion are compared with their corresponding conceptual structures through the analysis of semantic components conflated into linguistic forms. As a consequence, lexicalization patterns of motion will be recognized with several types (e.g., *Motion + Manner*, *Motion+Cause*, *Motion+Path*) on the basis of Talmy's (2000) theoretical classifications of lexicalization patterns. All things considered, with this method, the data will be collected, counted, categorized, analyzed, synthesized and interpreted. Then, the descriptions and analysis on the concerned perspectives related lexicalization patterns of motion are drawn out.

### *3.4.1.2. The qualitative and quantitative methods*

In linguistic studies, two quantitative and qualitative methods are often taken. However, the qualitative method is a backbone with the assistance of quantitative one in this study.

The quantitative method seeks the answer for the question on relationships within measurable variables to explain, predict and control phenomena. To put it simply, the quantitative method is deductive which is based on already known theory to develop hypotheses and focuses on how much or how many (Rasinger, 2008:12).

In contrary, the qualitative method is a means to investigate and understand individuals or groups ascribe to a social or human problem. The processes of this method are involved in questions and procedures, data typically collected in the participants' setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data (Creswell. 2007). To put it simply, the qualitative method is inductive in which its theory is derived from the

research result, and is concerned with structures, patterns and how something is (Rasinger, 2008). Rasinger illustrates stages in the qualitative method in Figure 3.7 below:

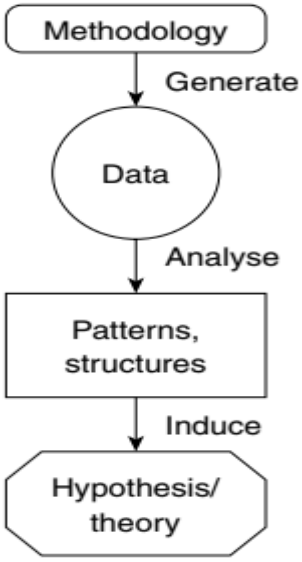



**Figure 3.7. Stages in qualitative method**

On this account, this research begins with the research methods which have been identified earlier to collect the data (expressions of motion) often randomly collected in a quantitative method. Based on Talmy's theoretical framework, the data were classified into different patterns or structures (e.g., *manner motion, path motion and caused motion*). Then, these patterns of motion were described to clarify their semantic and syntactical properties. More particularly, the comparative method was adopted to elicit the similarities and differences in these patterns in English and Vietnamese. As a result, the properties of LEsM in English and Vietnamese were illuminated regarded as the aims of this research.

### 3.4.2. Specific methods

If quantitative and qualitative methods help the researcher to gain general aims, descriptive and comparative will help reach specific ones.

#### *3.4.2.1. Descriptive method*

Descriptive method is used to illustrate the characteristics of the population or phenomenon that is being studied. In other words, the descriptive method enables the

researcher to test hypotheses and answer the questions (Mitchell & Jolley, 2010: 204). They add that the descriptive researchers often begin by answering "What" questions about a single variable, then expand these questions "Who", "Where" and "Where" questions which describe that variable's relationship to other variables.

Due to the characteristics of this method, it can be reasoned to involve data collection, analysis and description of data. At this point, the data of the research were described to formulate the groundwork for the follow-up analyses, explanations and interpretations. For instance, after the expressions of motion were collected, descriptive method mainly focused on illuminating their semantic and syntactic properties to illustrate and explain the mechanism of using, lexicalizing, interpreting and conceptualizing motion events in English and Vietnamese on the basis of cognitive perspective. Then, a range of properties of LEsM of both languages were found.

#### *3.4.2.2. Comparative method*

The comparison is the pivotal method of most social science research, which occurs between different categories such as semantics, syntax, constructions, frequency, or conceptualization. Then, these categories and conceptualization are analyzed to sort out similarities and differences. This process is described by the term ***contrastive analysis*** (James, 1980), which is used within most qualitative approaches. The fundamental objective of the comparative method is to look for similarity and variation between the categories which are the subject of comparison. The analysis of similarity implies the use of general theory and a search for universals. Hence, Given (2006: 100) explicates that the comparative method is used to develop categories and conceptualizations, and then to examine potential relationships between the categories.

In this dissertation, the comparative method is of partial use in comparing the descriptions of LEsM in English and Vietnamese. The criteria and principles for the comparison are the categories in the analytical framework. Relying on the results drawn out from the comparison, the researcher of this dissertation has tried his best to discuss further the typological reasons for the similarities and differences between LEsM in English and Vietnamese in terms of non-linguistic features.

## 3.5. Data collection

This section deals with the source of data, data collection and the data analysis as well.

### 3.5.1. Sources of the data

The data collected derives from two main sources including (i) English and Vietnamese dictionaries and (ii) English and Vietnamese stories and novels in the 20th century onward. The first source includes two English dictionaries and two Vietnamese dictionaries, which are evaluated to have the fullest number of words. These dictionaries provide a full sum of motion verbs and prepositions in two languages which will be key roots to search for expressions of motion in the second course.

**In English**

1. Longman Dictionary of Contemporary English, Longman, 3th edition (2010)
2. Advanced English Dictionary, Oxford: Oxford University Press, 6th edition (2016)

**In Vietnamese**

1. Từ Điển Tiếng Việt. Trung Tâm Từ Điển Học: NXB Đà Nẵng, 2nd edition (2003)
2. Từ Điển Tiếng Việt. KH-XH-NV: NXB Từ Điển Bách Khoa, 1st edition (2007)

The second source consists of 12 stories and three novels in English and 12 stories and novels in Vietnamese from which the expressions with motion verbs are picked up.

Actually, the expressions of motion verbs can be collected from a plethora of the publication printings. There are several reasons to explain why these stories and novels were chosen. First and foremost, these stories and novels were written after the emergence of cognitive linguistics. Next, to ensure that the data are in native languages, the stories and novels chosen were written by the authors from English-speaking countries (e.g., England, America or Australia). Last but not least, in order to manifest the real-life conceptualization of motion, the stories and novels mostly involve the daily lives of different ages, generations and social classes. More importantly, the genres of stories and novels in English is rather similar to ones in Vietnamese. More importantly, the stories and novels are related to different genres, settings and contexts which will make the data reliable.

### 3.5.2. Semantic component identification

Following Talmy' (1985) typology, the process of determining the components of motion in English and Vietnamese can be conducted as follows:

#### *3.5.2.1. Identifying motion events*

Following Talmy (2000b), there are five events in conceptual organization of language, which are represented as single clauses and regularly conceptualized as unitary events: (i) an event of motion or location in space; (ii) an event of change or constancy among states; (iii) an event of contouring in time (aspect); (iv) an event of correlation among actions; and (v) an event of fulfillment or confirmation in the domain of realization.

Talmy explains that a motion event refers to an object moving and changing its location with respect to another object, which is called a "***translational motion event***" by Talmy (2000: 35. As illustrated in (3.1), the dog moved with respect to the kitchen and changed its location from the outside of the kitchen to the inside.

(3.1) The dog **ran** *into* the kitchen. (**ES07**-42)

Talmy (2000b: 25) sheds light on four internal components in a translational motion event including *Figure* (the moving object), *Ground* (the reference object with respect to which the Figure moves), *Motion* (the presence of motion) and *Path* (the course/route along which the Figure moves with respect to the Ground). In addition to the internal components, a motion event can also have an external component or associated "co-event" (Talmy, 2000b: 26). One important co-event is the manner of motion, which specifies how a figure moves (Talmy, 2000).

#### *3.5.2.2. Identifying motion verbs*

Talmy (1985, 2000) examines the ways of how semantic components are mapped onto the linguistic units. Based on the semantic components mapped on the motion verbs, Talmy distinguishes two groups of languages, which are V-framed and S-framed languages or constructions. In V-framed languages, information about a path of movement is expressed in a verb (e.g. *exit, enter, pass*), which are termed as the ***path verbs***. However, in S-framed languages, information about a path is expressed outside the verb (by satellites), e.g. by adverbial particles (*out, in, past*) while the styles of motion are

denoted by the verbs (e.g., *run, crawl, walk*), then these verbs are called the ***manner verbs***. In another case, information about a path is expressed by satellites in S-framed language, the verbs denote forces to cause objects to move (e.g., *throw, blow, push*), which are called the ***cause verbs.*** It is the division which provides a groundwork to sort out LEsM into LEsMM, LEsPM and LEsCM, and pivotal features to analyze each of LEsM in two languages.

#### *3.5.2.3. Identifying satellites*

Identifying satellites is to examine a semantic category which is lexicalized in the closed-class type of surface forms. Following Talmy (2000b: 102), a satellite is the grammatical category of any constituent, which may encompass a noun phrase or a prepositional phrase in a sister relation to the verb root, but it is generally the category of prepositions such as into, to, from, along, etc. Syntactically, the role of the satellite is to relate the motion verbs which are considered as dependent components to external arguments to form a conglomeration of motion events.

Following this definition, Talmy attempted to apprehend an observable commonality, both syntactic and semantic properties, across all these forms (ibid.). He posits that the common function of satellites across one typological category of languages may be the characteristic site for the expression of Path (ibid.). In his further explanation, he is attempting to capture the commonality between English verb particles and comparable elements in other languages (ibid., 103). This is to say, the definition of a satellite in English is partially based on the characteristics of verb particles.

#### *3.5.2.4. Identifying some others*

Identifying some other aspects (e.g., *context, the prototype of verb meaning* and *culture*) is indispensable for collecting and analyzing the data.

*a. Identifying context*

The context may engender considerable obstacles in identifying semantic components and their functions in motion events. This is a crucial factor to collect the data in Vietnamese. In many cases, the components such as Figure, Path, Motion and Ground are not expressed explicitly. One of them can be elided, and without context, some

expressions are not considered to be motion events as in (3.2). "Đà Lạt" cannot be understood as a motion event without context.

(3.2) Speaker 1: Anh đi đâu tuần rồi?
Where did you go last month?
Speaker 2: Đà Lạt. (**VS07**-13)
Da Lat

*b. Identifying the prototype of verb meaning*

Blomberg (2014) proposes two kinds of motion, which are actual motion and non-actual motion. The actual motion expresses a movement of Figure projected to Ground as in (3.3a). The later does not express a movement in deed, but it is an image of movement in mind as in (3.3b) because they are, somewhat, metaphorized.

(3.3) a. The man ran into the house. (**EN01**-52)
b. The road goes through the tunnel. (**ES08**-113)

Or

(3.4) Chúng nó chẳng **đi** đến đâu. (**VN11**-274)
They have not made any decision.

Therefore, in order to understand these motion events, the meanings of verbs must be prototypical meanings of verbs. As a result, (3.4) cannot be a motion event.

### 3.5.3. Data collection procedure

The researcher follows these steps for the data collection.

- Selecting 2 dictionaries in English and 2 dictionaries in Vietnamese. Searching for 12 stories and 3 novels in English from the 20$^{th}$ century to present which satisfy the set criteria. Likewise, Vietnamese stories and novels were chosen.
- Reading through these dictionaries, the researcher picked up all motion verbs and spatial prepositions in English and Vietnamese. Afterward based on semantic properties of motion verbs, they were divided into three categories such as manner verbs, path verbs and cause verbs. Table 3.1 summarizes the sum of motion verbs and their categories found in the dictionaries.

**Table 3.1. Motion verbs and prepositions in English and Vietnamese**

| Dictionaries | Motion verbs | | | | Prepositions |
|---|---|---|---|---|---|
| | Manner verbs | Path verbs | Cause verbs | Total | |
| **English** | 282 | 95 | 79 | 459 | 17 |
| **Vietnamese** | 224 | 38 | 88 | 350 | 15 |

- Reading through the stories and novels, then they were coded from **ES 01** to **ES 12** (**ES** stands for English stories) and novels from **EN 01** to **EN 03** (EN for English novels) and ranked according to the order of time (see appendix 1). Similarly, the 12 stories and 3 novels in Vietnamese were coded from **VS 01** to **VS 12 (VS** stands for Vietnamese stories), and the novels from **VN 01** to **VN 03** (**VN** stands for Vietnamese novels) (see appendix 2).
- Picking up the samples of LEsM. These samples were divided into three categories corresponding to three categories of motion verbs including LEsMM, LEsPM and LEsCM. Table 3.2 summarizes the samples of LEsM in English and Vietnamese. Some samples with one motion verbs or preposition may be repeated many times, but they denote different meanings.

**Table 3.2. Samples of LEsM in English and Vietnamese**

| Stories/ Novels | Samples with motion verbs | | | Samples with prepositions |
|---|---|---|---|---|
| | LEsMM | LEsPM | LEsCM | |
| **English** | 1038 | 423 | 366 | 207 |
| **Vietnamese** | 787 | 228 | 410 | 198 |

## 3.6. Data analysis

This section refers to the analytical frameworks and statistical tools used to collect and analyze the data as well and data analysis procedure to set up steps to analyze the data.

### 3.6.1. Analytical framework

As for the title of the study referring a cognitive study and the given aims doing with the syntactic and semantic properties of LEsM in English and Vietnamese, thus this dissertation was investigated under the two analytical frameworks, which are *Talmy's*

*lexicalization patterns* and *Goldberg's constructional grammar*. The first one helps the researcher to explore the semantic properties of LEsM through the conflation of semantic components. The second one helps the researcher to analyze the syntactic properties of LEsM through construction grammar including argument structures and event structures .These frameworks are schematized in Figure 3.8 below:

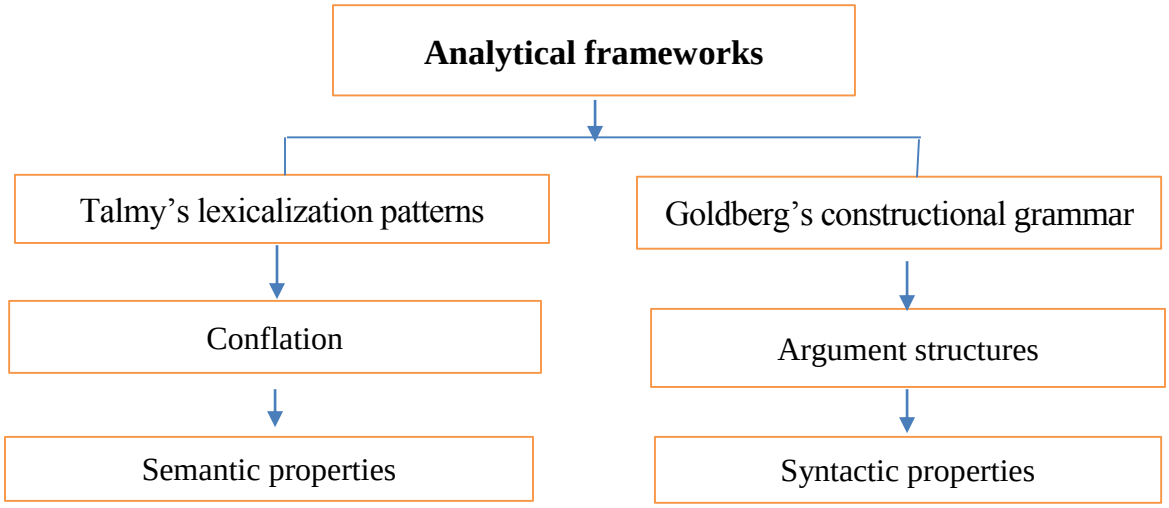



**Figure 3.8. Schema of analytical frameworks**

### *3.6.1.1. Talmy's lexicalization patterns*

Talmy (2000) examines the systematic relations between meaning and surface forms. Talmy (2000b:24) notes that lexicalization is involved in where a particular meaning component is found to be in regular association with a particular morpheme, and this process is termed as conflation. He examines an example in which the semantic components such as Motion, Path, Figure, Ground, Manner and Cause conflated into verbs and **satellites**, a grammatical category of any constituent rather than a noun-phrase or prepositional phrase complement that in relation to the verb root.

Then, he examines which semantic components are expressed by which surface forms. Talmy posits that the relationship between meaning and linguistic forms is not one-to-one; a combination of some semantic elements (**Se.E**) may be expressed by a surface form (**Su.F**) and vice versa as illustrated in Figure 3.9a, and Figure 3.9b. It the relation between Se.E and Su.F which helps him to constitute the theory of lexicalization patterns to divide languages into two groups such as V-framed and S-framed languages.

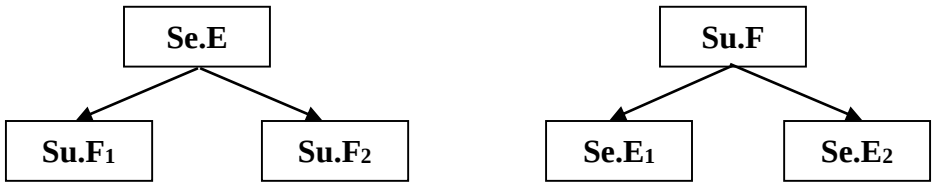



**Figure 3.9. Lexicalization patterns**

By the way of description, an English motion verb (surface form) can encode distinct types of semantic information; Manner of motion (e.g., *bounce*, *hop*), Path (e.g., *exit, enter*) and Cause (e.g., *kick*); but, the Path element can be expressed in English by both verbs and by prepositions (e.g., *into, out*), that is, by two different linguistic units in motion events. Talmy notes that by delving into the relationship between meaning and linguistic forms, a plethora of universal principles and typological patterns might come out. Talmy's approach to lexicalization can be put in the nutshell as follows (Talmy, 2000b: 22):

a. Determine various semantic entities in a language.

b. Determine various surface entities in the language.

c. Observe which (a) entities are expressed by which (b) entities- in what combination and with what relationship- noting any patterns.

d. Compare (c)- types patterns across different stages, noting any universal principles

e. Compare (c)- types patterns across different stages of a single language through time, noting any shifts or nonshifts that might be guided by a given universal principle (or a (d)- type universal principle).

f. Consider the cognitive processes and structures that might give rise to the phenomena observed in (a) through (c).

From the principles above, three principal lexicalization types are presented by motion verbs expressing the Co-event (Manner or Cause), Path, or Figure.

*a. Lexicalization patterns: Motion + Co-event*

In this expression, the verb typically denotes at once the Motion and a Co-event which are usually either the Manner or the Cause. English is one of the prototypical examples of this group. Talmy (2000b: 28) summarizes English expressions of motion conflated with Manner or Cause as follows:

**Move + Manner**

Non-agentive

(3.5) a. The rock *slid/rolled/bounced* down the hill.

b. The gate *swung/ creaked* shut on its rusty hinges.

c. The smoke *swirled/ squeezed* through the opening.

Agentive

d. I *slid/rolled/bounced* the keg into the storeroom.

e. I *twisted/ popped* the cork out of the bottle.

Self-agentive

f. I *ran/limped/ jumped/ stumbled/ rushed/ groped* my way downstairs.

g. She *wore* a green dress to the party.

**Move + Cause**

Non-agentive

h. The napkin *blew* off the table.

i. The bone *pulled* loose from its socket.

j. The water *boiled* down to the midline of the pot.

Agentive

k. I *pushed/ threw/kicked* the keg into the storeroom.

l. I *blew/ flicked* the ant off my plate.

m. I *chopped/ sawed* the tree down to the ground at the base.

n. I *knocked/ pounded hammered* the nail into the board with a mallet.

In this point, it is crucial to define the terms such as *agentive*, *non-agentive* and *self-agentive motion*. First, agentive motion is associated with a motion event whose Figure is moved by an agent; the agent causes the motion but the verb can denote either its Cause or the Manner in which the Figure moves. Second, non-agentive motion refers to the situations in which entities that are incapable of performing motion by themselves. Finally, self-agnetive motion has to do with events in which Figure can move by themselves.

*b. Lexicalization patterns:* ***Motion + Path***

Talmy (2000b:49-51) points out that Spanish is the most typical language whose expressions of Motion are conflated with Path. In the case of Vietnamese, there are a group of verbs termed as the directional verbs such as (e.g., *vào, ra, lên, xuống, qua, lại, tới*. etc) which conflate with the Path (Nguyễn Lai, 2001). This can be illustrated by the examples below:

Non-agentive

(3.6) a. Tiếng động vang dội **vào** tận lèn đá. (**VN01**-357)

The noise resounds to the cliff.

b. Bao nhiêu gánh xiếc **tới** Huế. (**VS08**-116)

How many companies of circus came to Hue.

Agentive

c. Lượm tụt **xuống** hố. (**VS09**-259)

Luom slided down the hole.

d. Một lúc sau, Mực **lại** gần tôi. (**VN03**-521)

A while later, Muc came near me.

In reality, though English also has verbs which incorporate Path such as *arrive, approach, cross, ascend, circle, descend, enter, exit, follow, join, pass, rise, return*, etc, this lexicalization pattern is not characteristic. This is because these verbs are historic borrowings from Romance languages. Talmy (2000b:62,139) adds that this conflation pattern (Motion +Path) hardly expands to conflation of location with site, which is 'Be-on', 'Be-under', etc, despite the fact that English consists of some incidental cases of such conflation such as *surround* (be around), *top* (be atop), *flank* (be beside), *adjoin* (be next to), *span* (be from one side to the other) and *line* (be in line).

*c. Lexicalization patterns*: ***Motion + Figure***

In this pattern, the motion verbs conflate Motion and Figure. English has got a few forms which conform to these patterns. English examples of conflation of Motion and Figure are taken from Talmy (2000b:57).

Non-agentive

(3.7) a. It *rained* in through the bedroom window.

Agentive

b. I *spat* into the cuspidor.

Likewise, Vietnamese also has a few forms that conflate the two semantic components. Examine the following examples:

Non-agentive

(3.8) a. Cả đội ùa hết ra sân mặc dầu trời vẫn lắc rắc *mưa.* (**VS11**-362)

Agentive

b. Tên cai ngục *khạc nhổ*, đóng ập cửa lại, đập chốt sắt. (**VN02**-107)

### *3.6.1.2. Goldberg's constructional grammar*

Goldberg (2006:3) states that constructions are form and meaning pairings which have been the basis of major advances in the study of grammar, which converges primary on argument structures and an analysis of argument structure constructions. Goldberg adds that constructional grammar is a theory of linguistic knowledge, so it is inherent in a cognitive perspective.

First and foremost, it is essential to understand constructions. A widely cited defined of constructions has been offered by Goldberg (1995:4) as follows: "*C is a CONSTRUCTION iff$_{def}$ C is a form-meaning pair <$F_i$, $S_i$> such that some aspect of $F_i$ or some aspect of $S_i$ is not strictly predictable from C's component parts or other previously established constructions".*

This definition takes a detailed account into two main elements such as F standing for "*form*" and S standing for "*semantics*". Then <F, S> standing for a symbolic unit represents the link between forms and meanings through the relation between predicate arguments, which refers to the interaction of particular verbs with other participants (arguments).

Goldberg illuminates her idea of construction grammar by examining the construction of argument structure, a special type of constructions which provides the basic meaning of the clausal expression in a language (Goldberg, 1995). In doing so, she

divides the clause into predicate and arguments. The predicate expresses the action, event, property, or relation that clause describes, which can be the lexical or content verb.

Goldberg indicates that the number of arguments that the predicate requires depends on the semantics of that predicate. The examples are taken from Evans & Green (2006: 674), the verb like *die* requires a single argument (George) as in (3.9a), the verb like *love* requires two arguments (They and their parents) as in (3.9b) while the verb like *put* requires three arguments (The soldiers, their gun and on the table) as in (3.9c).

(3.9) a. George *died*.

b. They *love* their parents.

c. The soldiers *put* their guns on the table.

These sentences can be schematized in the argument structures as follows:

a. V [Arg]

b. V [Arg1 $Arg_2$]

c. V [$Arg_1$, $Arg_2$, $Arg_3$]

Moreover, the semantics of the predicate is identified on the basis of what kinds of information the verbs encode. Goldberg (1985) examines four English constructions of argument structures as follows:

| | | | | | |
|---|---|---|---|---|---|
| 1. Ditransitive | X CAUSES Y to RECEIVE Z | Sub | V | $Obj_1$ | $Obj_2$ |
| 2. Caused motion | X CAUSES Y to MOVE Z | Sub | V | Obj | Loc |
| 3. Resultative | X CAUSES Y to BECOME Z | Sub | V | Obj | Comp |
| 4. Intrans motion | X MOVE Y | Sub | V | Obj | Loc |

More particularly, Mani & Pustejovsky (2012:37) describe the types of semantic roles and their functions as follows:

| | |
|---|---|
| a. **Agent** | The event participant that is doing or causing the event to occur. |
| b. **Experiencer** | The event participant who experiences or perceives something. |
| c. **Source** | The location or place from which motion begins. |
| d. **Goal/ Recipient** | The location or place to which the motion is directed or terminates. |
| e. **Patient** | The event participant who is affected by the event. |
| f. **Theme/ Figure** | The event participant who undergoes a change in position or state. |

g. **Instrument** The event participant used by the Agent to do or cause the event.

h. **Location/ Ground** The location or place associated with the event itself.

Example (3.10) taken from Evans & Green (2006:675) illustrates an argument structure construction of AGENT and PATIENT.

(3.10) [George] ate [the caviar]

V [AGENT, PATIENT]

Therefore, Goldberg (1995:78) generalizes the five caused motion constructions which have the number of related senses into a schema as in Figure.

a. **X CAUSES Y to MOVE Z.**

b. **X caused Y to MOVE Z.**

c. **X ENABLES Y to MOVE Z.**

d. **X PREVENTS Y from MOVING Comp (Z)**

e. **X HELPS Y to MOVE Z.**

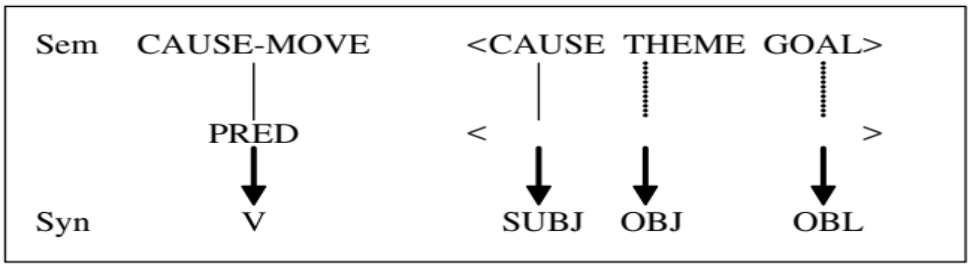



**Figure 3.10. The caused motion construction**

In short, the analysis of Goldberg's construction grammar helps to interpret the characteristics of construction which are helpful to analyze the syntactic properties of LEsM in terms of argument structures from the perspective of cognitive linguistics.

### 3.6.2. Statistical analysis tools

In this study, several useful tools were utilized in order to collect as well as analyze the data, offline concordance and web-based concordance

#### *3.6.2.1. Microsoft Excel*

Firstly, the researcher may use Microsoft Excel (version 2013) to calculate quantity, frequency, percentage, etc. Based on the results, the comparison is drawn out. Secondly, Microsoft Excel may help draw charts to show the results. These charts are inherent in

showing the comparison of argument structures of LEsM in two languages as Figure 3.14 below:

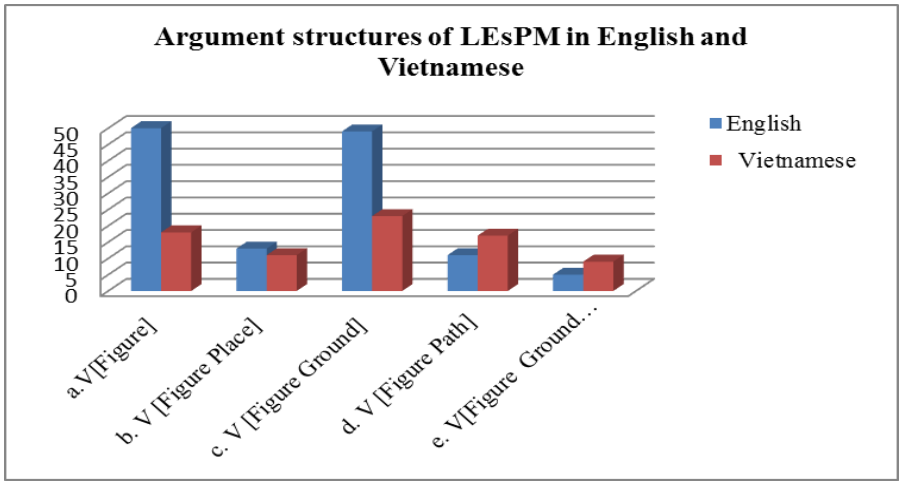



**Figure 3.11. Reproduction of Microsoft Excel**

### *3.6.2.2. Wordsmith*

WordSmith 5.0 (WS5) is a useful tool to collect concordance, keyWords and Wordlist.


**Figure 3.12. WordSmith Software (Tran Huu Phuc)**

### *(i) Concordance*

Concordance is one of the tools in WordSmith which provides the possibility of checking the emergency and frequency of motion verbs or prepositions in each English and Vietnamese story and novel. In addition, it can help the researcher investigate concordance lines of any keywords in the stories and novels. Thus, the data generated are used to qualitatively analyze each type of LEsM based on Talmy (1985, 2000). Namely, with the support of concordance tool, the motion verbs and prepositions are found as well as their arguments. The following Figure can illustrate the concordance more clearly with

word *account*, of course, in this study, the researcher can collect all sentences with the account and its arguments. Therefore, the data had been no sooner collected than the software WordSmith 5.0 was installed.


**Figure 3.13. Concordance Tool with the word *account***

### *(ii). Wordlist*

The wordlist in WordSmith software generates a list of motion verbs and prepositions and their frequencies, which is used to collect statistical data on the frequency of words used in a research corpus, the number of words counted and distinct words occurring in the corpus (Trần Hữu Phúc, 2017). Thus, by using this tool, the researcher can find the frequency use of words in the descending alphabetical order, identify the keyword as well as analyze the concordance lines of keywords in a text. Besides, every word is shown as an independent item-apart from its actual context. This alone provides an acceptable level of objectivity for the researcher to examine every word in its original sense. It is apparent that once the wordlist is generated, every word is examined to extract all and only words that are potentially related to the particular domain (e.g. reward) in the Figure below.

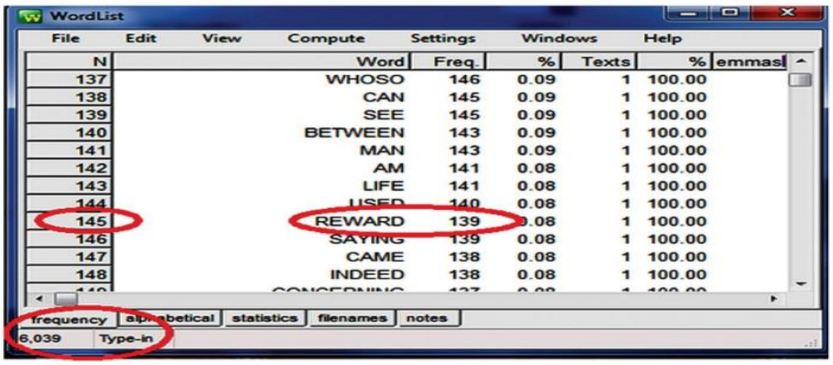



**Figure 3.14. Wordlist tool (Al-Saggaf, 2015:122)**

### *3.6.2.3. Foxit reader*

This is the simplest tool in this section, which is really a helpful tool in collecting the data. By that I mean that this tool helps the researcher find all expressions of motion in each story or novel. For example, just typing the verb "*walk*" into the box-finder, the researcher can find all expressions with that verb in each story.

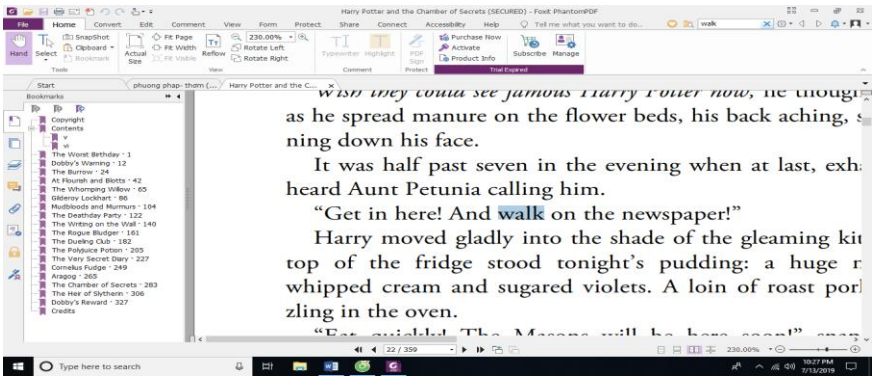



**Figure 3.15. Finding the word "*walk*" with Foxit reader**

## 3.7. Summary

This section refers to the methodology of this dissertation including research approaches, methods, data collection and analysis. First, the research approaches proposed by Bybee (2010) provides the researcher with an orientation and directions to conducting this study which consist of language, cognition and usage-based approaches. These three approaches are said to be typical ones to analyze and describe the cognitive data. Second, the research methods in this dissertation are divided into two categories, namely general and specific methods. The former present the overall steps to analyze the data, the later provides the researchers with detailed methods to collect and analyze the data as well. Regarding that data collection and analysis, this section illuminates the data sources, methods to collect analyze the data. Last but not least, this section refers to some tools to collect the data.

# Chapter 4

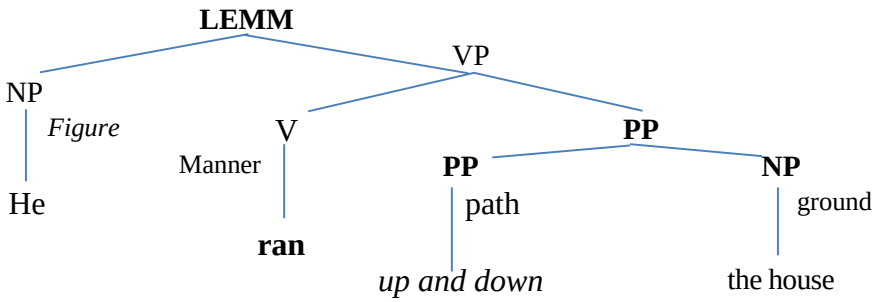
# LEXICAL EXPRESSIONS OF MANNER MOTION

## 4.1. Introduction

In this chapter, LEsMM are analyzed on the basis of the two analytical frameworks, which are construction grammar and lexicalization patterns. Then, LEsMM in English and Vietnamese are compared and contrasted to reveal similarities as well as differences.

The first framework analyzes the syntactic properties of LEsMM through their argument structures and event structures. A LEMM may be illustrated as in (4.1).

(4.1) He **ran** *into* the house (**ES09**-207)




The second framework helps shed light on the semantic properties of LEsMM through the analysis of lexicalization patterns of manner verbs and prepositions, the conflation of the semantic components into manner verbs and prepositions, to be more concrete. Based on the two frameworks mentioned as above, a LEMM may be schematized as follows:

| **A lexical expression of manner motion** | | | |
|---|---|---|---|
| **Subject** | **The predicate of manner motion** | | |
| *He* | *ran* | *Into* | *the house* |
| Figure | Motion/ Manner | Path | Ground |
| $Arg_1$ | V | $Arg_2$ | $Arg_3$ |
| **A manner motion event** | | | |

**Figure 4.1. A Schematization of a LesMM**

## 4.2. LEsMM in English

This section deals with semantics and syntax of LEsMM in English. First, it is concerned with the construction grammar of LEsMM, which investigates the form-meaning correspondences of the manner verbs. Second, the lexicalization patterns are analyzed in terms of the semantic components conflated into the verbs and prepositions. Finally, some conclusions are drawn, and the most typical distinctions between LEsMM in English and Vietnamese are dug up radically.

### 4.2.1. Construction grammar of LEsMM in English

Goldberg (1995:1) says that construction grammar is associated with form-meaning correspondences in which verbs exist independently in reference to the external arguments (e.g., noun, prepositions, and adverb). These form-meaning correspondences are analyzed with respect to argument structures and event structures.

#### *4.2.1.1. Argument structures of LEsMM in English*

Table 5.1 summarizes the types of argument structures of LEsMM in English. This table is grouped into three categories as follows: (i) number of arguments; (ii) types of arguments: and (iii) frequency of each argument structure.

**Table 4.1. Argument structures of LEsMM in English**

| Number of Args | Argument structures | Verbs | % |
|---|---|---|---|
| 1 | a. V [Figure] | 118 | 41.8 |
| 2 | b. V [Figure Path] | 61 | 21.6 |
| | c. V [Figure Figure] | 1 | 0.35 |
| | d. V [Figure Place] | 175 | 62.0 |
| 3 | e. V [Figure Path Ground] | 79 | 28.0 |
| | f. V [Figure Path  Place] | 17 | 6.0 |

*a. V[Figure]*

This structure shows that there is one argument combining the manner verbs, so all the manner verbs in this structure are intransitive verbs. There are 118 verbs of the English

manner verbs (41.8%) which have such one argument. The argument in this structure is a Figure which can be an agentive as in (4.2a) or non-agentive subject as in (4.4b).

(4.2) a. All sorts of lizards and snakes were **crawling.** (**ES06**-156)

b**.** The pages of the diary began to **blow**. (**ES11**-321)

Furthermore, the speakers mostly pay much attention to the motion of the Figure which seems to be more prominent (e.g., *crawling and blow*) while the Path and Ground are not mentioned or they are implied. Finally, when the Figure is a nonagentive subject, it is said to be metaphorized or personalized because the Figure cannot give rise to an actual motion as in (4.3). The manner verb *blow* normally goes with the agentive subject.

(4.3) A cold breeze was **blowing hard.** (**EN02**-83)

*b. V[Figure Path]*

There are 61 verbs of English manner verbs found in the data, making up 21.6 %, which have two arguments, namely the Figure and the Path. This structure denotes the style of motion *bounce* and its direction *up and down* as in (4.4).

(4.4) The opponent is **bouncing** *up and down*. (**ES07**-75)

The arguments are the Figure *the opponent* which is the Agent of motion and the Paths are the particles *up and down* whose roles are to denote the directions of the Figure. Then, this motion event is conceptualized as a configurational event because it is concerned with the spatial properties and an unbounded event in terms of the extent of space. It is clear that the Manner of motion as well as direction are far more prominent elements than the Figure.

*c.V[Figure Figure]*

This structure consists of arguments which are the two Figures. These Figures are both objects which are simultaneously moving in the same direction, but at different speeds. Syntactically speaking, the second Figure functions as a direct object; as a result, the manner verbs must be transitive verbs. One manner verb "*outrun*' was found in English with these two arguments, making up 0.35 %. The verb *outrun* denotes that one Figure is simultaneously moving with another Figure. However, the first Figure *"I"* may be moving faster and past the second Figure "*him*" as in (4.5).

(4.5) I was able to **outrun** him, but I knew he was clever. (**ES10**-41)

*d. V [Figure Place]*

This structure consists of two arguments, which are the Figure and the Place. The first argument refers to the moving objects and the second argument refers to the position where the motion takes place. This structure denotes the topological conceptualization which is associated with the relationship between the Figure and the surrounding things through the $Rel_{PLACE}$ adpositions (e.g., *in, at, under, on, behind, above, over,* etc). There are 175 verbs of English manner verbs, making up 62.0% found in the data, which is the most common argument structure of LEsMM in English.

(4.6) The British troop **marched** in the parade. (**EN03**-66)

*e. V [Figure Path Ground]*

This structure has three arguments, namely the Figure, Path and Ground and consists of 79 manner verbs, occupying 28.0%. The Figure in this structure denotes the moving thing like *they* in (4.7); the Path *through* denotes the route of the Figure, and the Ground *the station* denotes the destination which the Figure is moving towards.

(4.7) They **walked through** the little town to the station. (**ES09**-175)

More specifically, the Figure in this structure could be both agentive and nonagentive subjects. However, some manner verbs can only accept agentive subjects such as *drive, jog, cycle, flip,* and *nod, etc.* and other manner verbs only accept the nonagentive verbs, which are *float, bounce,* and *swing,* etc.

Nonetheless, there is a limited number of manner verbs combining with both the agentive and nonagentive subjects, which are *fly, roll, slid* and *rush*, etc. Take the verb *fly* as an example for detailed investigation, the verb *fly* can accept the agentive subject as in (4.8a) and the nonagentive subject as in (4.8b).

(4.8) a. She's **flying** back to the States tomorrow. (**EN01**-96)

b. Her long hair was **flying** in the wind. (**ES06**-22)

f. *V [Figure Path Place]*

There are three arguments in this structure including the Figure, Path and Place as in (4.9). The Figure *he* denotes a moving object, the Path *back* denotes the direction of the

Figure, and the last element denotes the place where the motion is taking place. However, the Ground is not mentioned in this structure because the prominent information related to motion is manner, direct and place. To be more particular, the speaker's topological conceptualization partly limits the space and position of motion. There are 17 the manner verbs, making up 6.0 %, found in the data which consist of three arguments.

(4.9) He **crawled back** onto the bed. (**ES04**-290)

### *4.2.1.2. Event structures of LEsMM in English*

Table 4.2 summarizes the event structures of LEsMM in English which are grouped into four categories as follows: (i) types of event structures; (ii) types of events; (iii) lexical aspects; and (iv) the frequency of verbs.

**Table 4.2. Event structures of LEsMM in English**

| Event structures | Types of events | Lexical aspects | Verbs | % |
|---|---|---|---|---|
| a. States | Bounded<br>Punctual | Atelic<br>Perfective | 0 | 0 |
| b. Activities | Bounded / Unbounded<br>Durational | Atelic<br>Imperfective | 229 | 81.2 |
| c. Achievements | Bounded/ Unbounded<br>Punctual | Telic/ Atelic<br>Imperfective | 47 | 16.6 |
| d. Accomplishments | Bounded<br>Durational | Telic<br>Pefective | 6 | 2.1 |
| **Total** | | | **282** | **100** |

*a. Event of States*

With the characteristics such as bounded, punctual, atelic and perfective, there are no events of states found in the data because the manner verbs are the stative verbs, which do not fall within the scope of the study as non-motion verbs.

*b. Event of Activities*

This event denotes a dynamic situation which goes on in time. First, the endpoint of the verbs expressing this event is not the focus of attention. As a result, these verbs are mostly intransitive verbs (e.g., *jog, swim, walk, run).* The result shows that most manner verbs in English can express this event. The second property is imperfective, which refers to the change in terms of position or situation as in (4.10a). More particularly, when this

event has the durational property, it always requires a length of time to complete to walk across the entrance hall event as in (4.10b).

(4.10) a. Professor McGonagall was **running** toward them. (**ES08**-144)

b. Hermione was **walkin**g across the entrance hall. (**EN02**-467)

According to the data, this event has the most number of manner verbs denoting this event (229 verbs, 81.2%) (see appendix 6). It can be concluded that most stories and novels in English consist of more dynamic situations than others. To put it another way, dynamic motion events are the most popular in the stories and novels under this research investigation.

*c. Event of Achievements*

The event of achievements denoting a dynamic situation is concerned with instantaneous happening. With repect to the imperfective property, it may express a progressive motion event (*bowing*) because it takes a length of time to bow his head (punctual) as in (4.11).

(4.11) Dobby was **bowing** his head. (**ES08**-257)

More specially, the manner verbs denoting this event can be both telic and atelic. When they denote the telic events, they always refer to the endpoint or goal of motion (*the other side of the fence*) as in (4.12a). In contrast, when they express the atelic events, they refer to motion events without endpoints as in (4.12b).

(4.12) a. She **leaped** over the fence. (**ES02**-349)

b. The car **accelerated** smoothly away. (**EN04**-241)

There are 47 verbs of English manner verbs denoting this event found in the data, making up 16.6% found in the data (e.g., *bowl, clip, clump, leap,* etc) (see appendix 6).

*d. Event of Accomplishments*

First, this event is conceptualized as a bounded and durational situation. With respect to the bounded event, the speakers mostly focus on the boundaries of the motion events, in particular, its end. For example, the speakers only pay their attention to Jill's appearance at the fire, but they seem to disregard the process of Jill's movement from the starting point as in (4.13). Moreover, in order to move from the starting point to the *fire,* it takes

Jill a certain length of time to reach the destination. Thus, this event is also said to be a durational event.

(4.13) Jill **darted** forward the fire. (**EN02-**521)

More particularly, the manner verbs denoting this event of accomplishments consist of two lexical aspects, which are telic and perfective. The telic property refers to a situation of motion with an endpoint while the perfective one is concerned with an unchangeable situation according to time or a stable situation. This is because the time between the starting point and endpoint are so short that speakers cannot conceptualize them as an event. As a result, the manner verbs must be the predicate of intransitive verbs (e.g., *dribble, flick, flip* and *rush*). This event is pretty uncommon in English; there are only 6 verbs of English manner verbs, making up 2.1% found in the data.

## 4.2.2. Lexicalization patterns of LEsMM in English

Lexicalization patterns are associated with an investigation into the semantic elements conflated into the manner verbs and the spatial prepositions

### *4.2.2.1. Lexicalization patterns of the manner verbs in English*

Table 4.3 summarizes the lexicalization patterns of LEsMM in English.

**Table 4.3. Lexicalization patterns of the manner verbs in English**

| **Number of elements** / **Types of Elements** | | **Lexicalization patterns** | **Verbs** | **%** |
|---|---|---|---|---|
| 1 | Internal | a. Motion | 1 | 0.35 |
| | **Total** | | **1** | **0.3** |
| 2 | Internal | b. Motion + Manner | 244 | 86.5 |
| | | c. Motion + Ground | 4 | 1.41 |
| | | d. Motion + Figure | 2 | 0.7 |
| | | e. Motion + Concurrent result | 1 | 0.35 |
| | **Total** | | **251** | **89.00** |
| 3 | Internal | f. Motion + Manner + Ground | 5 | 1.77 |
| | | g. Motion + Manner + Co-motion | 1 | 0.35 |
| | | h. Motion + Figure+ Manner | 4 | 1.41 |
| | External | i. Motion + Manner + Concurrent result | 1 | 0.35 |
| | | j. Motion + Manner+ Vehicle | 20 | 7.0 |
| | | k. Motion + Manner + Concurrent Purpose | 0 | 0.0 |
| | **Total** | | **31** | **11.0** |
| **Total** | | | **282** | **100** |

*a. Lexicalization pattern:* ***Motion***

In this expression, the manner verbs encode only one Motion, which is the verb "*Move*". This verb is a fairly general verb whose prototypical meaning is defined in dictionaries referring to both a change of posture (i.e., self-contained motion) and a change of location (i.e., translational motion).

(4.14) Jim **moved** gladly into the shade of the gleaming kitchen. (**EN0**2-470)

*b. Lexicalization pattern:* ***Motion + Manner***

The manner verbs in this expression consist of two semantic components, namely Motion and Manner. The first component denotes the change of the Figure's position; the second component is concerned with the styles of motion. There are 244 manner verbs (86.5%) denoting these semantic components found in the data (e.g., *run, walk, jump*, etc). For example, the verb "*jump*" in (4.15) depicts that the Figure "*Dobby*" moves from one place to another and it encodes that the Figure pushes itself up into the air, or over or away from something by using its legs. Such charcteristics indicates that the Figure must be agentive subjects like *Dobby*.

(4.15) Dobby **jumped** out of reach. (**ES11**-432)

*c. Lexicalization pattern:* ***Motion+ Ground***

Four verbs (e.g., *circuit, circulate, fly and hover*) found in the data encode the two semantic components such as Motion and Ground. The first component is associated with the Figure's motion, and the second postulates the place in which the act of motion is occurring. Examining the example below, the verb like "*fly*", besides denoting the change of position, it also denotes the right place in which the motion is happening such as higher and aerial place.

(4.16) Then, we **fly** above the clouds. (**ES02**-329)

*d. Lexicalization pattern:* ***Motion + Figure***

There are two semantic components conflated into the manner verbs including the Motion and Figure. The Motion is an internal element, which refers to the Figure's motion, and the Figure is an external element, a moving object. The manner verbs with

these two components express both the Figure's motion and change of position. This pattern is found in the data with two verbs (e.g., *bow* and *nod*). More particularly, this expression is related to the motion of a body part; in particular, the Figure's back for *bow* and the Figure's head for *nod*. Therefore, the verb "*nod*" and "*bow*" denote motion and imply the Figure as in (4.17).

(4.17) Hermione **nodded** fervently, but Harry didn't say anything. (**ES12**-438)

*e. Lexicalization pattern:* ***Motion + Concurrent result***

There are two internal semantic components conflated into the manner verbs, which are Motion and Concurrent result. The first component denotes the Figure's movement, and the second component refers to the occurrence of two events generated as a result of motion. For example, the expression with the verb *crash* expresses the motion of the Figure and the result of the Figure's collision into the Ground. In addition, the concurrent result is also a result of another action or motion, which simultaneously takes place with the Figure's motion.

(4.18) He **crashed** down the stairs. (**ES03**-321)

*f. Lexicalization pattern:* ***Motion + Manner + Ground***

The manner motion verbs, namely *moonwalk*, *paddle*, *swim*, *wade* and *waft* were found in the data to denote three semantic components which are Motion, Manner and Ground. For example, the verb *moonwalk* simultaneously provides three information about that motion such as Motion (*move*), Manner (*moonwalk*) and Ground (*on the moon*) as in the example (4.19) below.

(4.19) He has **moonwalked** for an hour. (**EN03**-256)

*g. Lexicalization pattern:* ***Motion + Manner + Co-Motion***

This expression is the conflation of three semantic components including Motion, Manner and Co-Motion into the manner verbs. The motion component refers to the Figure's movement from one location to another. The Manner is concerned with the styles of motion, and the Co-motion denotes that two Figures in this expression are simultaneously moving toward the Ground. For example, the Co-Motion in (4.19)

includes two Figures "*Peggy*" and "*her*" which are simultaneously tackling motion. There is one manner verb of "*follow*" found in the data which denotes the comparison of the speed of two Figures.

(4.20) Peggy **followed** her out onto the landing. (**ES08**-341)

*h. Lexicalization pattern:* ***Motion + Figure+ Manner***

This expression denotes the type of the body-part motion (e.g., *foot, feet*, and/or *legs*) in a particular manner. The expressions with the manner verbs such as *trample*, *tread*, and *step* generally imply that their Figures are moving as performing their manners of motion, whereas the verb *stamp*, its Figure does not need to move. In addition, while *trample, stamp*, and *tread* denote a sort of forceful and violent motion as placing someone's feet down on something, which may cause damage, *stamp* can give more information of the Figure's angry way. On the other hands, *step* can be involved in the action of motion by lifting someone's foot or feet and putting it/them down again as in (4.21). It is called "*walk*" or "*go on foot*". In a nutshell, this LEsMM denote both motion and emotion.

(4.21) They **stepped** through the archway. (**ES07**-255)

*i. Lexicalization pattern:* ***Motion + Manner + Concurrent result***

This expression simultaneously denotes three semantic components, which are Motion, Manner and Concurrent result. The component of Concurrent result refers to the result generated by motion. For example, the verb *overrun* denotes the Figure is moving and spreads over the Ground in great numbers. That may be understood that the Figure may run faster than someone else and run over them.

(4.22) Tourists **overran** a group of children. (**EN02**-651)

*j. Lexicalization pattern:* ***Motion + Manner + Vehicle***

This expression denoting the ways of the Figure's movement in which the Figure is not directly involved in motion. The Motion is engendered through a kind of vehicles (e.g., *bike*, *canoe*, *boat*). Thus, the verbs in this expression are generally named after those transportation means such as *balloon, bicycle, boat*, and *bus,* etc. For example, the verb "*bike*" first denotes the Figure's motion, the Manner of motion which is to ride a bicycle

and a kind of vehicles. More particularly, the Figure for these verbs must be humans because these vehicles are generated by humans which serve humans' travelling.

(4.23) She **bikes** to work every day. (**ES12**-277)

### *4.2.2.2. Lexicalization patterns of the prepositions in English*

Table 4.4 summaries the lexicalization patterns of prepositions which illuminates the semantic components of directions lexicalized into the spatial prepositions. The lexicalization patterns are analyzed on the features of two types of prepositions, which are $Rel_{PLACE}$Ps and $Rel_{PATH}$Ps. The $Rel_{PLACE}$Ps denote static relations between Figure and Ground, which are subdivided into Projective and topological prepositions. The $Rel_{PATH}$Ps express the directional relation between Figure and Ground, which include Goal, Source and Route. In addition, this table shows the number of manner verbs that combine with each type of prepositions and their distributions.

**Table 4.4. Lexicalization patterns of the prepositions in English**

| **Lexicalization patterns** | | **Verbs** | % |
|---|---|---|---|
| a. Motion +$Rel_{PLACE}$ Ps | i. Motion + Projective $Rel_{PLACE}$ Ps + G | 37 | 13.1 |
| | ii. Motion+ Topological $Rel_{PLACE}$ Ps + G | 245 | 86.9 |
| | **Total** | **282** | **100** |
| b. Motion+ $Rel_{PATH}$ Ps | i. Motion+ Goal $Rel_{PATH}$ Ps | 114 | 40.4 |
| | ii. Motion + Source $Rel_{PATH}$ Ps | 95 | 33.6 |
| | iii. Moiton + Route $Rel_{PATH}$ Ps | 73 | 25.8 |
| | **Total** | **282** | **100** |
| c. Motion + $Rel_{PATH}$Ps + G | i. Motion + Goal $Rel_{PATH}$ Ps + G | 130 | 46.0 |
| | ii. Motion + Source $Rel_{PATH}$ Ps + G | 39 | 13.8 |
| | iii. Motion + Route $Rel_{PATH}$ Ps + G | 113 | 40.0 |
| | **Total** | **282** | **100** |

#### *a. Lexicalization Patterns: **Motion+ ReL$_{PLACE}$ Ps +G***

This expression denotes a locative relation involving the Figure, the Ground (the entity or location with reference to which Space is targeted), Space (an area defined with reference to a Ground) and Place relator (the element that denotes or fulfills the relation). The $ReL_{PLACE}$ Ps in these patterns can be subdivided into two main categories, which are the projective prepositions including *above, among, over, below, under, in front of, behind*

and *beside* and the topological prepositions including *in, inside, outside, on, at, near* and *between*.

*i. Lexicalization Patterns:* ***Motion+ Projective Rel$_{PLACE}$Ps + G***

The projective prepositions denote the location of the Figure with reference to the Ground. Relying on the speakers' view, these prepositions have different meanings (Vandeloise, 1991). That is, the location of the spatial temple's origin is dependent on the user's perception of the landmark at the time of the utterance and object occlusion is integrated into the model. There are 37 manner verbs (13.1%) which can combine with these prepositions. For example, the projective preposition "*under*" denotes the upper-lower location between the Figure "*He*" with reference to the Ground "*the bed and armchair*". The preposition "*under*" is conceptualized as a configuration to limit the scope of motion.

(4.24) He crawled **under** the bed and armchair. (**EN03**-524)

*ii. Lexicalization Patterns:* ***Motion+ Topological Rel$_{PLACE}$ + G***

The topological prepositions such as *in, on, inside, outside, at* and *near* denote place-functions in terms of the proximity between the Figure and the Ground. These prepositions are concerned with a reference object and constrained by the place-function. For example, the reference object of *in* and *inside* are conceptualized as a bounded area of a container; which the Figure is moving in it while the reference object of *outside* involves or is conceived as an unbounded area. In the case of *near*, it depicts that the Figure is moving at the nearby space, which could be the inner or outer spaces of the Ground as in (4.25). This expression is common in English, which consists of 245 verbs of the manner verbs, making up 86.8%, found in the data.

(4.25) They crept **near** Ms. Morris. (**ES06**-397)

*b. Lexicalization Patterns:* ***Motion+ ReL$_{PATH}$ Ps***

The lexicalization patterns of *ReL$_{PATH}$ Ps* denote the spatial relation between the Figure and the Ground which is mainly associated with directional relation. Based on the directions encoded in these prepositions, the lexicalization patterns of *ReL$_{PATH}$ Ps* are divided into three subclasses, namely Goal, Source and Route paths. All the prepositions

denote unbounded events because these events do not contain the Ground which is considered as an extreme point of motion.

i. *Lexicalization Patterns****: Motion + Goal Rel$_{PATH}$ Ps***

There are two goal prepositions found in the data, which denote this expression, namely "*up*" and "*dow*n". These prepositions encode three semantic components, which are a transition (the change of position), direction and delimitation (upper or lower boundary for a movement or vice versa). For example, the goal preposition "up" in (4.26) depicts that the Figure "*his friend*" moves from a lower position to a higher position with a vertical direction.

(4.26) Jumping **up** and raising his own wand, but Jim said to his friend. (**ES07**-95)

ii. *Lexicalization Patterns:* ***Motion + Source Rel$_{PATH}$ Ps***

The source prepositions in the expression include *out*, *away* and *off* which denote the change of position and direction. The preposition "*out*" depicts the motion from the inside to the outside while the source prepositions "*away*" and "*off*" mean that the Figure leaves for the distant place as in (4.27).

(4.27) Hermione marched **away** with her nose in the air. (**ES04**-521)

iii. *Lexicalization Patterns:* ***Motion + Route Rel$_{PATH}$ Ps***

The preposition "*around*" is a route preposition which refers to as a route-denoting preposition. This preposition encodes one semantic component which is a transition, but involves no direction.

(4.28) I have to fly **around**. (**ES08**-271)

c. *Lexicalization Patterns*: ***Motion + Rel$_{PATH}$Ps + G***

*i. Path relation*

The spatial prepositions which express the path relation are to denote a sequence of places or a collection of points in space, which are ordered in a linearly homogenous way (Saeed, 2016:77). In other words, these prepositions shed light on the ways how the Figure moves to the Ground. For example, *round* is a spatial preposition which expresses the path relation between the Figure (*They)* and the Ground (*corners).* That is, the Figure

and the Ground are not on the same straight line, but arch-like line, so the Figure must move in the arch-like path in comparison with the Ground.

(4.29) They hurtled **round** tight corners.

Moreover, Zwarts (2005:744) further adds that a path normally has a starting point, an endpoint and points in between. Likewise, Pinon (1993: 287) considers a path as a quantity of space that extends between a starting point and an endpoint and that is traversed by an entity. Take (4.30) as an example, the preposition *through* denotes the path relation because it implicitly expresses the starting point where the Fugure departs and the endpoint where the Figure stops and explicitly expresses the central points.

(4.30) He'd followed **through** the ticket box. (**ES11**-327)

Therefore, the lexicalization patterns with the path relators denote a movement which has a starting point and an endpoint as Figure 4.2. A presents a starting point, B presents the middle points, and C presents an endpoint. X is the object that undergoes movement and the arrow signals the direction. The path relators in English are *to, through, away from, across, from,* etc).

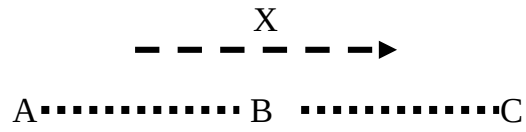



**Figure 4.2. The schematic representation of a path and its components**

When the English prepositions denote the path relation, the motion verbs of manner generally appear in the following lexicalization patterns: *V [Figure, Path]* or *V[Figure Path, Ground]*. The Ground is not mentioned explicitly as in (4.31).

(4.31) He **walked** away. (**ES07**-464)

Table 4.5 summarizes the semantic components which are Goal, Source and Route conflated into the prepositions in English to shed light on the directions of motion. Because the roles of manner verbs are to denote the Manner of motion and directions of motion are expressed by the other grammatical units that are called satettlites, Engish is categorized into the S-framed language. There are 11 prepositions in English which are classififed into three categories which denote three types of relations between the Figure and the Ground, namely Goal, Source and Route relations. There are 84 verbs of English

manner verbs which can coorperate with the goal paths, making up 29.7%, 62 verbs for the source paths, and 50 verbs for the route paths. The result shows that the expressions with the goal paths in English are the most common of all.

**Table 4.5. Path relations of the preposition in English**

| Prepositions | Types of paths | Semantic features |
|---|---|---|
| Around/ around | Route | Figure point is coincident with the Ground |
| Away | Source | Figure is separated from the Ground |
| Backward | Goal | Figure is nearing the Ground |
| Down | Goal | Figure is descending vertically the Ground |
| Forwards | Goal | Figure is heading to the ground |
| Into | Goal | Figure is entering the Ground |
| Off | Source | Figure is leaving the Ground |
| Out | Source | Figure is departing from the Ground |
| Over | Route | Figure is traversing the Ground |
| Up | Goal | Figure is moving vertically to the Ground |
| Upward | Goal | Figure is traveling in a vertical direction to the Ground |

*ii. Directional relation*

The prepositions with this relation denote the direction of movement of the Figure from location X to location Y (Saeed, 2016: 78). Syntactically, these prepositions are normally categorized into the argument structure of V *[Figure, Path, Ground]* and the event structure of Achievement. More importantly, these prepositions do not only denote directional relation but path relation as well. For example, the preposition *toward* in (4.32) simultaneously denotes the direction and path of the Figure's motion toward the Ground, and the starting point and endpoint of the Figure. There are 158 manner verbs (56.2%) found in the data, which combine with the goal paths, 87 verbs (30.85%) with the source paths, and 169 verbs (59.9%) with the route paths.

(4.32) Professor McGonagall was **running** *toward* them. (**ES04**-218)

Pantcheva (2011) identifies three semantic features of the directional prepositions, which Goal, Source and Route. There are 11 prepositions found in English which denote this relation. Table 4.6 summaries aspects of the directional prepositions in English according to three groups: prepositions, types of the path and semantic functions.

**Table 4.6. Directional relations of the prepositions in English**

| Prepositions | Types of paths | Semantic features |
|---|---|---|
| Across | Route | Figure undergoes two transitions: one side of the Ground to another. |
| Along | Route | Figure moves from one location of the Ground toward the other end of it. |
| Around / round | Route | Figure circles the Ground |
| Away from | Source | Figure moves away from the Ground |
| Down | Goal | Figure descends the Ground |
| Into | Goal | Figure enters the Ground |
| Out of | Source | Figure moves from the Ground |
| Above/ over | Route | Figure moves higher than the Ground without touching it. |
| Pass | Route | Figure undergoes two transitions: first from a location outside the Ground to the Ground, and then from the Ground to another location. |
| Through | Route | Figure moves in and again out of the Ground |
| To/ toward | Goal | Figure approaches the Ground |

## 4.3. LEsMM in Vietnamese

This section delves into semantics and syntax of LEsMM in Vietnamese. First, it deals with the construction grammar of LEsMM, which is concerned with the syntactic properties. Specifically, the argument structures of LEsMM are investigated in detail to clarify the number of arguments which can combine with the manner verbs, and event structures are also delved into to decompose the lexical aspects which are denore by the manner verbs. Second, the lexicalization patterns are investigated based on the semantic components conflated into motion verbs and prepositions.

### 4.3.1. Construction grammar of LEsMM in Vietnamese

The construction grammar deals with form-meaning correspondences referring to the rules of syntactic combination, which allow the units of language such as words or

phrases to combine together to generate bigger units of languages such as clauses or sentences. In doing so, this content will be analyzed on the basis of the theory of argument structures. In addition, the form-meaning correspondences refer to the ways of how the information of motion is formally packaged within a sentence, which will be elucidated in event structures.

#### *4.3.1.1. Argument structures of LEsMM in Vietnamese*

Table 4.7 summarises three types of argument structures in Vietnamese with regard to the number of external arguments combining the manner verbs. This table is grouped into three categories as follows: (i) the number of arguments; (ii) types of arguments; and (ii) frequency of the manner verbs.

**Table 4.7. Argument structures of LEsMM in Vietnamese**

| Number of Args | Argument structures | Verbs | % |
|---|---|---|---|
| 1 | a. V[Figure] | 65 | 29 |
| 2 | b. V [Figure Path] | 68 | 30.3 |
| | c.V [Figure Figure] | 1 | 0.4 |
| | d.V [Figure Place] | 23 | 10.2 |
| 3 | e. V[Figure Path Ground] | 62 | 27.6 |
| | f. V [Figure Path Place] | 22 | 9.8 |

*a. V [Figure]*

This expression consists of one argument functioning as the Figure. So, the manner verbs in this expression must be intransitive verbs (*e.g., bay, bay bổng, biến, bò, chảy, chạy, hụp,* etc.) There are 65 manner verbs (29%) found in the data, which have this argument structure. The Figure in this structure is occasionally an agentive subject which itself gives rise to motion as in (4.33a). In some cases, the Figure is a nonagentive subject, then LEMM is not a motion event because it is partly metaphorized or personalized, then the Figure is not the agent giving rise to motion and the verb *thổi* normally goes with the agentive subject as in (4.33b).

(4.33) a. Tôi **bơi** qua sông. (**VS04**-217)

I swam cross the river.

b. Gió **thổi** hiu hiu và thỉnh thoảng có gió giật. (**VS12**-235)

The wind blew softly sometimes strongly.

*b. V [Figure Path]*

There are 68 manner verbs (30, 3 %) such as e.g., *bạnh, bật, bệt, bò, bước, chảy, chạy*, etc found in the data, which have this argument structure. These verbs are comebined with two arguments which are the Figure and Path, so these verbs are always intransitive manner verbs. This structure denotes the Figure's motion and direction in which motion is encoded by the manner verbs and the direction by the Path. More particularly, the Path in Vietnamese may exist in both the surface forms such as verbs (*ra)* in (4.34a) and prepositions (*quanh)* in (4.34b).

(4.34) a. Hai người **nhảy** *ra*. (**VS06**-142)

The two people jumped out.

b. Những dáng núi xanh mờ suốt ngày đầy sương mù **vây** quanh. (**VS11**-184)

The green mountain was covered in the smog.

Last but not least, this argument structure of motion is conceptualized as the perspectival structure in which the satellites (e.g., *lên, xuống, tới, lại, vào, ra*, etc) play an important role in encoding the perspective direction. For example, the path-like element "*ra*" determine the direction (from the inside of the container to the outside).

(4.35) Khẩu súng từ trong bụng **văng** *ra.* (**VN03**-601**)**

The gun came out from his shirt.

*c. V [Figure Figure]*

According to the data, there is one Vietnamese manner verb (*chạy trước or vượt qua*), making up 0,4 %. This expression consists of two arguments of Figures. These two arguments are carrying out the same motion, so it means to compare the speed of two Figures. The first Figure is sometimes faster than the second Figure as in (4.36) in which the first Figure chị *vợ is* moving faster and overruns the second Figure *tay chồng.* However, sometimes the second Figure runs after the first one but later it runs faster and

overrun the first Figure. This structure may be conceptualized as the attentional system, which involves the explicit mention of space and time of a motion event.

(4.36) *Chị vợ* áo váy tơi tả **chạy trước** *tay chồng* chỉ vài bước. (**VS04**- 232)

His wife in her ragged dress ran to her husband.

*d. V [Figure Place]*

This structure consists of two arguments, which are Figure and Place. Thus, the manner verbs are the intransitive manner verbs (e.g., *bạnh, bay, bật, bệt, bò, bơi, bước, bò, bung, chành, chảy, etc.).* There are 23 manner verbs found in the data, making up 10, 2%. This structure denotes that the Figure's motion is taking place in comparison with the Ground in which the opened-class element of manner verbs (*bò*) encodes Motion and Manner while the closed-class element of prepositions (*cạnh*) encodes the configuration of motion event or the Place of the Figure in projection with the Ground such as *trong, ngoài, trên, dưới, cạnh,* and *gần*, etc. Therefore, this structure is conceptualized as the configurational system of location.

(4.37) Hoa **bò** *cạnh* Nhẫn thì thào. (**VS05**- 253)

Hoa crawed next to Nhan and whispered.

*e. V [Figure Path Ground]*

This structure consists of three arguments such as the Figure, Path and Ground, in which the Figure is moving in a certain direction toward the Ground. There are 62 manner verbs, making up 27, 6% (e.g., *bay, bò, bơi, xuống, vượt, tuột* and *tông*, etc). More specially, the Path of motion events is mapped onto independent surface forms which are the path verbs (e.g., *ra, vào, lên, xuống, qua, lại, tới* và *lui*,) or prepositions (e.g., *quanh* or *dọc theo).* As in (4.34), the Figure *những giọt nước mắt* denotes the moving object; the verb *rơi* denotes Manner and Motion, and *mu ban tay* denotes the Ground and the Satellite *xuống* denotes the direction of motion. Thus, the argument structure is conceptualized as the configurational system of direction in which the Path plays an important role in encoding the configuration of motion event and its direction as well.

(4.38) Nhưng sao giọt nước mắt **rơi** *xuống* mu bàn tay tôi. (**VS08**- 391)

Why some tears dropped down on the back of my hand.

*f. V [Figure Path Place]*

This last structure includes three arguments such as Figure, Path and Place while Ground may be implied or mentioned earlier. While Figure encodes the moving object which gives rise to motion, the Path encodes the direction. The Place encodes the configuration of motion which delimits the boundary of motion. Examine the illustrative example (4.39), the Figure *Tiền* is moving according to the Path *ra phía* in comparison to the landmark *ngoài cửa*.

(4.39) Tiền sợ hãi vội vàng **chạy** ra phía ngoài cửa. (**VS11**-108)

Tien felt scared and quickly ran out of the house.

### *4.3.1.2. Event structures of LEsMM in Vietnamese*

Table 4.8 summarizes the types of events of LEsMM in Vietnamese, which is grouped into four categories: (i) event structures; (ii) types of event; (iii) lexical aspects; and (iv) frequency of verbs.

**Table 4.8. Event structures of LEsMM in Vietnamese**

| Event structures | Types of events | Lexical aspects | Verbs | % |
|---|---|---|---|---|
| a. States | Bounded<br>Punctual | Atelic<br>Perfective | 3 | 1.33 |
| b. Activities | Bounded / Unbounded<br>Durational | Atelic<br>Imperfective | 147 | 65.6 |
| c. Achievements | Bounded/ Unbounded<br>Punctual | Telic/ Atelic<br>Imperfective | 36 | 16.0 |
| d. Accomplishments | Bounded<br>Durational | Telic<br>Pefective | 38 | 16.4 |
| **Total** | | | **224** | **100** |

*a. Event of States*

This event denotes that the manner motion does not have an endpoint (Atelic) and cannot express the progression of motion (Perfect). In addition, this event has characteristics of the bounded event in which only the endpoint of the event is focused on and punctual event which does not need the length of time to complete. However, this event is not common in Vietnamese, which consists of 3 manner verbs (1.33%) found in the data (e.g., *biến, chuồn, cút*). For example, the manner verb *chuồn in* (4.40) denotes event of states because this verb cannot express the progression of the

event (e.g, *đang chuồn*), mostly encodes the final boundary of event and does not take a length of time to complete.

(4.40) Tau với mi cũng phải tìm cách mà **chuồn** ra khỏi thành thôi. (**VN01**-1250)

You and I had to seek the ways to escape from the city.

*b. Event of Activities*

This event is the most common in Vietnamese, which has 147 manner verbs, making up 65.6% (see appendix 7). These manner verbs simultaneously denote two lexical aspects such as atelic and imperfective. First, the atelic depicts that the motion verbs in LEsMM don't consist of an endpoint, thus these verbs are always intransitive (e.g., *đi bộ* or *chạy*). Second, the imperfect is concerned with the dynamic situation in which the manner verbs are involved in the change of the Figure's position and express a motion event taking place at a point of time as in (4.41). Moreover, this event is either bounded or unbounded events in which speakers focus on both the boundary and progression of motion events. Last but not least, the event of activities is also a durational event which always takes a length of time to finish the action of "*chạy*" from one side of the forest to another side of the forest (*sang một bên bìa rừng bên cạnh*).

(4.41) Cận ôm súng **chạy** tạt sang một bìa rừng bên cạnh. (**VS07**-106)

Can brought the gun and ran to the side of next forest.

*c. Event of Achievements*

There are 36 verbs (16.0%) (e.g., *bung, chành, cập bến, chìa, duỗi, dập*, etc) in the event of achievements that denote two lexical aspects such as telic and imperfective properties. Regarding the telic property, LEsMM always have endpoints or goals (e.g., *cuốn, dập dờn* or *chồm*). Next, the imperfective property denotes dynamic situations, location change and progression of the event. Additionally, the event of achievements may be bounded or unbounded event, that is, when expressing this event, speakers may focus on either the boundary or the process of the event. Finally, the event of achievement is a punctual event which does not need a length of time to complete as in (4.42).

(4.42) Hắn **chồm** tới ôm chặt lấy người bạn**.** (**VS07**-354)

He jumped up and embraced you tightly.

*d. Event of Accomplishments*

In this event, the manner verbs denote the lexical aspects, which are telic and perfective. The telic property depicts that LEsMM always have endpoints or goals while the manner verbs with the perfective property do not express the progression of the event (e.g, *rớt, lao, búng* and *vụt*) because this event often takes place in a short time. In addition, this event is concerned with bounded and durational properties which refer to speakers' boundary limitation and the duration of the event as in (4.43). This event includes 38 manner verbs (e.g, *bật, bệt, chạy mất, chúi, đạp, giậm*), occupying 16.9%.

(4.43) Lam Dạ Ảnh **đạp** lên chân ga chạy thẳng đến bờ biển. (**VN01**-288)

Lam Da Anh pedaled and drove to the shore.

## 4.3.2. Lexicalization patterns of LEsMM in Vietnamese

This section is concerned with lexicalization patterns in which the semantic components are conflated into the manner verbs and the spatial prepositions in Vietnamese. This investigation was conducted on Talmy's (1985) theory of lexicalization, which seeks for an answer for the question *what are lexicalization patterns of LEsMM in Vietnamese?*

### *4.3.2.1. Lexicalization patterns of the manner verbs in Vietnamese*

Table 4.9 summarizes the lexicalization patterns of the manner verbs in Vietnamese in which the semantic components are conflated into the manner verbs. This table is grouped into four categories: (i) types of semantic components; (ii) LEsMM; (iii) the verbs denoting these components; and (iv) the frequency of the verbs.

**Table 4.9. Lexicalization patterns of the manner verbs in Vietnamese**

| **Number of components** / **Types of components** | | **Lexicalization patterns** | **Verbs** | **%** |
|---|---|---|---|---|
| 1 | Internal | a. Motion | 2 | 0.9 |
| | **Total** | | **2** | **0.9** |
| 2 | Internal | b. Motion + Manner | 167 | 74.55 |
| | | c. Motion + Ground | 9 | 4. 01 |
| | | d. Motion + Figure | 8 | 3.57 |
| | | e. Motion + Concurrent result | 5 | 2.23 |
| | **Total** | | **189** | **83.48** |
| | | f. Motion + Manner + Ground | 8 | 3.57 |

| | | | | |
|---|---|---|---|---|
| 3 | Internal | g. Motion + Manner + Co-motion | 1 | 0.44 |
| | | h. Motion + Figure+ Manner | 4 | 1.78 |
| | External | i. Motion + Manner + Concurrent result | 2 | 0.89 |
| | | j. Motion + Manner+ Vehicle | 11 | 4.9 |
| | | k. Motion + Manner + Purpose | 7 | 3.12 |
| | **Total** | | **33** | **14.7** |
| **Total** | | | **224** | **100** |

*a. Lexicalization pattern: **Motion***

Three manner verbs (e.g., *biến, dao động* and *di chuyển)* in the expression contain the internal component of Motion. *Biến* and *di chuyển* refer to a change of posture (self-contained motion) and a change of location (transitional motion). *Di chuyển* is conceptualized as the prototypical manner verb with the most typical meaning of motion. Last, the verb *dao động* denotes the Motion with regular changes.

(4.44) Chúng tôi đã **di chuyển** lên đây từ trước. (**VS02**-209)

We moved here in advance.

*b. Lexicalization pattern: **Motion + Manner***

This expression is the conflation of two internal elements: Motion and Manner. It is the most frequent expression of motion with 167 manner verbs (74.55.16%) found in the data Vietnamese. This expression refers to both the change of position and mode of motion (e.g,.*chạy, bò, nhảy,* etc). The verb "*bò*" in (4.45) denotes that the Figure is moving from a place to the Ground "*vị trí giặc*". In addition, it depicts that motion is very secret and gentle, but without any noise.

(4.45) Cả trung đội đang thận trọng **bò** lên tiếp cận vị trí giặc. (**VS07**-95)

The whole platoon cautiously crawled next to the opponents' position.

*c. Lexicalization pattern: **Motion + Ground***

This expression contains two semantic components in which the Motion is internal, and the Ground is external. The verbs such as *cất cánh, hạ cánh, lan truyền, ra khơi,* and *luôn chuyển,* etc found in the data denote these two components. The verb *quay*, *xoay*, and *xoắn* denote motion around, over, or along an area which remains unspecified, therefore they need overt expression in the utterance. Finally, the verbs *bay* and *bay lượn* denote the motion through the air, so *bay* and *bay lượn.* The different Figures of these verbs give

rise to various motion. In short, this expression encodes the Figure's change of position and a place that the Figure is moving toward or is located as in (4.46).

(4.46) Máy bay đang gầm rít tức tối **lượn** đảo quanh bầu trời. (**VN01**-432)

The jets were roaring and hovering in the sky.

*d. Lexicalization pattern:* ***Motion+ Figure***

This expression has two semantic components in which one is internal and another is external. The manner verbs in this expression are concerned with the motion of the human bodies, which consist of the verbs such as *cúi, gật, vẫy* and *bạnh*. Last, the manner verb *ngoe nguẩy* refers to animals' tails to denote motion with happiness. The verb "*gật*" denotes motion and the Figure "*đầu*" though it is not mentioned explicitly.

(4.47) Có có, ông cũng có nghe nói. - Cụ **gật gật**. (**VS11**-209)

Yes, I have heard that- The old man nodded.

*e. Lexicalization pattern:* ***Motion + Concurrent result***

The verbs contain two semantic components including *đâm, lao, tông, va* and *xô* in which the Motion is an internal component and the Concurrent result is an external component. The first component refers to the Figure's change of position while the other refers to as a result of the first motion. Thus, the verbs like *đâm, lao, tông* and *xô* generally encode the Figure's collision into the Ground "*đá*" as in (4.48).

(4.48) Mình mẩy **va vào** đá khi lăn xuống khe. (**VN03**-1110)

My body bumped against stones when I rolled down the valley.

*f. Lexicalization pattern:* ***Motion + Manner + Ground***

The verbs (e.g., *nhảy dây, đi cà kheo, nhảy rào, nhảy sào, bơi, nội suối* and *trèo đèo)* consist of three semantic components, which are Motion, Manner and Ground. *Nhảy dây* and *đi cà kheo* denote that the Figure is moving on the ground and with another tool. Second, *nhảy sào* and *nhảy rào* denote that the Figure jumps over an obstacle. *Bơi* encodes motion in and on water (the Figure's body is submerged in water). Next, *nội suối* denotes walking in water with noise (the part of the Figure's body is submerged). Last, *trèo đèo* encodes motion on the sloping ground (moving from a low position to a higher one). On the whole, the verbs concluding these components encode motion,

styles of motion and the Ground which the Figure is moving toward or located as in (4.49).

(4.49) Bọn trẻ đang **bơi** lội ì oạp. (**VS09**-233)

Children were swimming noisily.

*g. Lexicalization pattern:* ***Motion + Figure+ Manner***

The verbs containing these semantic components are involved in one's foot or feet as Figure which moves according to a distinct manner. The verb *bước* generally denotes that the Figure refers to the action of a walk, whereas the verbs *dậm*, *dẫm* and *đạp*, the Figure does not need to act as a walk. Furthermore, while *đạp* encodes a type of forceful and violent motion when placing somebody's foot on somebody or something, which can cause damage, the pattern with *dẫm* and *dậm* denote information with the Figure's angry manner as in (4.50).

(4.50) Hắn dậm một chân lên ngực ông cụ. (**VS10**-356)

He stamped his one leg on the old man's chest.

*h. Lexicalization pattern:* ***Motion + Manner + Vehicle***

*Bơi xuồng, chèo thuyền , đi ca nô, đi phà, đi xe bus, đi xe đạp, đi xe máy , đi taxi, đi xe trượt tuyết, đi xe ngựa, đi xe đò*, and *lái xe* are the manner verbs containing these semantic components. These verbs denote the styles of the Figure's movement in which the Figure is not directly associated with motion. The motion arises from a kind of vehicles (e.g., *ca nô, thuyền, phà, xuồng, xe đạp, xe máy, taxi, xe đò, xe ngựa* and *xe trượt tuyết*. Therefore, these manner verbs are generally named after those vehicles which are directly involved in motion.

(4.51) Nó chợt thấy có hai người **đi xe đạp** ngang qua. (**VS05**-341)

Suddently, he saw two people cycle past him.

*i. Lexicalization pattern:* ***Motion + Manner + Co-Motion***

This expression consists of three semantic components such as Motion, Manner and another motion, which are internal components. This expression refers to the change of position, the styles of motion and another motion. Take the verb *chạy trước* as an

example, it denotes that the Figure runs farther and faster than another Figure moving at the same time as in (4.52).

(4.52) Lượm **chạy trước**, các bạn líu ríu chạy theo sát sau lưng. (**VS04**-340)

Luon ran in advance, his friends chased him closely.

*j. Lexicalization pattern:* ***Motion + Manner + Purpose***

*Chạy trốn, chạy thoát, chạy đua, chạy mất, đi học, đi làm* and *đi chợ* are the manner verbs with these semantic components in which the Motion and Manner are internal and the Concurrent purpose is external. *Đi học* and *đi làm* verbs denote the motion and the action which are the final purposes of that motion. These verbs are the combinations of two verbs in which the first verb is a manner verb and the later is a dynamic verb. *Đi chợ* and *đi chùa* verbs are the combinations of the manner verbs with a place that is the destination of that motion. However, *chạy trốn, chạy thoát, chạy đua*, and *chạy mất* encode the motion and another action following that motion to achieve certain purposes. Take (4.53) as an illustrative example, the verb *chạy trốn* simultaneously denotes three semantic elements which are the manner of motion (secrete motion), motion (movement from one place to another) and Purpuse (to get safety).

(4.53) Chắc hắn bỏ **chạy trốn** về với Tây rồi. (**VS05**-107)

It is possible that he has already escaped with Tam.

*k. Lexicalization pattern:* ***Motion + Manner+ Concurrent result***

This expression with three semantic components consists of two internal components and one external component. The verb *vượt* denotes that the $Figure_1$ starts later than the $Figure_2$, after that the $Figure_2$ runs faster or overruns the other Figure. Unlike the verb *overrun* in English, the verb *rượt* implies the attempt of the Figure to overrun another Figure. In short, the expression with this verb denotes three information on that motion event which are the Motion, the style of motion and result.

(4.54) Họ phải **vượt qua** cả bọn giặc. (**VS08**-412)

They had to overrun the opponents.

### *4.3.2.2. Lexicalization patterns of the prepositions in Vietnamese*

Table 4.10 summarizes the semantic components in terms of direction and place conflated into the spatial prepositions in Vietnamese. The prepositions in Vietnamese are divided into two categories such as $Rel_{PLACE}$Ps and $Rel_{PATH}$Ps. First, $Rel_{PLACE}$Ps consists of the projective and topological prepositions. Next, $Rel_{PATH}$Ps refers to the path relations, which are the goal, source and route paths.

**Table 4.10. Lexicalization patterns of the prepositions in Vietnamese**

| **Lexicalization patterns** | | **Verbs** | **%** |
|---|---|---|---|
| a. Motion +$Rel_{PLACE}$ Ps | i. Motion + Projective $Rel_{PLACE}$ Ps + G | 58 | 25.9 |
| | ii. Motion+ Topological $Rel_{PLACE}$ Ps +G | 166 | 74.1 |
| | **Total** | **224** | **100** |
| b. Motion+ $Rel_{PATH}$ Ps | i. Motion + Goal $Rel_{PATH}$ Ps | 124 | 55.3 |
| | ii. Motion + Source $Rel_{PATH}$ Ps | 48 | 21.4 |
| | iii. Motion + Route $Rel_{PATH}$ Ps | 52 | 23.2 |
| | **Total** | **224** | **100** |
| c.Motion + $Rel_{PATH}$Ps + G | i. Motion + Goal $Rel_{PATH}$ Ps + G | 119 | 53.1 |
| | ii. Motion + Source $Rel_{PATH}$ Ps + G | 37 | 16.5 |
| | iii. Motion +Route $Rel_{PATH}$ Ps + G | 68 | 30.3 |
| | **Total** | **224** | **100** |

*a. Lexicalization patterns:* ***Motion+ $Rel_{PLACE}$Ps +G***

The lexicalization patterns of $Rel_{PLACE}$Ps will shed light on the spatial relationship between the Figure and the Ground. The place relators denote two types of relations, which are projective and topological relations as in (4.55). In this example, the preposition *trên* denotes topological relation between the Figure and the Ground because it is concerned with the upper and lower position.

(4.55) Những con dòi bò **trên** tóc Lượm. (**VS03**-87)

The maggots were crawling on Luom's hair.

*i. Lexicalization patterns:* ***Motion + Projective $Rel_{PLACE}$Ps+ G***

The prepositions denote the projective relation in Vietnamese including *ở dưới, ở trước, ở sau, ở giữa, ở bên cạnh, ở phía trên* and *ở phía dưới*. The result shows that there are 58 manner verbs (25.9%) that can incorporate with these projective prepositions. The projective prepositions express the location of the Figure *Một cánh quân Mỹ* with

reference to the Ground l*ưng đội hình của trung đoàn* as in (4.56). However, the meanings of these prepositions mostly rely on the locations of speakers'view because the different locations will result in various construals on relations between two objects in space.

(4.56) Một cánh quân Mỹ đổ xuống **sau** lưng đội hình của trung đoàn. (**VS03**-224)
A group of American soldiers came after the back of the regiment.

*ii. Lexicalization patterns:* ***Motion+ Topological Rel +G***

The topological prepositions denote a place with respect to the proximity, the upper surface, the exterior side and the interior side between the Figure and the Ground (e.g*., ở trong, bên trong, bên ngoài, ở ngoài, ở trên, ở tại* and *ở gần*) and the orientation of the Figure toward the Ground (eg., *vào, ra* , and *từ*). In Vietnamese, these prepositions can combine with 166 manner verbs, making up 74.1 % (e.g., *bay, bật, chảy* and *dạo*). The example below shows that the in-out relation between the Figure and the Ground. The preposition-like means that Figure "*Đăng*" is moving through a container "*phòn*g" to the outside as in (4.57)

(4.57) Bất ngờ đại đội trưởng Đăng đi **ra** khỏi phòng. (**VS05**-333)
Suddenly, the team leader Dang went out of the room.

*b. Lexicalization patterns:* ***Motion+ Rel$_{PATH}$ Ps***

This pattern includes two semantic components which are Motion and direction. First, apart from motion verbs denoting motion, these prepositions implicitly encode motion through expressing the Figure's change of position. Next, despite lack of Ground's location, they are inherent in encoding some certain directions.

*i. Lexicalization patterns:* ***Motion + Goal Rel$_{PATH}$ Ps***

In motion events, the goal prepositions are characterised by several properties. First, they have directions. Second, they have endpoints which are normally determined by the Ground. The starting point of the Path is not determined. This tendency is reflected in the finer distinctions made by six goal prepositions: *tới, đến, lên, xuống* and *vào* and *ra*. Both *Tới* and *đến* suggests reaching a goal with the horizontal directions while *lên* and *xuống* encode the vertical directions in which *lên* refers to an upward direction and *xuống* refers

to a downward direction. The Paths *vào* and *ra* are configurated by a certain container which is considered as the image schema of motion. There are 124 manner verbs found in the data incorporating these prepositions.

(4.58) Lượm lao **xuống.** (**VN03**-344)

Luom plunged down.

*ii. Lexicalization patterns:* ***Motion + Source Rel$_{PATH}$ Ps***

In order to interpret what semantic components are encoded by the source prepositions in Vietnamese, examine the following example.

(4.59) Tâm ngó lơ đi một chút, rồi đàng hoàng đi **ra ngoài**. (**VS10**-43)

Tam disregarded for a short time, then went **out** solemnly.

This example refers to the Figure's motion "*Tâm*" in which the verb "*đi*" denotes motion. However, the preposition-like "*ra ngoài*" denotes the path of motion which is considered as a source path because it does not include the endpoint, but its starting point. This path generally refers to the motion from the inside to the outside and vice versa. The source Paths are found in Vietnamese including *ra ngoài* và *vào trong*. There are 48 manner verbs (21.4%) found in the data combining with these prepositions.

*iii. Lexicalization patterns:* ***Motion+ Route Rel$_{PATH}$ Ps***

Apart from the goal and source Paths, the starting point and the endpoint of the route path is not determined and does have any directions. The focus is mostly placed on the middle part of motion which can be graphically represented as Figure. The prepositions like "*quanh*" and "*qua*" are the route paths in Vietnamese. There are 52 manner verbs (23.2%) found in the data combining with the route paths.


**Figure 4.3. The route path**

c. *Lexicalization patterns*: ***Motion + Rel$_{PATH}$Ps + G***

The prepositions denote the spatial relation between the Figure and the Ground including the path relation and directional relations in Vietnamese. The first relation is concerned

with the spatial relation in terms of the distance or location between the Figure and Ground. More importantly, the spatial relation deals with speakers' focus on the points of the motion such as starting points, middle points or endpoints. Next, the directional relation refers to the direction of the Figure which is moving toward the Ground. However, directions of motion mostly depend on the speaker's view. That means that different positions of speakers may lead to various conceptual structures of directions.

*i. Path relation*

Syntactically, the prepositions denoting the path relation have the argument structures as follows: *V [Figure Path]*. Nonetheless, the Ground is not mentioned because the speaker's attention may be placed on the Figure's motion, or it can be understood implicitly. More particularly, the different types of prepositions may give rise to distinct path relations. Those relations show speakers' locations as well as attention. For example, the goal paths denote the speaker's focus on the endpoints, the source paths on the starting points and the route paths on the middle parts.

Table 4.11 summarizes the semantic components of Paths such as Goal, Source or Route. There are 124 manner verbs (55.3%) combining with the goal paths, 48 verbs (21.4%) with the source paths and 52 verbs (23.2%) with the route paths.

**Table 4.11. Path relation of the prepositions in Vietnamese**

| Prepositions | Types of paths | Path relation |
|---|---|---|
| Ra | Source | The Figure is separated from the Ground |
| Lại | Goal | The Figure is nearing the Ground |
| Xuống | Goal | The Figure is descending vertically the Ground |
| Vào | Goal | The Figure is entering the Ground |
| Lên | Goal | The Figure is ascending vertically the Ground |
| Qua | Route | The Figure is traversing the Ground |
| Tới | Goal | The Figure is heading to the Ground |

*ii. Directional relation*

This expression denoting the directional relation has the pattern in terms of syntactic property as follows: *V[Figure Path Ground]*. This expression expresses the spatial

relation in terms of directions. In other words, this expression illuminates the motion direction of the Figure from the location X to the location Y. The directional relation between the Figure and the Ground consists of three types of Paths such as Goal, Source and Route. The result shows that there are 119 (53.1%) manner verbs combining with the goal prepositions, 37 manner verbs (16.5%) with the source prepositions and 68 verbs (30.3%) with the route prepositions. Table 4.12 summarizes the directional relation of the prepositions in Vietnamese.

**Figure 4.12. Directional relation of the prepositions in Vietnamese**

| Prepositions | Types of path | Directional relation |
|---|---|---|
| Qua | Route | The Figure undergoes two transitions: one side of the Ground to another |
| Dọc theo | Route | The Figure moves from the location of the Ground toward the other end of it |
| Quanh | Route | The Figure circles the Ground |
| Ra (khỏi) | Source | The Figure moves away from the Ground |
| Hướng đến | Goal | The Figure approaches the Ground |
| Xuyên qua | Route | The Figure moves in and again out of the Ground |

## 4.4. Discussion and conclusion

This section deals with the discussion of the major similarities and differences of LEsMM in English and Vietnamese. This discussion was conducted on the semantic components conflated into the manner verbs in the two languages. The comparative study was conducted in the methodology of the quantitative approach.

### 4.4.1. Lexicalization patterns of manner verbs in English and Vietnamese

Table 4.13 summarizes the lexicalization patterns of the manner verbs in English and Vietnamese in terms of the conflation of semantic components. On the whole, there are no big differences in the lexicalization patterns of LEsMM between English and Vietnamese from the statistical perspectives. LEsMM in Vietnamese have all 11 lexicalization patterns, but LEsMM in English do not consist of the lexicalization pattern: *Motion + Manner + Concurrent Purpose*. This distinction takes place in Vietnamese is

because these semantic components are conflated into so-called phrasal verbs such as the verb –verb phrases (e.g., *đi câu, đi học, đi làm*, etc), or the verb-noun phrases (e.g. *đi chợ, đi chùa*, etc). In these phrases, the component of Motion and Manner are lexicalized into the verb '*đi*' while the component of concurrent purpose is rendered into either the verbs such as *câu, học, làm* or the nouns such as *chợ, chùa*.

**Table 4.13. Lexicalization patterns of the manner verbs in English and Vietnamese**

| Number of elements / Types of Components | | Lexicalization patterns | English verbs | Vietnamese verbs |
|---|---|---|---|---|
| 1 | Internal | a. Motion | 1 | 2 |
| | **Total** | | **1** | **2** |
| 2 | Internal | b. Motion + Manner | 244 | 167 |
| | | c. Motion + Ground | 4 | 9 |
| | | d. Motion + Figure | 2 | 8 |
| | | e. Motion + Concurrent result | 1 | 5 |
| | **Total** | | **251** | **189** |
| 3 | Internal | f. Motion + Manner + Ground | 5 | 8 |
| | | g. Motion + Manner + Co-motion | 1 | 1 |
| | | h. Motion + Figure+ Manner | 4 | 4 |
| | External | i. Motion + Manner + Concurrent result | 1 | 2 |
| | | j. Motion + Manner+ Vehicle | 20 | 11 |
| | | k. Motion + Manner + Concurrent Purpose | 0 | 7 |
| | **Total** | | **31** | **33** |
| **Total** | | | **282** | **224** |

The most typical similarity between two languages is that the lexicalization patterns: *Motion + Manner* and *Motion + Manner+ Vehicle* occupy the biggest number of the manner verbs. In particular, the first pattern makes up 244 verbs in English and 167 verbs in Vietnamese, and the second pattern consists of 20 verbs in English and 11 verbs in Vietnamese.

Syntactically speaking, there is a disparity in Vietnamese in which two motion verbs can take place in a motion event in which both verbs can serve as the main verb in a sentence as in (4.60a). However, each verb can stand alone as the main verb in a sentence as in (4.60b) and (4.60c). When they are separated, they will not express the meaning of the original sentence. The first verb is always the manner verb such as, *trôi*, *chạy*, *bơi* and *đi bộ*, and the second verb will be the path verb, which are *vào*, *lên*, *xuống* and *qua*, etc. An example was taken from Talmy (2000b:42).

(4.60) a. Cái chai **trôi vào** trong động. The bottle floated into the cave.

b. Cái chai **trôi** trong động. The bottle floated in the cave.

c. Cái chai **vào** trong động. The bottle entered the cave.

### 4.4.2. Argument structures of LEsMM in English and Vietnamese

The comparative study in terms of argument structures shows various ways of the speakers' knowledge of LEsMM from the perspective of the syntactic properties in two contexts. Chart 4.1 below presents the disparity in terms of the quality and types of arguments combining with the manner verbs in the two languages. The chart shows that there are no considerable differences among argument structures such as *V [Figure Figure]*, *V [Figure Satellite Place]*, *V [Figure Path Ground]*, and *V [Figure Satellite]* in English and Vietnamese. However, there is a short-cut disparity in the argument structures such as *V [Figure Place]* and *V [Figure]* in which the speakers of English are prone to use the arguments of the Figure and Place with the manner verbs much more than the Vietnamese speakers. There are 175 manner verbs used with the arguments of Place in English while 23 manner verbs with the Place are used in Vietnamese. Likewise, 118 verbs with the Figure in English, but 65 verbs used with the Figure in Vietnamese.

In short, throughout argument structures of LEsMM, a conclusion can be drawn out is that the speakers of English tend to express manner motion in relation to surrounding objects much more Vietnamese speakers do. In addition, the speakers in both contexts rarely use two arguments of the Figure to denote manner motion, just one manner verb with this structure was found in the data.

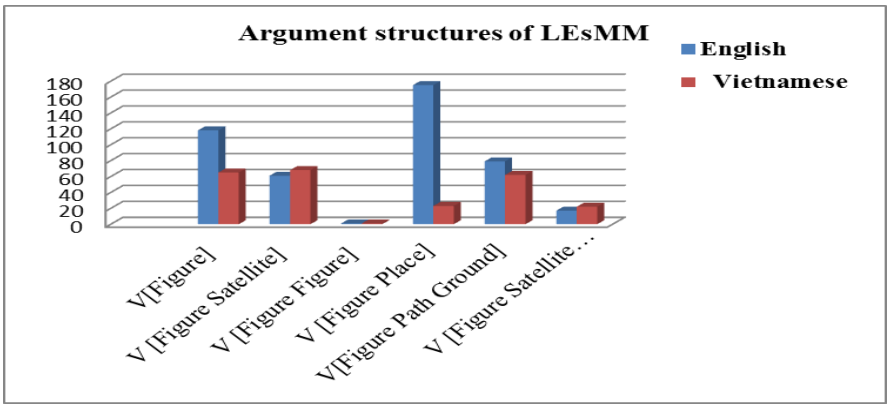



**Chart 4.1. Argument structures of LEsMM in English and Vietnamese**

### 4.4.3. Event structures of LEsMM in English and Vietnamese

Table 4.14 summarizes the manner verbs used to denote 4 types of events in English and Vietnamese. On the whole, there is a considerable similarity in using several manner verbs to express events such as Activities, Achievements and Accomplishments in two contexts. The most noticeable point is that both English and Vietnamese speakers use the event of Activities to denote manner motion most (229 for English and 147 for Vietnamese). This can be explained that LEsMM with this event does not consist of endpoints (e.g., *run, jog, swim,* etc) and it can be utilized to express a continuous action of motion as in (4.61) in Vietnamese.

(4.61) Các anh **đang chạy** trên những ngọn đồi trọc. (**VN03**-842)

They were running on the bare hills.

However, it is easy to recognize the biggest disparity of LEsMM between two contexts is that there are no manner verbs used to express the event of States in English, meanwhile, there are three manner verbs in Vietnamese found in the data to express this event. Perhaps, the English speakers cannot express motion which takes place in an extremely short time such as *drop, fall, collapse*, etc, whereas, this event still exist in the Vietnamese context.

**Table 4.14. Event structures of LEsMM in English and Vietnamese**

| Event structures | Types of event | Lexical aspects | English verbs | Vietnamese verbs |
|---|---|---|---|---|
| a. States | Bounded Punctual | Atelic Perfective | 0 | 3 |
| b. Activities | Bounded / Unbounded Durational | Atelic Imperfective | 229 | 147 |
| c. Achievements | Bounded/ Unbounded Punctual | Telic/ Atelic Imperfective | 47 | 36 |
| d. Accomplishments | Bounded Durational | Telic Pefective | 6 | 38 |
| **Total** | | | **282** | **224** |

### 4.4.4. Dual and Single Functionality of the Paths in Vietnamese

There are 15 Paths in Vietnamese, which can be both prepositions such as *quanh, dọc theo, trên* and verbs such as ra*, vào, lên, xuống, tới, lại, sang, qua, về, đến.* When the Paths are prepositions which generally function as satellites, the Vietnamese language is the satellite-framed language. However, these Paths are only the route paths which clarify the properties of paths of motion, but they do not specify an endpoint of motion as the preposition *quanh* in (4.62).

(4.62) Gạch lại tới tấp rơi **quanh** mình nó. (**VS06**-241)

Brick felt around him continuously.

As a result, the Path *quanh* can only function as a preposition, it cannot stand alone as the manner verbs as in (4.63).

(4.63) Gạch **quanh** mình nó. (**VS10**-98)

Brick around him.

When they can be both prepositions and verbs including *vào, lên, xuống, tới, lại, sang, qua, về, đến* as in (4.64).

(4.64) Con mèo **nhảy qua** của sổ. (**VN03**-236)

The cat jumped over the fence.

This observation leads to two possibilities for how to correctly parse as in example (5.28). One possible interpretation of the example sentence is that *nhảy qua* is a serial verb construction, with one the manner verb and one the path verb. In this case, the path verb *qua* would reveal that Vietnamese is a verb-framed language; similar to the English verbs such as *enter, ascend, descend*, etc; but, the verb *nhảy* would equally show that Vietnamese is a satellite-framed language, similar to some English verbs such as *swim, jump, walk, float*, etc. The second possible interpretation is that *nhảy qua* is a series of prepositions. In this case, *qua* is a satellite to accompany the manner verb *nhảy*, and this indicates that Vietnamese is a satellite-framed language. It has been shown that both types of frame are possible in Vietnamese. Therefore, a further look must be taken into complex sentences to determine whether motion verbs in Vietnamese can be categorized

as generally verb-framed or generally satellite-framed and whether serial prepositions can provide an easy answer to the problem.

### 4.4.5. Invariability of the Paths in English

Compared to the Vietnamese Paths, there are 17 Paths in English, which have invariable positions in a sentence. To put it simply, these Paths cannot be separated from the manner verbs like the preposition *down* in (4.65).

(4.65) When he was dressed he jumped **down** the hall into the kitchen. (**ES08**-76)

The role of the verb *jump* in this sentence is to denote the manner of motion and the semantic element of direction is mapped onto the surface form of the preposition *down*. The prepositions in English have only one function as satellites, so English is always determined as Satellite-language.

## 4.5. Summary

First, this chapter is a summary of the exploration of LEsMM in English and Vietnamese. This exploration was conducted in the methodology of description in the light of semantic and syntactic properties of LEsMM. In terms of semantics, the lexicalization patterns of LEsMM were brought to light through the semantic components conflated into the manner verbs and prepositions to constitute a motion event. In addition, the event structures were also analyzed to shed light on how the speakers in two contexts express motion through their knowledge and experience of motion. This analysis was carried out through the decomposition of 4 types of events on the basis of lexical aspects.

More particularly, the comparative study provided the researcher with a panorama about similarities and disparities of LEsMM between two languages. The comparison between lexicalization patterns of LEsMM in two languages points out the different ways of expressing manner motion through semantic components. Besides, construction grammar of LEsMM in English which was compared with one in Vietnamese would illuminate speakers' expressions of motion in different manners through different conceptualization on motion in these two contexts.

# Chapter 5

# LEXICAL EXPRESSIONS OF PATH MOTION

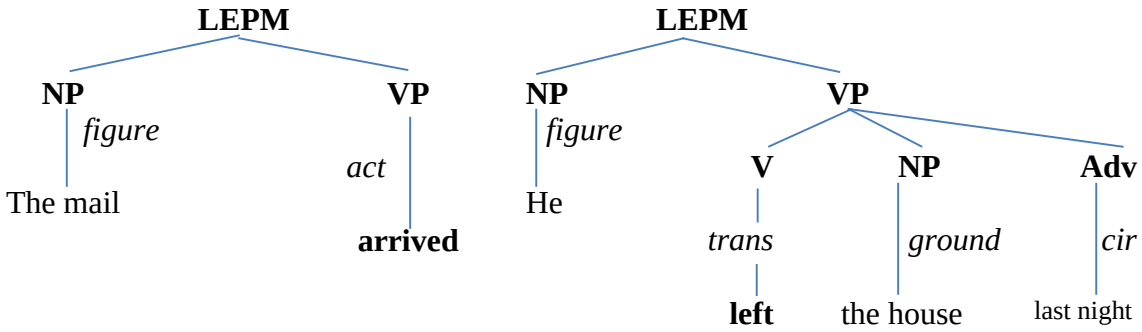
## 5.1. Introduction

From the definition of the LEsM and the linguistic properties of the path verbs, a definition of *LEPM may* be supposed as follows: "A LEPM *can be a word, phrase, or sentence, which contains a conceptual category of path motion verbs and its arguments denoting motion,* and schematized as follows.

| **A Lexical Expression of Path Motion** | | | |
|---|---|---|---|
| **Subject** | **The predicate of path motion** | | |
| | VP | | Periphery |
| *He* | *left* | *the house* | *early last night* |
| Figure | Motion, path | Ground | Circumstance |
| Arg1 | V | Arg2 | Arg3 |
| **A path motion event** | | | |

**Figure 5.1. The Schematization of LEsPM**

Syntactically, this section is involved in the arrangement of components with the path verbs which are argument structures. This analysis of these structures helps determine the syntactic properties of LEsPM in English and Vietnamese. In addition, this section involves event structures of LEsPM through an exploration of lexical aspects of the path verbs in English and Vietnamese.




Semantically, LEsPM are analyzed based on the lexicalization patterns which illuminate semantic components lexicalized into the path verbs.

## 5.2. LEsPM in English

This section is concerned with semantic and syntactic properties in English. For the syntactic properties, this dissertation will be explored on the basis of the theory of grammar construction, which deals with form and meaning relation. This relation includes argument structures and event structures. In the case of semantic properties, the lexicalization patterns of the verbs and prepositions will be elucidated.

### 5.2.1. Construction grammar of LEsPM in English

Fried & Boas (2005:1) clarify this notion of the grammar construction as follows: "Construction grammar is a linguistic form which is intractably bound with its meaning and its communicative function and that this connection must be the basis for any descriptively and explanatorily adequate theory of linguistic structure". Therefore, this section focuses on the exploration of the correspondences of syntactic properties of path verbs in LEsPM.

#### *5.2.1.1. Argument structures of LEsPM in English*

The argument structures in English revolve speakers' knowledge of LEsPM in which speakers can know different types of arguments incorporating with the path verbs. Table 5.1 summarizes types of argument structures. This table is grouped into three categories as follows: (i) number of arguments; (ii) types of argument structures; and distributions of each type.

**Table 5.1. Argument structures of LEsPM in English**

| Number of Args | Argument structures | Verbs | % |
|---|---|---|---|
| 1 | a.V [Figure] | 50 | 52.63 |
| 2 | b. V [Figure Place] | 13 | 13.6 |
| | c. V [Figure Ground] | 49 | 51.6 |
| | d. V [Figure Path] | 11 | 11.6 |
| 3 | e. V [Figure Ground Manner] | 5 | 5.2 |

*a. V [Figure]*

The argument structure consists of one argument of the Figure. Therefore, these path verbs in these structures must be always intransitive verbs. They do not denote translational motion but acts of motion because the Ground may be implied or mentioned earlier. There are 50 path verbs (52.63%) found in the data (e.g., *advance, alight, arise, approach, arrive, back, circle, come, crash, crumble,* etc*).*

(5.1) He hadn't expected that they **arrived.** (**ES08**-154)

*b. V [Figure Place]*

The path verbs have two arguments, which are the Figure and the Place. While the Figure refers to a moving object, the verbs are involved in denoting the appearance of the Figure at given places after leaving somewhere and acts of motion rather than denoting translation of the Figure. Thus, the path verbs may be inclined to denoting volitional motion because it is quite vague in terms of styles of motion and vehicles, etc as in (5.2). The roles of the Place (*in the kitchen*) in this structure are to shed light on the spatial relationship of the Figure with other objects. In other words, the Place encodes the perspective system of the location of motion events. There are 14 path verbs (14.73 %) found in the data (e.g., *arrive, ascend* and *collapse, etc),* which have these arguments.

(5.2) Dudley **arrived** in the kitchen with his mother (**ES12**-367)

*c. V [Figure Ground]*

There are 49 path verbs with two arguments, making up 51.57%, found in the data (e.g., *abandon, alight, approach, back, chase, circle, come, cross and crumple,* etc*).* The first argument is the Figure denoting a moving thing and the other is the Ground denoting the destination of motion or landmark. Therefore, path verbs must be transitive and translational verbs. Depending on the locations of the Ground in comparison with the Figure, the path verbs denote different types of directions. For instance, if the Ground is in an outside position in comparison with the Figure, the verb *enter* in (5.3) will denote the direction of towards the ground, etc. As a result, the Ground may be conceptualized as a configuration of the perspectival direction for motion events.

(5.3) He was the first to ***enter*** the room. (**ES06**-428)

*d. V [Figure Path]*

The 11 path verbs (11.6%) found the data, which have two arguments: the Figure and the Path (e.g., *ascend, climb, descend, ford, mount, pass, plunge, plummet, scale, shiny* and *tail*). Unlike the structure *V [Figure Ground]*, the Ground truthfully functions as the Path for the Figure because it is not really an endpoint of the Figure, but the Figure moves along the Path from a starting point to an endpoint of the Path as in (5.4). Generally, the path verbs in this structure denote motion along the path with different directions of motion. The verbs such as *ascend, climb, mount, shinny,* and *scale* denote the upward Path, whereas, *descend, plunge,* and *plummet* denote the downward Path. Finally, the verb *pass, ford,* and *tail* denote the horizontal Path.

(5.4) They joined the crowds ***descending*** the staircases. (**EN01**-245)

*e. V [Figure Ground Manner]*

In this structure, the path verbs have three arguments, which are the Figure, Ground and Manner. Therefore, the verbs are transitive and translational. The argument of Manner refers to the motion of vehicles which illuminate the styles of the Figure's motion because the Manner of motion is not included in these path verbs as in (5.5).

(5.5) John ***departed*** Boston *by car*. (**ES12**-136)

Next, the argument of the Figure carries out an act of motion by transportation means, the Figure must be an agentive subject as *John*. Finally, the role of the Gound (*Boston*) is to form the configuration of perspectival directions (e.g., *down, up, forward, toward,* etc) for the Figure. The structure includes 5 path verbs (5.2%) found in the data (e.g., *depart, come, leave* and *go*).

### *5.2.1.2. Event structures of LEsPM in English*

The event structures are concerned with what type of situation or event that the predicate of LEsPM denotes and they are involved in a radical exploration on the aspectual properties of the path verbs. This can be explicated that verbs denote sets of events and are classified into lexical subclasses depending on the properties of the events in their denotations in correlation with that particular description (Rothstein, 2004:4). From

another aspect, events are necessarily tied to change, either changing themselves or bringing about a change in the entities associated with them (Frawley, 2009:142). Table 5.2 summarizes the types of event structures in English.

**Table 5.2. Event structures of LEsPM in English**

| Event structures | Types of events | Lexical aspects | Verbs | % |
|---|---|---|---|---|
| a. States | Bounded Punctual | Atelic Perfective | 0 | 0 |
| b. Activities | Unbounded Durational | Atelic Imperfective | 47 | 49 |
| c. Achievements | Unbounded Punctual | Telic/ Atelic Imperfective | 38 | 40.0 |
| d. Accomplishments | Bounded Durational | Telic Pefective | 10 | 10.5 |
| **Total** | | | **95** | **100** |

*a. Events of States*

In this event structure, the verbal predicates denote unchanging situations of the Figure and have perfective properties which are continuous over the whole period. As a result, there are no path verbs found in the data.

*b. Event of Activities*

The path verbs of this event have two lexical aspects, which are imperfective atelic. The first property encodes the progressive situations of events while the second property depicts that they are intransitive verbs because they do not denote endpoints as in (5.6).

(5.6) The apples are beginning to **drop** from the trees. (**ES10**-398)

In addition, this event refers to unbounded and durational events which do with the boundary of the event and the length of time to complete the event. At this point, when expressing this event, speakers normally pay their attention to the whole process of event including the starting point and endpoint. There are 47 path verbs denoting this event were found in the data (e.g., *alight, arise, arrive, climb, collapse, come, depart, disembark, dive, drop,* etc). When the path verbs with the imperfective property, they often denote the change of position at the given time. However, some verbs such as

*drop, fall, collapse* and *dive* do not have this property because they cannot last the change of the Figure.

*c. Event of Achievements*

The path verbs denoting this event have telic properties because they denote dynamic situations with a terminal point. The example (5.7) is as an event of Achievements in which the event is over when the Figure is at the market.

(5.7) They **reached** the market. (**EN03**-568)

Additionally, this event also refers to unbounded and punctual properties depicting that speakers focus on the whole process of the event both the starting point and endpoint. The punctual property means that the event does not take a length of time to complete because this event normally takes place a short time. There are 38 verbs of the English verbs of path motion denoting these types of events (40%), which are *abandon, approach, ascend, back, descend , dismount, distance, divert, emanate, ford, forge, get, hound, immigrate, lunge, pursue, reach, scale, shadow, recoil, tail, traverse.*

*d. Event of Accomplishments*

The event of Accomplishments denoted by the path verbs is dynamic situations which are conceived as a progressive situation. The path verbs denoting the event of Accomplishments normally refers to the terminal points of motion (e.g., *drop, collapse, fall*). More particularly, the event of Accomplishments can be thought of instantaneous changes in the Figure. For example, the event of the verb *drop* denotes a change from a higher position (*apple tree*) to a lower one (*the ground*) as in (5.8).

(5.8) The apples are beginning to **drop** from the trees. (**EN03**-271)

The perfective property depicts that this event cannot be expressed in a progressive situation because the action of this event generally takes place rather abruptly and takes a very short time. There are 10 verbs of English verbs of motion denoting these events found in the data such as dive, *drop, collapse, fall.*

## 5.2.2. Lexicalization patterns of LEsPM in English

This section deals with lexicalization patterns including (i) lexicalization of semantic components (SC for short) conflated into the path verbs and (ii) lexicalization of directions conflated into verbs.

### *5.2.2.1. Lexicalization patterns of SC the path verbs in English*

Table 5.3 summarizes the conflation of SC into the path verbs, which are termed as lexicalization patterns. This table is grouped according to four contents: (i) the number of SC conflated into the path verbs; (ii) types of SC conflated into the path verbs; (iii) distribution of the path verbs; and (iv) frequency of each type of lexicalization patterns. According to the result, there are 95 path verbs found in the data in English.

**Table 5.3. Lexicalization patterns of the path verbs in English**

| **Number of components** / **Types of components** | | **Lexicalization patterns** | **Verbs** | **%** |
|---|---|---|---|---|
| 2 | External | a. Motion +Path | 65 | 65.2 |
| | **Total** | | **65** | **65.2** |
| 3 | External | b. Motion + Path + Manner | 25 | 26.3 |
| | | c. Motion + Path + Ground | 5 | 5.2 |
| | **Total** | | **30** | **31.8** |
| 4 | External | d. Motion + Path+ Ground+ Manner | 3 | 3.1 |
| | **Total** | | **3** | **3.1** |
| **Total** | | | **95** | **100** |

a. *Lexicalization patterns :* ***Motion + Path***

This expression makes up the biggest number of the path verbs in English, which are 65 verbs, making up 65.2% (e.g., *separate, shadow, sink, stray, submerge, swerve, tack, transit, and turn, etc*). This expression comprises of two semantic components which are the Figure's motion and the Path. For instance, the verb *approach* in (5.9) simultaneously denotes the movement of the Figure *they* and the distance from the starting point to the destination, which is the Ground *the giant heads.*

(5.9) They ***approached*** the giant heads. (**ES11**-41)

*b. Lexicalization patterns :* ***Motion + Path + Manner***

When expressing a motion event, these path verbs simultaneously encode three semantic components, which are Motion, Path and Manner. There are 25 path verbs (26.3 %) found in the data (e.g., *charge, chase, climb, dive, plunge, plummet, plunge, and tumble,* etc). In general, these verbs denote information about the directions of motion and how the Figure moves. The verbs such as *charge, lunge, plunge*, and *pounce* denote the sudden movement of the Figure towards the Ground, usually in a forceful or violent way at fast speed and plunge and *lunge* can also show off agentive behavior.

While *thrust* expresses an effortful forward motion, the verbs *(*e.g., *chase stalk, tail, track* and *trail)* denote motion of the Figure which is moving slowly after another, usually in contact with the Ground. *Chase* denotes a fast movement, whereas *stalk, tail,* and *track* denote that the Figure follows the other Figure furtively in a secretive manner.

The following verbs (e.g, *scram, slink, skedaddle*, and *stampede*) denote that the Figure is moving away from the Ground. While *scram* and *skedaddle* denote the movement of the Figure at high speed, *slink* means that the Figure moves in a furtive manner so as not to be noticed. The path verb *stampede* means that the Figure goes away quickly because it is frightened.

Finally, *dive, plummet, soar*, *rocket*, tumble and *climb* denote that the Figure is moving with respect to the vertical axis. While *plummet* and *tumble* denote downwards movement at a high speed, *rocket* and *sour* express quick upwards movement. More particularly, *climb* depicts an upwards movement onto the Ground in clambering way by using one's legs and hands as in (5.10).

(5.10) Harry had been **climbing** school buildings. (**EN01**-521)

*c. Lexicalization patterns :* ***Motion + Path + Ground***

This expression is the conflation of three semantic components in which there are two internal components (motion and path) and one external component (Ground). There are 5 verbs of the English path verbs (5,2%) in this expression found in the data (e.g., *disembark, embark, emigrate, immigrate* and *land*. *Disembark* and *embark).* These verbs depict the change of the Figure in terms of position. *Disembark* denotes a change of

position from a lower place up to a higher one, whereas *embark* means a change of position from a higher place to a lower one. The Ground is conflated into these verbs; it is normally a ship, vessel, or boat as in (5.11).

(5.11) Passengers should assemble in the lounge before **embarking**. (**ES07**-249)

More specially, *emigrate* and *immigrate* denote that one moves away from his/ her country or into another country respectively. Finally, *land* depicts that the Figure moves downwards the Ground from a higher place to a lower place which is considered as the endpoint of the motion. In addition, this verb also denoted that the Figure has moved through the air before landing on the ground.

*d. Lexicalization patterns :* ***Motion + Path + Ground+ Manner***

This expression with the components such as Motion, Path, Ground, and Manner consists of three verbs of English path verbs (3.1%) which include *skydive, ford*, and *swoop*. *Skydive* denotes a sport of jumping [Manner] from a plane, falling through the sky [Path] before opening a parachute and reaching the land [Ground]. *Ford* denotes that someone crosses [Path] a body of water [Ground] by wading or walking [Manner] with difficulty. Finally, *swoop* refers to a quick motion [Manner] through the air [Ground] especially down [Path] from the height in order to attack as in (5.12).

(5.12). The horses **forded** the river without any problems. (**EN03**-301)

### *5.2.2.2. Lexicalization patterns of directions into the path verbs in English*

Table 5.4 summarizes the 13 types of paths lexicalized into the path verbs, ranked by their frequency of the paths. These patterns are analyzed with respect to three contents: (i) types of path; (ii) the path verbs; and (iii) distribution of path verbs.

**Table 5.4. Lexicalization patterns of directions into the path verbs in English**

| Lexicalization patterns | Verbs | % |
|---|---|---|
| a. Motion+ Away from G | 19 | 20 |
| b. Motion+ Up/ Onto G-Upwards | 11 | 11.6 |
| c. Motion+ After G | 6 | 6.3 |
| d. Motion+ Change direction | 4 | 4.2 |
| e. Motion+ Down from/ to G- Downwards | 21 | 22.1 |

| | | |
|---|---|---|
| f. Motion+ To/ towards G | 6 | 6.3 |
| g. Motion+ Back to G/ Backwards | 6 | 6.3 |
| h. Motion+ Pass/ Cross G | 3 | 3.1 |
| i. Motion+ Into G | 4 | 4.2 |
| j. Motion+ Closer to G | 2 | 2.1 |
| k. Motion+ Forwards G | 7 | 7.3 |
| l. Motion+ Out of G | 1 | 1.0 |
| m. Motion+ Multiple directions | 5 | 5.2 |
| **Total** | **95** | **100** |

*a. Lexicalization patterns:* ***Motion+ Away from G***

There are 19 path verbs (20%) found in the data denoting this path (e.g., *go*, *abandon*, *depart*, and *stray*, etc). These verbs depict that the Figure leaves away from the Ground and leaves the Ground (as direct object) behind. It may be on its own as in (5.13a) and in a bad situation as in (5.13b).

(5.13) a. He had mercifully ***abandoned*** his bunches. (**ES08**-412)

b. I was terrified they would ***desert*** me the moment. (**ES12**-371)

More precisely, the Figure is fleeing from the Ground in order to be free or to avoid danger (e.g. *escape* and *retreat*). The verb *dodge* means that the Figure avoids the Ground by moving quickly to one side. Finally, this pattern denotes that the Figure goes away from the intended path as in (5.14)

(5.14) Three of the soldiers ***strayed*** into enemy territory. (**ES03**-214)

*Depart*, and *leave* are considered to be the most general in meaning when they express the movement of the figure away from the Ground. Apart from *depart* and *leave*, the verb *go* simultaneously denotes three different senses. First, the pattern with *go* means that the Figure is moving away from the speaker or from the point at which he mentally places himself as in (5.15a). Next, the Figure is moving towards a place which is not occupied by the speaker as (5.15b). Last but not least, the Figure is moving without regard to its point of departure or destination as in (5.15c).

(5.15) a. But the other night they ***went to*** a carnival at Amphi. (**ES10**-216)

b. Harry ***went*** back to the kitchen. (**ES04**-179)

c. They ***went*** to sleep. (**ES11**-43)

*b. Lexicalization patterns:* ***Motion+ Up/ Onto G-Upwards***

There are 11 path verbs (11.6%) found in the data (e.g., *ascend, climb, disembark, mount, rise, scale, shinny, soar*, and *surface*, etc*).* The path verbs such as *arise, ascend, and rise* denote that the Figure is moving towards a higher position relative to the land in the vertical direction as Figure 5.2a, whereas *disembark* also means that the Figure moves from a place to a higher one, but in the slanting direction as Figure 5.2b.

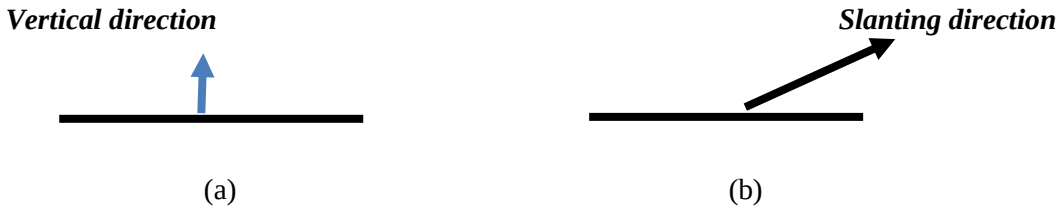



**Figure 5.2. The trajectory of arise, ascend and rise**

*Mount, climb, scale* and *shinny* denote elevation and upward motion, but onto the Ground. More particularly, the Ground functions as the path as in (5.16).

(5.16) He ***mounted*** the stairs and looked around him slowly. (**ES09**-318)

Finally, *Surface* denotes a quite particular motion. The pattern with *surface* denotes that the Figure is moving upwards the Ground but in the water. The distance from departure to the destination in this pattern is determined because the Ground is the surface of water.

*c. Lexicalization patterns:* ***Motion+ After G***

The path verbs found in the data include 6 verbs (6.3%), which are *chase, follow, hound, pursue* and *shadow*. In general, this verbs denotes that one Figure is moving behind or after another Figure. While *follow* depicts the path of motion without specific information related to motion, the verbs such as *chase, hound, pursue, and shadow* do not only express motion and path but provide further semantic meanings. For instance, *hound* implies motion with the Figure's relentless pursuit of the second Figure as in (5.17a). *Pursue* means that the first Finger considered to be the chaser is moving after the second Figure with a specific purpose, which may be to capture or kill the second Figure. Next, *shadow* implies the first Figure's secretive movement after the second Figure to observe

the second Figure's actions as in (5.17b). Finally, *chase* implies the Figure's speed and attempt to keep pace with the second Figure for a certain purpose.

(5.17) a. It would be indeed ***hounding*** him forever. (**ES08**-172)

b. Detectives ***shadowed*** him for weeks. (**ES11**-294)

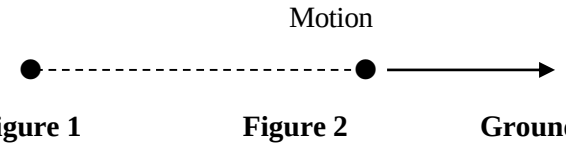



**Figure 5.3. Simultaneous motion of the path verbs**

*d. Lexicalization patterns:* ***Motion+ Change direction***

The path verbs denote the directional changes of the Figure, which consist of 4 path verbs (4.2%) found in the data (e.g., *divert, swerve, tack,* and *turn).* The verbs *tack* denotes the change of the course of a sailing ship so that the wind blows against its sails from the opposite direction. *Divert and swerve* and *turn* purely denote the change of direction of any Figures

(5.18). Scrimgeour **turned** slowly on the spot. (**ES07**-366)

*e. Lexicalization patterns:* ***Motion+ Down from/ to G- Downwards***

The path verbs denoting this direction consist of 21 path verbs (22.1.%), which are *collapse, crash, crumple, descend, dismount, dive, drop, fall, flop, plunge, plummet, sink, slump, submerge, swoop topple* and *tumble*.

These verbs generally depict the downwards direction of motion with regard to the earth. However, there is a wide range of differences in the lexicalization of specific features of direction. For instance, the four path verbs such as *descend, drop, fall,* and *plummet* denote that the Figure is moving downwards the Ground according to the vertical direction without further meaning information as in Figure 5.4a. *Dismount* depicts downwards motion, but the Figure is moving downwards from traffic vehicles. In the case of *collapse, crush,* and *crumple,* the Figure falls with or without external force. As a result, the Figure becomes broken and shattered. Next, *flop* and *slump* denote Figures' motion downward the furniture, which are mostly human bodies. More specifically, *dive, sink, plunge,* and *submerge* denote the downwards motion of the Figure

from a higher position into the water in a vertical trajectory. Finally, *topple* and *tumble* denote that the Figure is moving from a higher place to a lower one in the arc-like trajectory as Figure 5.4b.

(5.19) He **stumbled** backwards and knocked over his lamp. (**ES10**-126)

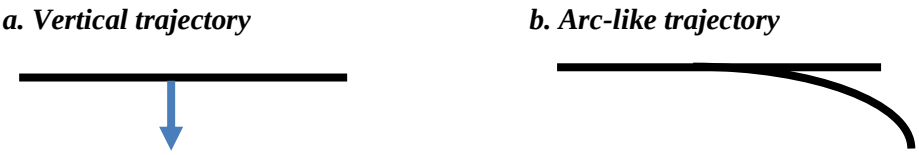



**Figure 5.4. Vertical and arc-like trajectory**

*f. Lexicalization patterns:* ***Motion+To/ towards G***

There are 6 path verbs (6.3. %) found in the data (e.g., *arrive, alight, come, enter, get,* and *reach)* denoting this direction. These verbs normally denote the accomplishment of the Figure's movement towards the Ground. *Alight* denotes that the Figure reaches the Ground, but it implies the downward motion from an animal or vehicle as (5.20).

(5.20) She ***alighted*** from the train at 74th Street. (**EN02**-406)

*Arrive, come, enter, get, go and reach* are the deictic path verbs, which generally depict that the Figure reaches the endpoint. While *arrive, get* and *reach* only denote the Figure's movement towards the destination without specific information, the verbs *come, go* and *enter* denote the deictic motion. More precisely, *come* denotes the Figure's motion towards the speaker as Figure 5.5a, conversely, *go* moves towards the hearer as Figure 5.5b. In the case of *enter* the Figure moves towards the Ground which is in a certain container as Figure 5.5c.

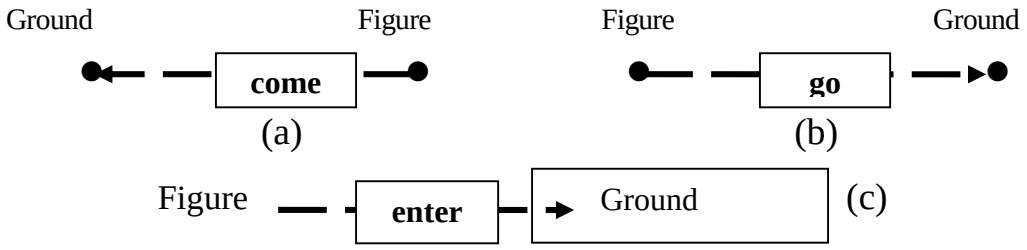



**Figure 5.5. Trajectory of *come, enter* and *go***

*g. Lexicalization patterns:* ***Motion+Back to G/ Backwards***

The path verbs denoting backward motion consist of 6 path verbs found in the data, which are *back, rear, recede, retreat, recoil* and *return.*

(5.21) His footsteps ***receded*** along the out-of-sight corridor. (**ES10**-170)

While *back, recede, retreat* and *recoil* denote backward motion but they do not include any explicit reference to the trajectory towards the Ground, *return* denotes that the Figure is moving back to an earlier location. Finally, *rear* refers to the Figure's trajectory back to the Ground in order to have more force and jump up.

(5.22) The horse ***reared*** and threw me off. (**ES**06-28)

*h. Lexicalization patterns:* ***Motion+Pass/ Cross G***

There 3 verbs the path verbs (3.15%) such as *cross, pass* and *traverse* to denote this direction. The path verbs *cross* and *traverse* generally mean that the Figure is moving across the Ground. However, the verb *pass* denotes three distinct types of the Figure's trajectory: (i) it denotes that the Figure is going by but go beyond the Ground as Figure 5.6a; (ii) it depicts Figure's movement through the Ground as Figure 5.6b; and (ii) it means that the Figure is moving towards and then proceeds the Ground as Figure 5.6c.

(5.23) They had just **passed** a bend in the path. (**ES12**-117)

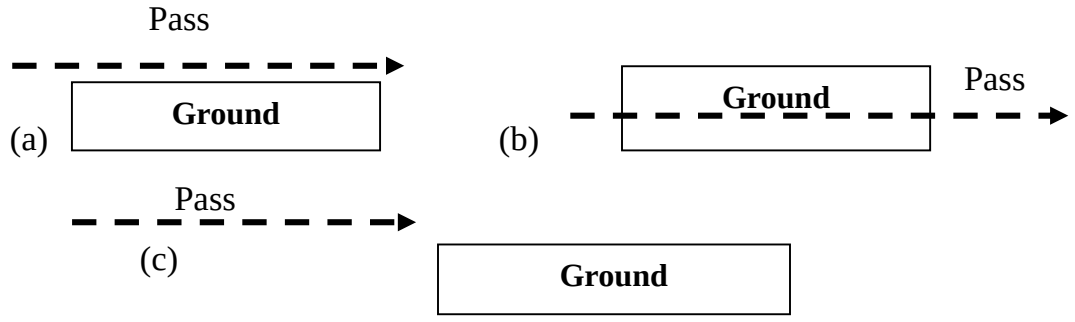



**Figure 5.6. The trajectory of the verb *pass***

*i. Lexicalization patterns:* ***Motion+Into G (container)***

The path verbs denoting this direction depict that the Figure's motion from the outer space into the Ground (e.g., *enter, immigrate, join* and *penetrate).* However, the biggest difference among these verbs lies in the variety of the Ground. First, *immigrate* implies that the Figure from a certain country moves into another country; normally in illegal

ways. Next, *penetrate* denotes that the Figure is moving into the Ground through a tinny hole and with difficulty. Finally, the verb *join* implies that a group of people moves into the Ground which is occasionally another group as in (5.24).

(5.24) They **joined** the crowd thronging the corridor. (**ES07**-325)

*j. Lexicalization patterns:* ***Motion+Closer to G***

There are two path verbs such as *approach* and *nears* found in the data denoting that the Figure is moving closer to the Ground. *Approach* depicts the movement towards the Ground from the speaker, whereas *near* does not include this information, and the Figure may come from different directions as in (5.25).

(5.25) They **approached** the giant heads. (**ES09**-307)

*k. Lexicalization patterns:* ***Motion+ Forwards G***

This direction the forward G means that the Figure is moving forwards the Ground. There are seven path verbs found in the data (e.g., *advance, forge, head, lunge, proceed, surge* and *transit*), denoting this direction. First, *advance* and *proceed* denote that the Figure's movement is generally towards the Ground in a particular direction. It is normally a deliberate place as in (5.26a). The verbs *forge, head, lunge*, and *surge* do not only express the Figure's trajectory forwards the Ground, but depict the high speed of motion as in (5.26b). Finally, *transit* is a special path verb denoting motion forwards the Ground of vehicles.

(5.26) a. Everybody else ***proceeded*** to the front doors. (**EN03**-657)

b. Suddenly, he's ***heading*** for the third floor. (**ES05**-77)

*l. Lexicalization patterns:* ***Motion+Out of G***

There is one path verb found in the data (*exit*), which denotes that the Figure is moving from the inside of the Ground to the outside. The Ground, in this case, is normally considered to be a container.

(5.27) I exited through a side window. (**ES0**4-254)

*m. Lexicalization patterns:* ***Motion+Multiple directions***

The path verbs denoting this direction include 5 path verbs such as *part, scatter, separate, skedaddle* and *stampede*. In general, a Figure is usually a group of entities which are

moving far apart from in different directions. The verbs *part, separate* and *scatter* describe the Figure's motion in different directions without further information related to motion while *skedaddle* and *stampede* simultaneously express the distinct directions of the Figure and support further information with rapid speed and fear as in (5.28).

(5.28) The crowd ***stampeded*** backward. (**EN02-**1305)

## 5.3. LEsPM in Vietnamese

This section is concerned with the semantic and syntactic properties of LEsPM in Vietnamese. The syntactic properties are conducted on the basis of the theory of construction grammar related to the form and meaning relation. Next, the semantic properties are associated with the lexicalization patterns of semantic components mapped on the surface forms.

### 5.3.1. Construction grammar of LEsPM in Vietnamese

This part explores the form-meaning correspondences of LEsPM in Vietnamese. This exploration includes: (i) the arguments arranged around the path verbs; and (ii) the information of different situations packed in the path verbs.

#### *5.3.1.1. Argument Structures of LEsPM in Vietnamese*

Table 5.5 summarizes the argument structures of LEsPM in Vietnamese, which is grouped into four categories; (i) numbers of arguments in each expression, (ii) argument structures; (iii) the number of verbs; and (iv) distribution of each type.

**Table 5.5. Argument structures of LEsPM in Vietnamese**

| Number of Args | Argument structures | Verbs | % |
|---|---|---|---|
| 1 | a. V[Figure] | 18 | 47.3 |
| 2 | b.V[Figure Place] | 11 | 28.9 |
| | c.V[Figure Ground] | 23 | 60.5 |
| | d. V[Figure Path] | 17 | 44.7 |
| 3 | e. V[Figure Ground Manner] | 9 | 23.6 |

*a. V [Figure]*

The path verbs in this structure are the intransitive path verbs because they have one argument of the Figure. This structure denotes that the motion of the Figure is considered a result of motion, but not a process. As a result, the Ground as well the Path is not mentioned. There are 18 path verbs, making up 47.3%, found in the data (e.g., *biến khỏi, co quắp, đế, đến gần, đi, đi đầu, đi khỏi, hạ cánh, lên, lùi, nhập cư, ra, tản cư, tới, trở lại, trốn thoát, vào* and *xuống*) in this structure. Take (5.29) as an example, in which *Em* is the Figure and ***đi*** is motion.

(5.29) Em không **đi.** (**VS08-**125)
I didn't go.

*b. V [Figure Place]*

This structure denotes that the motion takes place in harmony with the Ground. In other words, the Figure's motion is limited by that Ground, so this structure does not include the Path and Ground. There are 11 path verbs found in the data, occupying 28, 9%, in this structure (e.g., *dạo, đi, đột kích, gục, hạ cánh, lùi, ra, trốn thoát* and *vào*) with two arguments such as the Figure *một bóng người* and the Place *trong ngõ*.

(5.30) Bỗng *một bóng người* cứng nhắc xồng xộc **vào** *trong ngõ.* (**VS01**-647)
Suddenly, a person quickly entered the gate.

*c. V [Figure Ground]*

There are 23 the path verbs, making up 60.5% consisting of two arguments, which are the Figure and the Ground. Thus, these path verbs are the transitive path verbs (e.g., *bỏ xa, cập, cúi, dạo, đến, đến gần, đi, đi khỏi, đột kích, ghé, lại, lên, lùi, qua, ra, theo đuổi, tới, trèo, trở lại, trốn thoát, vào* and *xuống*). As a result, this structure may be conceptualized as the perspectival system of direction in which the Ground plays a role of configuration for motion, perspectival direction more specially. Relying on the positions of the Ground, the path verbs encode various directions. For example, as the Ground (*lầu)* in (5.31) is in a higher position than the Figure, the verb (*lên*) encodes the direction of *up*.

(5.31) Nguyễn Miên Miên đành phải cẩn thận khi **lên** *lầu*. (**VN05**-146)

*d. V [Figure Path]*

This structure has two arguments, which are the Figure and the Path. In this structure, while the Figure refers to the moving object, the Path encodes motion and its direction. The Figure and the Path of motion are more prominent, so the Ground is not mentioned because it may be understood or mentioned earlier. Therefore, this structure is framed by the Paths (e.g, *lại, về, qua, sang, tới, lên, xuống*, etc). Moreover, this event may be conceptualized as the configuration of prospective direction because the event – sequence of motion is viewed from the perspective of the starting point. This expression consists of 17 verbs, making up 44.7% (e.g., *chum, chụm, co, cúi, co quắp, doãi, đi, ghé, gục, khép, khuỳnh, khuỵu, lùi, ngả, ngoảnh, quay* and *ưỡn*).

(5.32) Đã mấy lần Loan ngập ngừng muốn **quay** *về*. (**VS10**-379)

Loan hesitated to return for several times.

*e. V [Figure Ground Manner]*

This structure consists of three arguments including Figure, Ground and Manner in which the Figure denotes the moving object and the Ground is considered as the configuration for the motion event. In this case, the path verbs are transitive verbs which simultaneously denote the direction and the motion. However, they are not really translational verbs, but verbs of act because they tend to denote actions rather motion (e.g., *đi, đến, tới, qua, sang, lại, về, etc*). The Manner encodes styes of motion and refers to the change of position implicitly through vehicles (e.g, *bằng xe đạp, bằng mày bay, bằng* ô tô). There are 9 path verbs in Vietnamese found in the data, occupying 23.6%. Take an illustrative example, the verb (*đi)* in (5.33) refers to the action of *đi, xe đạp* encodes both the Manner and translation.

(5.33) Nó chợt thấy có hai người **đi** *xe đạp* ngang qua chợ. (**VS04**-103)

Suddently, he saw two people cycle through the market.

### *5.3.1.2. Event structures of LEsPM in Vietnamese*

Table 5.6 summaries the event structures of LEsPM in Vietnamese, which is grouped into three categories such as (i) types of events; (ii) semantic features; and (iii) the path verbs denoting each of events.

**Table 5.6. Event structures of LEsPM in Vietnamese**

| Event structures | Types of events | Lexical aspects | Verbs | % |
|---|---|---|---|---|
| a. States | Bounded Punctual | Atelic Perfective | 0 | 0 |
| b. Activities | Unbounded Durational | Atelic Imperfective | 10 | 26.3 |
| c. Achievements | Bounded Punctual | Telic Imperfective | 26 | 68.4 |
| d. Accomplishments | Bounded Durational | Telic Pefective | 2 | 5.2 |
| **Total** | | | **38** | **100** |

*a. Event of States*

This event refers to the two lexical aspects such as Atelic and Perfective. The first property refers to motion events without endpoints. The second property postulates that the event of States is stative situations which cannot express progressive motion events. As a result, there are no verbs found in the data denoting this event.

*b. Event of Activities*

This event has two lexical aspects, which are Atelic and Imperfective. First, the Atelic aspect depicts that the path verbs do not require an endpoint, so the path verbs denoting event are generally the intransitive path verbs. Next, the Imperfective aspect refers to dynamic situations in which the path verbs can denote the continuous motion. Also, the event of achievements is involved in unbounded and durational properties. The former property depicts that speakers tend to observe the whole process of the event, from the starting point (the sky) to the endpoint of the event (the airport) as in (5.34). The latter

one means that the event always lasts a certain length of time. There are 10 path verbs (26.3%) (e.g., *chúm, co, doãi, dạo, co* and *hạ,* etc) found in the data.

(5.34) Phi cơ bắt đầu **hạ** thấp cao độ. (**VN02**-541)

The jet started to reduce the height.

*c. Event of Achievements*

The event of Achievements denotes that the Figure of motion is necessary to move toward the Ground. In other words, the path verbs always consist of an endpoint and are transitive verbs as "*ngả*" in (5.35). The imperfective property means that this is dynamic motion, which can express a progressive motion at a certain time. Additionally, this event is also associated with more properties like bounded and punctual, which focus the punctual moment of the event's termination and invoke a preceding culminating. This is the most common event in Vietnamese including 26 path verbs, making up 68.4% (e.g, *biến khỏi, bỏ xa, cúi, đi khỏi, đột kích, ghé* and *ngả*, etc).

(5.35) Anh sẽ **ngả** con chó nằm ngửa trên một tấm ny lông. (**VS12**-234)

He will lean himself so that his dog can lie on the sheet of plastic.

*d. Event of Accomplishment*s

The last event denotes the motion with an endpoint and an undynamic situation. This event is the least common in Vietnamese, which have two path verbs (e.g., *khuỳnh* and *trốn*) found in the data denoting this event. In order to denote this event, these path verbs often take a certain duration for their completion and require an energy source, an intentional human activity in other words. It seems that speakers only focus on the conclusion of the event.

(5.36) Nguyễn Miên Miên mới **trốn** ra khỏi biệt thự. (**VS09**-350)

Nguyen Mien Mien has just escaped from the vila.

### 5.3.2. Lexicalization patterns of LEsPM in Vietnamese

This section is concerned with the lexicalization patterns of LEsPM in Vietnamese, which will elucidate semantic components conflated into the path verbs such as Path, Manner and Ground and spatial adpositions such as directions and vectors. This is the answer to the question *what are lexicalization patterns of LEsMM in VN*?

### *5.3.2.1. Lexicalization patterns of the path verbs in Vietnamese*

Table 5.7 summarizes the lexicalization patterns of the semantic components conflated into the path verbs, which are Manner, Path and Ground.

**Table 5.7. Lexicalization patterns of the path verbs in Vietnamese**

| **Number of components** / **Types of components** | | **Lexicalization patterns** | **Verbs** | **%** |
|---|---|---|---|---|
| 2 | External | a. Motion +Path | 23 | 60.5 |
| | **Total** | | **23** | **60.5** |
| 3 | External | b. Motion + Path + Manner | 12 | 31.5 |
| | | c. Motion + Path + Ground | 3 | 7.8 |
| | **Total** | | **15** | **39.5** |
| 4 | External | d. Motion + Path+ Ground+ Manner | 0 | 0 |
| | **Total** | | **0** | **0** |
| **Total** | | | **38** | **100** |

*a. Lexicalization Patter:* ***Motion +Path***

In this expression, two semantic components are conflated into the path verbs, which are Motion and Path. There are 23 verbs, making up 60.5% (e.g., *biến khỏi, bỏ xa, dạo and đến*, etc). In general, the path verbs in this expression simultaneously denote the motion of the Figure and the path of the motion from the starting point to the Ground as in (5.37).

(5.37) Không một thằng địch nào dám **đến** gần cái đống đất ấy! (**VS09**-423)

No opponents dared to approach the pile of soil.

*b. Lexicalization Patterns:* ***Motion + Path + Manner***

This expression consists of three semantic components, which are Motion, Path and Manner. There are 12 verbs (31.5%) found in the data denoting this expression (e.g., *chum, co, cụm*, *ưỡn* and *khuỳnh, etc*). Take the verb *ưỡn* as an example; the path verb denotes that the Motion is the Figure's change of position from one place to another. Next, the Path is the route path which the Figure moves along. Last, the Manner is mostly concerned with the style of motion of the chest.

(5.38) Em cầm lấy chim, **ưỡn** người trễ về phía bọn giặc. (**VN01**-967)

He took his penis and threw out his chest toward the opponents.

*c. Lexicalization Patterns:* ***Motion + Path + Ground***

There are three semantic components conflated into the path verbs, namely Motion, Path and Ground. There are three verbs, making up 7.8% found in the data (e.g., *cập*, *hạ cánh* and *nhập cư*). These path verbs denote that the Figure moves from one position to another along a path *xuống* toward the Ground as in (5.39).

(5.39) Tại sao máy bay vận tải lẻ tẻ còn **hạ cánh** xuống sân bay được? (**VS07**-124)

Why did some aeroplanes sometimes land on the airport?

*d. Lexicalization Patterns:* ***Motion +Path + Ground + Manner***

The four semantic components conflated in the path verbs, which are Motion, Path, Ground and Manner. However, there are no path verbs in Vietnamese denoting four semantic components at the same time.

### *5.3.2.2. Lexicalization patterns of directions into the path verbs in Vietnamese*

Table 5.8 summarizes thirteen types of directions between the Figure and the Ground conflated into Vietnamese path verbs. Like the path verbs in English, the path verbs in Vietnamese denote different directions. These directions mostly depend on the positions of the Ground in comparison with the Figure.

**Table 5.8. Lexicalization patterns of the paths in Vietnamese**

| Lexicalization patterns | Verbs | % |
|---|---|---|
| a. Motion+ Away from G | 7 | 18.4 |
| b. Motion+ UP/onto G-Upwards | 2 | 5.2 |
| c. Motion+ After G | 1 | 2.6 |
| d. Motion+ Change direction | 3 | 7.9 |
| e. Motion+ Down from/to G- Downwards | 5 | 13.1 |
| f. Motion+ To/towards G | 4 | 10.5 |
| g. Motion+ Back to G- Backwards | 3 | 7.9 |
| h. Motion+ Pass/cross G | 1 | 2.6 |
| i. Motion+ Into G | 7 | 18.4 |
| j. Motion+ Closer to G | 1 | 2.6 |
| k. Motion+ Forwards G | 1 | 2.6 |
| l. Motion+ Out of G | 1 | 2.6 |
| m. Motion+ Multiple direction | 2 | 5.2 |
| **Total** | **38** | **100** |

*a. Lexicalization pattern:* ***Motion+ Away from G***

The path verbs denoting this direction consists of 7 path verbs (18.4%) found in the data such as *biến khỏi, bỏ xa, doãi*, *khuỳnh, tản cư, trốn thoát*, and *đi khỏi*. These verbs denote that the Figure is moving away from the Ground. For instance, Figure *Hai người,* at first, is at the place of the Ground *Xiêm*, but the Figure separated from the Ground and moved away from the Ground *đi khỏi*.

(5.40) Hai người vừa **đi khỏi** Xiêm đã sập hết các phên cửa. (**VS12**-229)

The two people had hardly left when Xien shut all the doors.

*b. Lexicalization pattern:* ***Motion+ UP/onto G-Upwards***

The verbs with this direction denote that the Figure moves from a low position to a higher position. There are two path verbs (5.2%) which denote this direction such as *lên* and *trèo*. The verb *lên* expresses the direction of motion from a low position to a higher position; meanwhile, the verb *trèo* provides some more specific information about motion such as from a low position to a higher position, a vertical direction, an animate Figure and motion with legs and arms as in (5.41).

(5.41) Lượng **trèo** (lên) những bậc đá. (**VS07**-54)

Luong climed up the stone stairs.

*c. Lexicalization pattern:* ***Motion+ After G***

There is only one verb *theo* denoting this Path found in the data in Vietnamese. This verb denotes that Figure *Chị em* is moving after the Ground *Bộ đội* which may (not) be moving at the same time.

(5.42) Chị em chỉ có thể bố trí từng tốp **theo** Bộ đội. (**VN03**-237)

The women only could be arranged into each team according to Military.

*d. Lexicalization pattern:* ***Motion+ Change direction***

The verbs such as *quay, ngoảnh* and *nghé* denote that the Figure is moving according to a certain direction but urgently changes its direction. The verbs *quay* and *ngoảnh* reveals that the second direction is opposite to the first direction as in (5.43a). The verb *ghé* means the Figure may turn left or turn right, so the Figure in this expression must be agentive subject as in (5.43b).

(5.43) a.Kinh **quay** người và nói nhỏ hơn. (**VS09**-431)

Kinh turned back and spoke more softly.

b. Nó cũng tò mò **ghé** lại coi chút cho biết. (**VN02**-657)

He curiously dropped by to know what happened.

*e. Lexicalization pattern:* ***Moiton+ Down from/to G- Downwards***

There are six verbs (15.7%) denoting this direction found in the data such as *xuống, ngả, khuỵu, hạ cánh, gục* and *cúi*. The verb *hạ cánh* denotes the vertical direction from a high position to a low position, but other verbs do not. More specially, the Figure of the verb *hạ cánh* must be a type of machine like planes. The verbs *xuống, ngả, cúi* and *khuỵu* denote the directions of the curve as in (5.44).

(5.44) Vịnh hơi **ngả** về đằng trước. (**VS06**-43)

Vinh leaned himself towards.

*f. Lexicalization pattern:* ***Motion+ To/towards G***

The verbs with this direction denote mean that the Figure is moving in the direction of the Ground and approaching it. There are four verbs of Vietnamese path verbs (10.5%) found in the data denoting this direction, namely *tới, đi, đi đầu*, and *đến*. There is a difference between the verb *đi* and *đến.* The verb *đi* denotes that the Figure moves from the speaker to the hearer, but the verb *đến* from the hearer to the speaker. More specially, the verb *đi đầu* depicts that Figure is standing in the first position and moving in the direction of the Ground.

(5.45) Em **đến** cạnh giường bạn. (**VS02**-78)

I came next to your bed.

*g. Lexicalization pattern:* ***Motion+ Back to G- Backwards***

The verbs with this direction posit that the Figure is at the same place as the Ground, and then the Figure is moving towards the Ground. There are three path verbs (7.8%) found in the data, namely *lùi, lại* and *trở lại*. The verbs *lùi* and *lại* express the direction of the Figure towards the Ground while the verb *trở lại* does not only denote the direction of the Figure but the starting point and the destination as well.

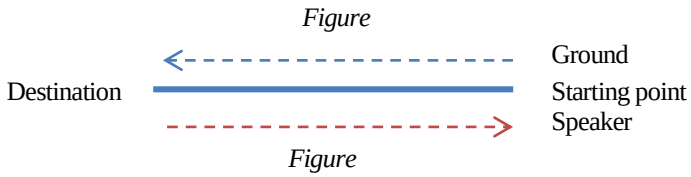



**Figure 5.7. The direction conflated into the verb *trở lại***

*h. Lexicalization pattern:* ***Motion+ Pass/cross G***

There is one verb (2.6%) denoting this direction in Vietnamese, which is *qua* (*băng qua*). This direction means that the Figure (the arrow) may move from one side to another of the Ground as Figure 5.8a, move into at one side and out of at another side of the Ground as Figure 5.8b, or move parallel with the Ground as Figure 5.8c. In this expression, the sides of the Ground play an important role in determining the starting point as well as the endpoint of motion, especially the limitation of Figure's movement. In reality, the Ground plays a role as the Path.

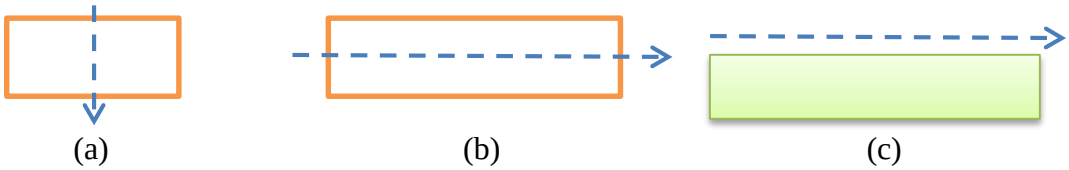



**Figure 5.8. The direction conflated into the verb *qua***

*i. Lexicalization pattern:* ***Motion+ Into G***

There are seven path verbs (18.4%) found in the data denoting this direction, namely *vào, nhập cư, co quắp, co, chụm, chúm* and *cập*. The verb *vào* denotes the direction from the outside part to the inside part of the Ground. The verbs *co quắp, co, chụm* and *chúm* express the Figure's change of size, which is normally from big size to a smaller size. Next, for the case of the verb *nhập cư*, the Figure must be the agentive subject, which moves from a country into another. Finally, the verb *cập* refers to the Figure's motion from the open sea or river to the shore or harbor.

(5.46) Tảng sáng, đò **cập bến** làng Trò. (**VN03**-453)

At dawn, the boat docked Tro Village's harbor.

*j. Lexicalization pattern:* ***Motion+ Closer to G***

The verb with this direction denotes that the Figure is nearing the Ground. There is only one path verb *khép* expressing this direction found in the data, making up 2.6%. In this case, there are generally two Figures, which move coincidentally as in (5.47).

(5.47) Lép-sẹo nhanh tay **khép** vội hai tà áo. (**VS08**-242)

Lep-seo quickly closed her flap of dress.

*k. Lexicalization pattern:* ***Motion+ Forwards G***

There is one word found in the data denoting this direction, which is *đến gần.* When denoting this direction, the Ground is considered to be the destination or the target for the Figure which is moving towards nearer and nearer the Ground from the distance.

(5.48) Sắp **đến gần** cầu ván Mậu Tài, Lượm nói với Tư-dát. (**VS09**-97)

Luon said to Tu-dat that we were going to Mau Tai bridge.

*l. Lexicalization pattern:* ***Motion+ Out of G***

Opposite to the direction *into G,* the verb with this direction expresses the Figure's motion from the inside area to the outside area, and the Ground is regarded as the container. To put it simply, the starting of motion will be certainly inside of the container and the endpoint must be outside the Ground. In addition, this motion is conceptualized as moving from a covered area to an open area. There is one verb found in the data which denotes this direction (*ra*), which posits that the Figure normally moves from a small area to a larger one as in (5.49).

(5.49) Cả đội ùa hết **ra** sân mặc dầu trời vẫn lắc rắc mưa. (**VS07**-428)

The whole team ran to the yard despite drizzle.

*m. Lexicalization pattern:* ***Motion+ Multiple directions***

This verb denoting this direction normally consists of many Figures at the same time, and each of Figures moves in different directions. There are two verbs (5.2%) with this direction found in the data, which are *dạo* and *đi khỏi*.

(5.50) Kim **dạo chơi** vùng tiền chiến khu. (**VN02**-357)

## 5.4. Discussion and conclusion

This section discusses the possible similarities and disparities between two LEsPM in the two languages. As mentioned in the previous chapters, the comparative study was conducted on these linguistic areas including argument structures, event structures and lexicalization patterns.

### 5.4.1. Argument structures of LEsPM in English and Vietnamese

Argument structures of LEsPM present speakers' knowledge or experience of path motion in two languages. This knowledge is associated with the syntactic properties of the path verbs. This means that speakers need to know whether the path verbs are activity verbs or translational verbs, and which arguments may combine with the path verbs to make up path motion events.

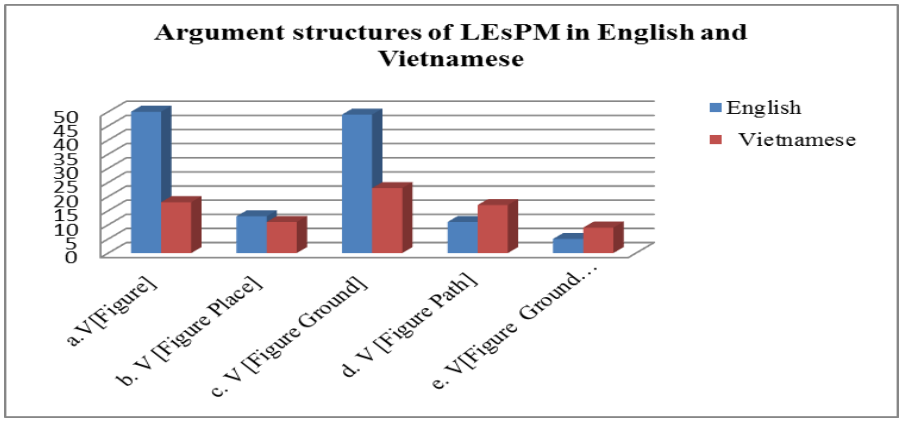



**Chart 5.1. Argument structures of LEsPM in English and Vietnamese**

The chart above presents the argument structures of LEsPM in two languages. The most noticeable disparity between two argument structures such as *V [Figure]* and *V [Figure Ground]* can be recognized is that the English speakers tend to use the path verbs with most argument structures much more than the Vietnamese speakers do (55 path verbs used with *V [Figure]* in English, 18 verbs with *V [Figure]* in Vietnamese, and 49 verbs with *V [Figure Ground]* in English, 23 verbs with this structure in Vietnamese). On the contrary, for the structures of *V [Figure Path]* and *V [Figure Ground Manner]*, the path verbs in Vietnamese are used more than ones in English.

In sum, there is a considerable difference in using the path verbs between speakers of the two languages. Two first argument structures with the path verbs in English are

used more than ones in Vietnamese. Conversely, the Vietnamese speakers use the last two structures more than the English speakers do.

### 5.4.2. Event structures of LEsPM in English and Vietnamese

Table 5.9 summaries event structures in English and Vietnamese. These structures are concerned with speakers' knowledge of LEsPM in English and Vietnamese in terms of lexical aspects. This knowledge permits speakers to express lexical aspects of path motion through the use of 4 events.

**Table 5.9. Event structures of LEsPM in English and Vietnamese**

| Event structures | Types of event | Lexical aspects | English verbs | Vietnamese verbs |
|---|---|---|---|---|
| a. States | Bounded Punctual | Atelic Perfective | 0 | 0 |
| b. Activities | Unbounded Durational | Atelic Imperfective | 47 | 10 |
| c. Achievements | Unbounded Punctual | Telic/ Atelic Imperfective | 38 | 26 |
| d. Accomplishments | Bounded Durational | Telic Pefective | 10 | 2 |
| **Total** | | | **95** | **38** |

A common tendency toward expressing these events in LEsPM is that both English and Vietnamese speakers have the same trend to use the path verbs to denote 4 types of event structures of LEsPM. The number of the path verbs used to express the event of Activities is most, and the event of Accomplishment is least in the two languages. More particularly, no path verbs were found to express the event of States in English and Vietnamese because the path verbs are inherent in translational and dynamic verbs.

### 5.4.3. Lexicalization patterns of LEsPM in English and Vietnamese

Table 5.10 summaries the lexicalization patterns of LEsPM in English and Vietnamese which are involved in an investigation into semantic components conflated into path verbs to express path motion. A comparison between these patterns was conducted to make sense of how LEsPM are expressed in two languages.

**Table 5.10. Lexicalization patterns of the path verbs in English**

| Number of components | | Lexicalization patterns | English verbs | Vietnamese verbs |
|---|---|---|---|---|
| Types of components | | | | |
| 2 | external | a. Motion +Path | 65 | 23 |
| | **Total** | | **65** | **23** |
| 3 | external | b. Motion + Path + Manner | 25 | 12 |
| | | c. Motion + Path + Ground | 5 | 3 |
| | **Total** | | **30** | **15** |
| 4 | external | d. Motion + Path+ Ground+ Manner | 3 | 0 |
| | **Total** | | **3** | **0** |
| **Total** | | | **95** | **38** |

On the whole, the path verbs in English used to encode the semantic components are more than ones in Vietnamese. However, the most salient disparity between the two languages is that there are no path verbs in Vietnamese found in the data to encode 4 semantic components such as Motion, Path, Ground and Manner, but 3 path verbs found in English such as *skydive, ford* and *swoop*. This is because the Ground in Vietnamese is always encoded in the nouns of places which are always used with the path verbs such as *đi chợ, về nhà, đến trường, tới lớp*, etc. As a result, an interesting conclusion can be drawn is that the path verbs contain semantic components to express motion events than Vietnamese. In sum, English speakers tend to have much more ways to express LEsPM than Vietnamese speakers.

### 5.4.4. Spatial relations between the Figure and the Ground in English

The relation between the Figure and the Ground in English is construed on the basis of spatial rapport or the spatial features. That is, the Figure's locations and directions will be analyzed with reference to the Ground. Following Many & Pustejovsky (2012: 47), the path motion is expressed by underlying topological properties of the Figure and Ground, and the path verbs involve the identification of a distinguished location and the presupposition of the path traversed. Many & Pustejovsky also point out that the relationship between the Figure and the Ground always denotes some spatial properties of path relations such as topological path, orientation path, topometric path, and topometric orientation path expressions.

With regard to the relation of the topological path, this relation proposes some features as follows:

a. There is a transition event of an action which brings out a change of location from one state to another state.
b. Figure undergoes this change of location.
c. Figure traverses a presupposed path through the motion.
d. There is a distinguished region of the path identified as the Ground.

The lexical representation for a topological path expression such as "arrive" in (5.51) refers to two or three syntactically arguments: the Figure (David), the Ground (Ocosingo), and the Source (at). However, logically speaking, there is a further argument which refers to the path of this motion.

(5.51) David **arrived** at Ocosingo on Tuesday. (**ES07**-205)

Next, the orientation properties allow us to direct and position the movement of the Figure relative to the Ground. In reality, the orientational path has all characteristics of the topological path, but they have an additional parameter of the meaning of orientation, which helps defines the aspects of the manner of motion as well as in (5.52).

(5.52) John **ascended** the ladder. (**ES02**-42)

Following Talmy's (2000) classification, the verb *ascend* is introduced to contain the orientational features because of the following points.

a. There is an action bringing about an iterated non-distinguished change of location.
b. The Figure undergoes this non-distinguished change of location.
c. The Figure creates a path by virtue of the motion.
d. The action is performed in a certain manner.
e. The path is oriented in an identified or distinguished way.

Albeit the topological and orientation features are adequate for quantifying the path which created by motion, these features will not be sufficient to determine the change in relative distance between the Figure and the Ground over time. Another property providing a measurement of the movement by using a function of distance is topometric orientation property as in (5.53)

(5.53) The comet is **nearing** the planet. (**EN01**-207)

Therefore, the path verb *near* is a more comprehensive treatment of metric change of location. This expression of motion refers to the relative value in distance between two objects over time, and it also makes explicit reference to the change in distance.

### 5.4.5. Cultural relations between the Figure and the Ground in Vietnamese

Besides the spatial relation in English, the rapport between the Figure and the Ground in Vietnamese will be analyzed with respect to cultural relation, which will be investigated on the basis of semantic features of world image and cognitive maps (Ly Toan Thang, 2005). With regard to world image, semantic properties of each language reflect different ways in which world image of language is conceptualized in a given cultural community. Thus, there will be a wide range of different expressions to denote motion in human languages in terms of cultural traits such as anthropological characteristics and social conditions. Based on these features of world image of language, Ly ToanThang (2005: 77-92) determined some typical relations between the Figure and the Ground in motion events as follows:

*a. On – Under relation*

This relation is defined by the spatial relationship between the Figure and the Ground. If there are no dependencies between two these semantic components; that is, the Figure is on a par with the Ground with respect to location, the Figure's motion towards the Ground will be *SANG* as in (5.54).

(5.54) Lượm **sang** tận chợ Bến Ngự. (**VS05**-119)

Luom came to Ben Ngu market.

In contrast, when the Figure moves from a higher location to a lower location and via versa, the spatial relation will be contingent upon the Figure's direction of motion, which is LÊN or XUỐNG as in (5.55).

(5.55) a. Mời chú em **lên** xe! (**VS10**-26)

Please get on!

b. Cháu chưa kịp **xuống** đò thì tụi hắn ập tới. (**VN03**-904)

I had hardly stepped down the boat when they rushed in.

*b. In – Out relation*

There is a great difference in expressing this relation in English and Vietnamese. While English speakers only examine motion at the endpoint, Vietnamese speakers examine the whole process of moving from the starting to endpoint. Investigating directions of the verb ENTER in English and RA in Vietnamese will shed light on this statement. When the English say ENTER *the scene*, they only pay specific attention to the endpoint; that is, at the endpoint, the Ground *the scene* is considered to be a container with the surrounding curtains, and the Figure moves from a spacious place to a constrained place. In contrast, Vietnamese speakers use the verb RA the scene in this situation just because they posit that they conceptualize the whole process of moving from the starting point (backward and dark area) to the endpoint frontward and light area). Therefore, the verb RA is used to denote that the Figure is moving from a dark and small place to a bigger and lighter place. Based on this relation, Ly ToanThang (2005:79) arrange these locations from narrowness to wideness.

House < Yard < Garden < Alley < Road < Field < Dyke < Plain

Therefore, the verb VÀO is used to express motion moving into the house as in (5.56a) and *ra* is used to express motion moving to larger locations such as *Ra* Sân, *vườn*, *ngõ*, *đường*, *đồng*, *đê* and *bãi* as in (5.56b).

(5.56) a. Bà O vào **nhà** để gặp mọi người. (**VN02**-867)

My aunt entered the house to meet everyone.

b. Nó ra **bãi** thả trâu, đánh bạn với bọn giữ trâu. (**VS06**-113)

He went to the plain to watch his buffalo and made friends with others.

*c. Culture-oriented relation*

The relationship between the Figure and the Ground in Vietnamese is regulated by some social norms such as social status, occupation, gender, politics, power, class, etc. For example, if someone in the administrative offices of hamlet or district level travels to the higher positions such as provincial or state departments, then motion will be LÊN for the higher position and XUỐNG for the lower position as in (5.57).

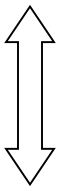
(5.57) a. Tối nay tôi LÊN nhà Chủ tịchViện. (**VS01**-74)

I went to the house of chairman of institute.

b. Chị ấy XUỐNG huyện công tác. (**VS11**-352)

He went on business to the district.

Ly ToanThang (2005: 86) arranged this relation as follows:

| ASCEND | **Capital** | **City/ Province** | **Education** |
|---|---|---|---|
|  | City | District | University |
| | Province | Commune | Department |
| | Village | Village | Division |

DESCEND

*d. Psychological distance relation*

Here are some locations with psychological relation:

| **Lại/ Về** | **Sang/ Qua** |
|---|---|
| Trong nước | Nước ngoài |
| Trong tỉnh | Ngoài tỉnh |
| Trong huyện | Ngoài huyện |
| Cơ quan | Cơ quan khác |
| Nhà | Nhà khác |

This relation reveals a rather particular rapport between the Figure and the Ground in a motion event. This is because the direction of motion is tightly contingent upon the psychological tie between the Figure and the Ground. If the Figure has a close relationship with the Ground such as one's house, native country, workplace, or school, the direction of motion will be VỀ/ LẠI (back) as in (5.58a). If that relationship is far in terms of both psychology and geography such as foreign country, other's house, the direction of motion will be SANG/ QUA (past) as in (5.58b).

(5.58) a. Tôi phải **về** nhà tôi trong đêm nay. (**VS09**-92)

I had to go home this night.

b. Họ **sang** Pháp cùng nhóm nghiên cứu. (**VS12**-205)

I went to France together with my group of research.

## 5.5. Summary

In short, lexicalization patterns and construction grammar of LEsPM in English coincides in ones in Vietnamese in terms of quality and types. The descriptive study of the linguistic areas provides the researcher with in-depth insights into syntax and semantics of LEsPM in English and Vietnamese. In general, the path verbs in English are much more than ones in Vietnamese (95 and 38, respectively). The comparison of these areas between speakers of two contexts reveals the similarities and disparities in expressing LEsPM.

# Chapter 6

# LEXICAL EXPRESSIONS OF CAUSED MOTION

## 6.1. Introduction

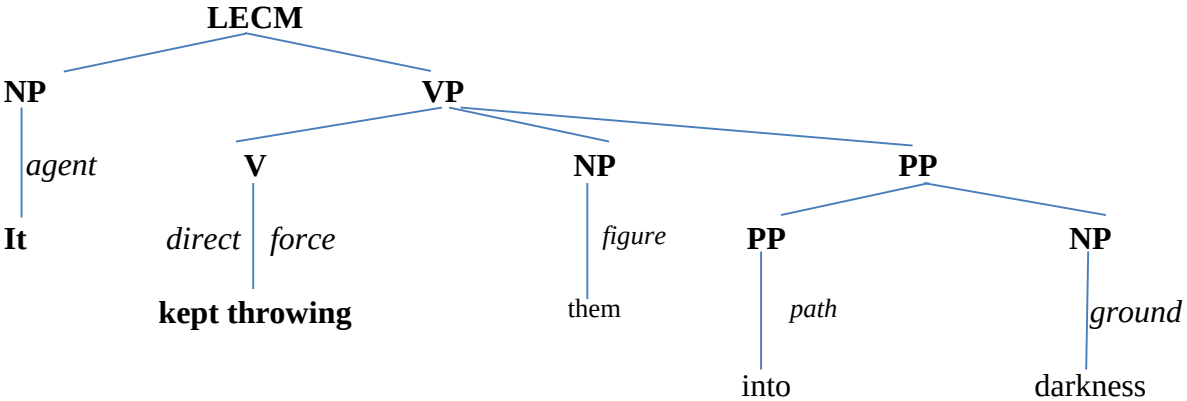
As analyzed in the previous section, an LECM can be a word, phrase, or sentence, which contains a conceptual category of cause verbs and its arguments denoting motion. The verbs are conceptualized as the cause verbs from cognitive perspective because they are considered to be a source which gives rise to motion, and they may generate actual or non-actual causes. LEsCM can be schematized as follows:

| **A Lexical Expression of Caused Motion** | | | | |
|---|---|---|---|---|
| Subject | **The predicate of caused motion** | | | |
| | VP | | PP | |
| It | kept throwing | them | Into | Darkness |
| *Agent* | *Manner, Motion, Cause* | *Figure* | *Path* | *Ground* |
| $Arg_1$ | V | $Arg_2$ | $Arg_3$ | $Arg_4$ |
| **A caused motion event** | | | | |

**Figure 6.1. The Schematization of LesCM**

The syntax of LEsCM is associated with the arguments combining with the cause verbs to constitute the caused motion events as in (6.1). These arguments are determined based on Talmy's (1985) theory of lexicalization patterns.

(6.1) It kept ***throwing*** them into darkness. (**EN02**-654)




The semantics of LEsCM revolves the conflation of the components (e.g., *Manner, Cause, Path, Ground*) into the surface forms (e.g., *verbs, prepositions*) to denote motion.

## 6.2. LEsCM in English

This section focuses on the analysis of semantic and syntactic properties of LEsCM in English. In terms of the syntactic properties, the grammar constructions of LEsCM will be elucidated while the semantic properties of LEsCM will be analyzed on the basis of the theory of lexicalization patterns.

### 6.2.1. Constructions grammar in English

The construction grammar of LEsCM refers to the arrangement of external arguments with the cause verbs constituting the caused motion events, the argument structures of LEsCM, more precisely. Next, the lexical aspects of the cause verbs are also investigated to clarify different situations or events denoted by the cause verbs, the event structures of LEsCM, in other words.

#### *6.2.1.1. Argument structures of LEsCM in English*

The argument structures are associated with the exploration into syntactic properties of LEsCM by the analysis of a number of arguments (e.g., *Agent*, *Figure*, *Path* and *Ground*) combining with the cause verbs. Table 6.1 summarizes the main types of argument structures of LEsCM found in English.

**Table 6.1. Argument structures of LEsCM in English**

| Number of Args | Argument structures | Verbs | % |
|---|---|---|---|
| 3 | a. V [Figure Path Ground] | 12 | 16.9 |
| 3 | b. V [Agent Figure Path] | 16 | 22.5 |
| 4 | c. V [Agent Figure Path Ground] | 79 | 100 |

*a. V [Figure Path Ground]*

The cause verbs in this structure consist of three arguments such as Figure, Path and Ground. First, the Figure is a nonagentive subject and involved in ergativity. As a result, the Figure is considered to be a subject of the intransitive sentence as in (6.2a), but it is treated as the object of transitive patterns as in (6.2b).

(6.2) a. The napkin *blew* off the table.

b. He *blew* the napkin off the table. (Talmy, 1985: 42)

The Path occupies an important role in shaping different types of motion because various Paths will give rise to distinct conceptualization in terms of directions such as Goal (e.g., *up, down, to* and *into*), Source (e.g., *away from, from, out of*, and *off*) and Route (*around, along, over, through* and *pass*). To put it another way, the Path is conceptualized as the configuration of direction for motion.

Finally, the Ground reflects the relationship between the Figure and the Ground in motion events and construed as the configuration of perspectival location for motion. Thanks to the distinct properties of the Ground such as locations, shapes and material, etc, they may give rise to a wide range of motion events. For instance, when the Ground is a liquid material, it will limit some types of Figures and motion as well.

(6.3) A luxury yacht was **sunk down** the bottom of the sea. (**ES06**-249)

*b. V [Agent Figure Path]*

The cause verbs have three arguments such as Agent, Figure receiving the force from the Agent to move, and the Path denoting the Figure's directions. To begin with, the Agent gives rise to different forces and transmits them to the Figure to cause it to move. The Agent may be a non-agentive subject as in (6.4a) or an agentive subject as in (6.4b) as long as it can generate any forces that cause the Figure to move.

(6.4) a. **The wind** flicked the roof off my house. (**ES09**-127)

b. **I** pushed the keg into the storeroom. (**ES11**-109)

Next, the Figure receives the external force from the Agent to move. However, this structure only can occur in case of the two source paths such as *away, off* or *out* because these Paths are inherent in the intransitive prepositions as in (6.5). Thus, the directions of the Figure are configurated by these Paths, which are mostly the inside-outside directions.

(6.5) She pushed him **away**. (**ES10**-118)

*c. V [Agent Figure Path Ground]*

This structure consists of four arguments, which are the Agent, Figure, Path and Ground. To begin with, the Agent is the source of motion because it generates the force to give rise to motion, which can be either internal or external force as in (6.6).

(6.6) I pushed the keg **into** the storeroom. (**EN03-**217)

Next, the Figure is a direct object of transitive patterns, which receives the direct force from the Agent and moves along the Path. With regard to the Path, it denotes the direction of motion towards the Ground. Relying on the location of the Ground, the Path could be associated with three types, which are Goal, Source and Route paths. In other words, the Ground is the determinant of directions for the Figure and can be described as a landmark for the Figure to orientate, move towards or delimitate the Figure's motion.

### *6.2.1.2. Event structures of LEsCM in English*

This section is associated with an exploration into lexical aspects, which is related to the situation and the temporal relation in conceptual space. According to Rothstein (2004: 6), verbal predicates may be divided into four different classes according to logical entailments, interactions with temporal modifiers, and interaction with tense, which are States, Activities, Achievements, and Accomplishments. Table 6.2 summarizes types of events on the basis of lexical aspects of the cause verbs, which are concerned with situations or events denoted by the cause verbs.

**Table 6.2. Event structures of LEsCM in English**

| **Event structures** | **Types of events** | **Lexical aspects** | **Verbs** | **%** |
|---|---|---|---|---|
| a. States | Bounded Punctual | Atelic Perfective | 15 | 19.0 |
| b. Activities | Unbounded Durational | Atelic Imperfective | 26 | 32.9 |
| c. Achievements | Unbounded Punctual | Telic/ Atelic Imperfective | 21 | 26.5 |
| d. Accomplishments | Bounded Durational | Telic Pefective | 17 | 21.5 |
| **Total** | | | **79** | **100** |

*a. Event of States*

The cause verbs denoting this event have two properties of lexical aspects, which are Atelic and Perfective. Hence, it refers to the motion events without a destination and is not concerned with progressive motion events. Moreover, this event involves bounded and punctual properties. The first property indicates that speakers mainly focus on the final boundary of the event while the second property refers to the event's length of time to complete There are 13 cause verbs found in the data are said to have this type of events, which are *allow, ask, assist, guide, help, keep, let, order, invite, lead, propel, show and urge*. More specially, these cause verbs only give rise to internal force as in "let" in (6.7).

(6.7) We won't **let** him go to the Hunt. (**ES07**-243)

*b. Event of Activities*

The verbs denoting this event must be dynamic verbs and they denote Atelic and Imperfective lexical aspects only when: (1) activity of generating forces lasts for a period of time (6.8a) and (2) an activity may go on in a homogenous way; it is constant over the period of time in which it happens (6.8b). There are 14 verbs of English cause verbs found in the data denoting this event, which are *bring, carry, chase, cram, drag, draw, drive, plump, push, raise, remove, rinse,* and *transfer*.

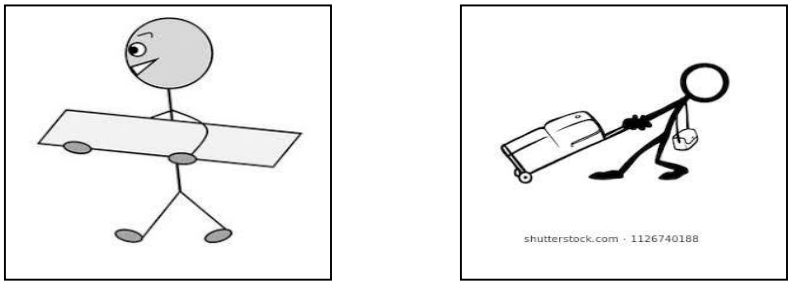
(6.8) a. I've come to **bring** Harry to his aunt and uncle. (**ES11-**304)

b. They had been pushed the letter under the door. (**ES01-**122)

In general, these verbs denote that when receiving forces from external agents, they cause the Figure to move. For the verbs *bring, carry, remove, and transfer*, they denote that the Agent generates a force causing the Figure to move, and it also simultaneously moves with the Figure as Figure 6.2a. In the case of *chase, cram, drag, draw, plump, raise pull, push* and *rinse*, the Agent just generates a force causing the Figure to move, but it may move with the Figure or may not move with the Figure at the same time as Figure 6.2b.

Besides the lexical aspects, this event is also involved in the unbounded and durational properties. The unbounded property means the speakers often pay attention to the whole process of the event including the starting point and endpoint. The second one

implies that in order to complete an event of the caused motion, the Agent and Figure must take a length of time to complete.




*a. Carry* *b. Drag*

**Figure 6.2. Motion styles of *carry* and *drag***

*c. Event of Achievements*

The event of achievements refers to dynamic situations which is conceptualized as instantaneous motion because it is punctual and ends as soon as it begins its movements. Moreover, the event of achievement generally occurs at a single moment in time, and it is incompatible with stopping and starting events because they are themselves achievements. There are 17 cause verbs found in the data, which are *drop, flip, hurtle, kick, precipitate, scatter, send, shot, snatch, spin, sneeze, splash, sprinkle, stab, throw, topple* and *toss*. These verbs do not homogeneously denote the event of achievement, and these verbs denote the imperfective property of motion. For example, the verb "*kick*" has direct contact with the Figure "*the diary*" and causes it to move. However, the Agent also finishes the action, and the speakers focus their attention on the whole journey of the Figure.

(6.9) He **kicked** the diary right *through* the door. (**ES02**-423)

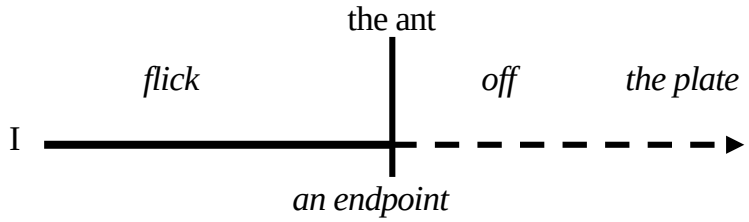
*d. Event of Accomplishments*

The verbs with the event of accomplishments reveal some following features. First, it denotes the dynamic situations with a terminal point. Next, it may take a certain amount of time to finish happenings of motion. Finally, it does not go on in homogenous way, but encompass an endpoint.

There are 14 cause verbs found in the data belonging to this category, which are *barricade, blow, charge, deliver, flee, flick, hammer, launch, insert, shove, lower, pitch,*

*slide, splash, squeeze, stuff, suck, thrust* and *uproo*t. On the whole, these cause verbs which denote the event of accomplishments give rise to external forces causing the Figure to move, and it is this force which generally reaches an endpoint when the Figure has moved as in (6.10).

(6.10) I **flicked** the ant off my plate. (**ES05-**352)




However, there is a minor difference among these verbs underlying the directions of the Figure. While the verbs like *uproot* and *lower* denote the vertical direction, the verbs like *insert, stuff, squeeze* and *hammer* depict that the Figure move from the outside to the inside. In the case of *barricade, charge, deliver, flee, flick launch, shove, pinch, slide, splash* and *thrust,* the force can cause the Figure to move according to different directions.

### 6.2.2. Lexicalization patterns of LEsCM in English

The semantic properties of LEsCM will be decomposed in terms of the number of semantic components such as Motion, Path, Cause and Manner lexicalized into the caused motion verbs, different types of causes lexicalized into the cause verbs and semantic components of path lexicalized into some surface elements.

#### *6.2.2.1. Lexicalization Patterns of the cause verbs in English*

This section provides an answer to the question "*What semantic elements are conflated in motion events in terms of lexicalization patterns from cognitive semantics*. By this ways, the semantic elements, namely Path, Cause, Manner and Motion were analyzed to show into which verbs they were conflated. Moreover, the analysis of lexicalization patterns helped interprete different types of motion in terms of directions and manner. These patterns are grouped into three groups: (i) number of semantic components; (ii) LEsCM; (iii) the cause verbs, and (iv) distribution of these verbs.

**Table 6.3. Lexicalization patterns of the cause verbs in English**

| Number of components | | Lexicalization patterns | Verbs | % |
|---|---|---|---|---|
| Types of components | | | | |
| 2 | External | a. Motion + Cause | 33 | 41.7 |
| | **Total** | | **33** | **41.7** |
| 3 | External | b. Motion + Cause + Path | 12 | 15.1 |
| | | c. Motion + Cause + Manner | 22 | 27.8 |
| | **Total** | | **34** | **43.03** |
| 4 | External | d. Motion + Cause + Path + Manner | 12 | 3.1 |
| | **Total** | | **12** | **15.1** |
| **Total** | | | **79** | **100** |

*a. Lexicalization Patterns:* ***Motion + Cause***

This expression consists of two components including the motion of the Figure and the cause of motion. There are the two cause verbs found in the data belonging to this pattern such as *blow* and *drift*. This pattern generally denotes that the Figure is moved by an external force, the force is normally from a stream of water or wind as in (6.11).

(6.11) Smoke ***drifted*** over the heads of the chattering crowd. (**ES06**-276)

*b. Lexicalization patterns:* ***Motion + Cause + Path***

Three semantic components are conflated into the cause verb *topple* which denotes unsteady motion, the expression with the verb *topple* depicts that the Figure is descending as the result of its loss of balance.

(6.12) A stack of plates swayed and began to ***topple*** over (**ES08**-306)

*c. Lexicalization patterns:* ***Motion + Cause + Manner***

The cause verbs found in the data include four verbs *bring, carry, send* and *take*. These verbs generally denote that the Figure does not really move, its movement is due to the agent's movement in a distinct manner. The Figures of these verbs *bring, carry* and *take* do not move in essence, but they are on the agents' bodies which are moving. In the case of *send*, it denotes that the Figure's movement is owing to other agents such as plane, vehicle, etc as in (6.13).

(6.13) I'll ***send*** this with Hedwig when she gets back. (**ES10**-60)

*d. Lexicalization patterns:* ***Motion + Cause +Path + Manner***

This expression is the conflation of four semantic components. One verb *flee* found in the data consists of these components, which denotes both physical and nonphysical cause that stems from the motion event; therefore, this verb depicts that the Figure runs in any direction away from the Ground because of danger.

(6.14) Sirius had had to ***flee*** for his life. (**ES04**-278)

### *6.2.2.2. Lexicalization patterns of the Cause into the cause verbs in English*

This section continues to answer the question in terms of semantic components conflated into the cause verbs: *What cause is conflated into the cause verbs*? The analysis of the conflations of cause is grouped into three fields: (i) types of cause; (ii) the cause verbs denote distinct causes; and (iii) the distribution to show the frequency of the cause verbs.

**Table 6.4. Lexicalization patterns of the cause into the cause verbs in English**

| Lexicalization patterns | Verbs | % |
|---|---|---|
| a. X di CAUSES Y to MOVE Z | 56 | 70.8 |
| b. X ind CAUSES Y to MOVE Z | 7 | 8.8 |
| c. X ENABLES Y to MOVE Z | 5 | 6.3 |
| d. X PREVENTS Y from MOVING COMP (Z) | 4 | 5.0 |
| e. X HELPS Y to MOVE Z | 7 | 8.8 |
| **Total** | **79** | **100** |

*a. Lexicalization pattern:* ***X di CAUSE Y to MOVE Z***

This is the most popular expression in English which occupies 56 cause verbs (70.8%) found in the data (e.g., *blow, drag, toss*, etc*).* In general, these verbs denote that an external cause is transferred from the Agent to the Figure, and causes the Figure to move. However, this external cause is generated from different sources, it may stem from water (e.g., *drift*), wind (e.g, *drift, blow*), direct contacts (e.g., *flip, drag, stab*), or it can be created by the weight of the Figure as in (6.15).

(6.15) Harry **dropped** the bit of sausage. **(EN02-234)**

*b. Lexicalization pattern:* ***X ind CAUSES Y to MOVE Z***

This expression consists of 7 verbs of the cause verbs (8.8%) found in the data (e.g., *ask, beckon, invite, order, send, urge,* etc). The cause is indirect or internal one because these cause verbs do not really generate force causing the Figure to move. The nature of the cause is one of the communicative acts or perlocutionary acts to be precise, and it is interpreted through the conceptualization of other linguistic elements such as "*out*" in (6.16a) and "*inside*" in (6.16b). In reality, this cause is the result that is produced by the utterance in the given context. Moreover, this cause is completely dominated by distinct social classes, ages and cultures because these factors are determinant factors which give rise to different communicative acts such as invitation, command, permission, inhibition or urgent, request, etc and different styles such as formal or informal.

(6.16) a. Jerry's too scared to ***ask*** her ***out***. *Request* (**EN02**-724)

b. I ***invited*** him ***inside***. *Invitation* (**ES05**-106)

*c. Lexicalization pattern:* ***X ENABLES Y to MOVE Z***

There are 5 cause verbs (6.3%) (e.g., *allow, free, let, release, etc)* found in the data, which generally denote inducive causation which involves either active removal of a barrier or the failure to impose a potential barrier. However, the enablement is not associated with the removal of a barrier, but it is involved in giving rise to the power of language.

(6.17) Potter **allowed** them to come in the room. **(ES10-43)**

*d. Lexicalization pattern:* ***X PREVENTS Y from MOVING COMP (Z)***

This expression denotes the volitional causation which is related to the force-dynamic schema of imposing a barrier, causing the Figure to stay in a location in spite of its inherent tendency to move. There are four cause verbs (5.00%) found in the data, which are *barricade, keep, prevent* and *lock.*

(6.18) The Beaters **keep** the Bludgers away from their team. **(ES11-51)**

e. *Lexicalization pattern:* ***X HELPS Y to MOVE Z***

This expression denotes volitional causation generated by interactions of a volitional object on a physical object which causes the Figure to move. The verbs giving rise to this cause consist of 7 cause verbs (8.8%) such as *assist, help, guide, lead, show, urge*

and *walk*. The most typical feature of this expression is that both the Agent and the Figure must be agentive as in (6.19).

(6.19) She began ***urging*** him towards the front door. (**ES07**-246)

### *6.2.2.3. Lexicalization patterns of the Paths in English*

The study on lexicalization patterns of the Paths in English is to shed light on the semantic components conflated into Paths. In other words, they are involved in how linguistic properties are lexicalized into the prepositions. Such semantic components are determined by Ramchand (2008), which are Goal, Source and Route paths. In addition, these Paths are provided with further semantic properties, which will illuminate the starting points and endpoints of motion. Table 6.5 summarizes three types of paths which are considered to be results of cause generated by the verbs, and a number of cause verbs denote these paths.

**Table 6.5. Lexicalization patterns of the Paths in English**

| Lexicalization patterns | Paths | Semantic features | Verbs | % |
|---|---|---|---|---|
| a. Motion + Goal Path | To<br>Into<br>Up<br>Down<br>Towards | Cofinal<br>Cofinal<br>Terminative<br>Terminative<br>Approximative | 42 | 53.1 |
| b. Motion+ Source Path | Away from | Recessive | 23 | 29.1 |
| | Out of | Coinitial | | |
| | From | Coinitial | | |
| | Off | Coinitial | | |
| c. Motion+ Route Path | Along | Prolative | 14 | 17.7 |
| | Across | Transitive | | |
| | Around | Recessive | | |
| | Round | Recessive | | |
| **Total** | 13 | | **79** | **100** |

#### *a. Lexicalization patterns: **Motion + Goal Path***

This expression denotes that the agent transfers a cause (both internal and external cause) to the Figure to move along with a path. The Figure's paths depict both directions and the relationship between the Figure and the Ground. There are 42 cause verbs found in the data with the Goal paths. In general, these Goal paths are goal-oriented paths, which are

involved in a translation of a Figure from one location to another. Additionally, the Goal paths depict differences in the relationship between the Figure and the ground. First, the Goal paths *to* and *into* are referred to as Cofinal paths, which suggest the endpoint as the termination of a path and some properties such as translation, orientation and non-delimitation. Finally, *to* and *into* denote a motion which is oriented or directed to the endpoint of the Ground, but they do not posit a specific termination of the Figure. That is, the Ground, *the house* in (6.20) is an endpoint of the path but not a final endpoint.

(6.20) They allowed the burglar **to/into** the house. (**ES10**-234)

The paths *up* to and *down* refer to Terminative paths, which display the same properties as *to* and *into* in terms of translation, termination and orientation. That is, Figure terminates precisely at the Ground, *the roof of the house* as in (6.21). In short, the paths *up* and *down* denote the semantic features such as a change of location, vertical spatial meaning and a higher or lower position.

(6.21) He kicked the ball ***up to*** the roof of the house. (**ES10**-225)

Finally, the path *towards* is an Approximative one, which neither involves the transition from one location to another nor delimits the Figure's motion. Despite the fact that the Ground *the door* as in (6.22) forms an endpoint of the path, it does not denote that the Figure will be located within its dimension.

(6.22) Philip pushed him **towards** the door. (**ES12**-231)

*b. Lexicalization patterns:* ***Motion+ Source Path***

This expression denotes that when a force is transferred to the Figure from an Agent, this force causes the Figure to move along with the Source paths, which are referred to as Coinitial, Egressive and Recessive. The Source paths in English include *away from, from, out of* and *off*. For this expression, there are 23 cause verbs denoting this path found in the data. In general, the Source paths display the same properties as the Goal paths, but they differ with respect to the type of extreme points. First, the path *from* is the Coinitial path, which is involved in a translation of a Figure from one location to another. However, it does not specify the boundary of the starting point of motion as in (6.23).

(6.23) He'd snatched the keys **from** the table. (**ES07**-514)

The path *away from* is a Recessive path with some properties such as non-translational, oriented and non-delimited. More specifically, this path does with a source-oriented path made up of the adverb *away* denoting distance and the Coinitial path *from* denoting the relation of a Figure with a starting point in a path as in (6.24). There are 11 verbs of English caused verbs with the Source path found in the data, which are *blow, drag, flee, let, pull, shove* and *snatch*.

(6.24) Keith snatches toys **away from** the other children. (**EN01**-921)

Finally, the Source paths *off* and *out of* could well be a representative example of the Conitial that suggest a transition, no delimitation and source orientation. Moreover, the Figure is transmitted from a location inside the Ground *the flames* as in (6.25a) to an outer location. However, *off* differs from *out of* with regard to the container. That is, the path *off* is not necessary to denote the Figure which must be contained in the Ground *the table* as in (6.25b), but the *out of* must be. There are 22 cause verbs which can combine with the path *out of* and7 verbs for the path *off* found in the data.

(6.25) a. One of the firemen dragged my husband **out of** the flames. (**ES11**-241)

b. He sneezes the piece of paper **off** the table. (**ES09**-135)

*c. Lexicalization patterns:* ***Motion + Route Path***

The Route paths in English comprise *of along, across, around, round, past, through* and *over*, which are route-denoting paths. These Paths do not involve orientation; that is, the Ground forms the middle point of a route path. No direction or extreme points are specified or implied.

First, *past* and *along* are the Transitive and Prolative paths, which are associated with translation and no translation, respectively. Furthermore, both of them are negative with respect to orientation and delimitation. In the case of the *past* denotes that the Figure undergoes two transitions; first from a location outside the Ground to the Ground *the car* as in (6.26a), and then from the Ground to another location. With regard to *along*, the Figure does not undergo a translation when it follows a path *the floor* as in (6.26b), and it is interpreted as an extended entity.

(6.26) a. He shoved her **past** the car. (**ES05**-207)

b. Don't drag them **along** the floor. (**ES12**-97)

In the case of the Route paths *through, across, around* and *round*, each of these paths relates a Figure to some intermediate point in a path domain and can be characterized as either translational or non-translational. In addition, these paths are determined by the boundedness of the Ground; that is, the Ground which is perceived as a point so that the Figure passes through it in a specific amount of time. To begin with, *through* and *across* share several properties in terms of the limitation of a path, but they also denote a few different aspects of the path. With regard to *through*, it means that the Figure enters the one end and emerges out of the other end of the Ground as in (6.27a). *Across* denotes that the Figure enters the Ground through the side entrance and exits out another side entrance. In short, *through* denotes the middle of a Figure, and then going out the other side, whereas, *across* denotes crossing the middle but it not necessarily going in the thing the Figure is crossing as in (6.27b).

(6.27) a. Peter shoved his way **through** the dense crowd. (**ES06**-82)

b. He blew smoke rings **across** the table. (**ES04**-128)

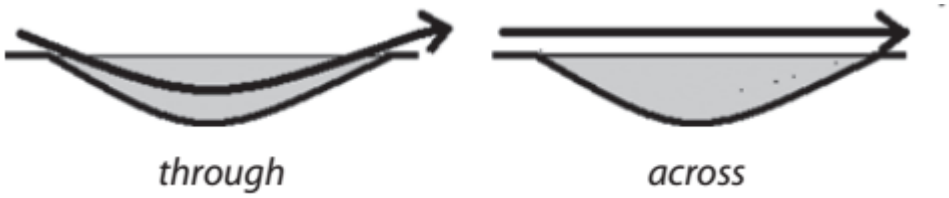



**Figure 6.3. The paths of *through* and *across***

Finally, the Route paths *around*/ *round* and *over* are the Recessive paths which are involved in no orientation and direction. First, *around* or *round* denotes that there are no extreme points; that is, the Figure moves around or round and outside the Ground with a whole-circular or a semi-circular detour as in Figure 6.4.

a semi-circular detour a whole-circular detour

**Figure 6.4. The path of *around* or *round***

Finally, the *over* is a Transitive path denoting that the Figure moves from one location to another. Moreover, it refers to paths that extend beyond one side of the Ground to beyond the other and it is described as an arc-like path, as shown in Figure 6.5.

**Figure 6.5. The path of *over***

## 6.3. LEsCM in Vietnamese

This section deals with the syntactic and semantic properties of LEsCM in Vietnamese. These properties are conducted on the basis of the theory of grammar construction and lexicalization patterns of LEsCM.

### 6.3.1. Construction grammar of LEsCM in Vietnamese

This section refers to the structure of the predicate of motion, which sheds light of the combination with some external arguments, termed as argument structures. On the basis of cognitive grammar, this section provides an in-depth insight into some aspects denoted by the cause verbs under the title of event structures.

#### *6.3.1.1. Argument structures of LEsCM in Vietnamese*

Table 6.6 summaries the argument structures of LEsCM in Vietnamese, which focuses on the number of arguments, types of arguments, the cause verbs and their frequency.

**Table 6.6. Argument structures of LEsCM in Vietnamese**

| Number of Args | Argument structures | Verbs | % |
|---|---|---|---|
| 3 | a. V [Figure Path Ground] | 12 | 13.6 |
| | b. V [Agent Figure Path] | 57 | 64.7 |
| 4 | c. V [Agent Figure Path Ground] | 63 | 71.5 |

*a. V [Figure Path Ground]*

There are 12 cause verbs, making up 13.6 % found in the data (e.g., *cắm, cuộn, hất, thổi, phóng, hạ, lao, đổ, nâng, lăn*, *tung*, etc) which can combine with three arguments such as

Figure, Path and Ground. In reality, the external force makes the Figure itself move while the Agent giving rise to that external force is not mentioned or implied. Thus, these verbs could be concluded to be active and intransitive verbs and the Figure is somewhat metaphorized as in (6.28).

(6.28) Chiếc L.19 như chiếc ô tô sắp **lăn** bánh *xuống* phà. (**VN01**-703)

The L.19 like a car is going to move down the ferry.

In this example, the Path "*xuống*" has a role in constituing the configuration of the direction of motion while the Ground "*phà*" provides the perspectival location of motion.

*b. V [Agent Figure Path]*

There are three arguments in this structure such as the Agent, Figure and Path. First, the Agent may give rise to both internal and external forces causing the Figure to move. Next, the Path takes an important role in constituting the configuration of directions for motion, which consists of both the goal paths (e.g*., lên, xuống*) and source paths (e.g., *vào, ra, tới, về*). There 57 cause verbs found in the data, making up 64.7% (e.g., *chất, chêm, chỉ, thổi* and *phun*, etc.,). However, the Ground is not mentioned in this expression as follows as in (6.29).

(6.29) Rồi thị **kéo** hắn *lên*. (**VS07**-39)

Then she pulled him up.

*c. V [Agent Figure Path Ground]*

This structure consists of four arguments, which are the Agent, Figure, Path and Ground. This structure generally denotes that when an external force from the Agent is transmitted to the Figure, and this force causes the Figure to move toward the Ground. Additionally, the forces in this expression can be both external like "*vác"* in (6.30a) and internal forces like "*cho phép"* as in (6.30b). There are 63 cause verbs, making 71.5%, found in the data denoting this structure, so it may have great popularity in English.

(6.30) a. Đồng chí nào **vác** mấy bao gạo ướt *ra* đây cho tôi? (**VS06**-438)

Who carries some sacks of rice out for me?

b. Chính ủy **cho phép** Khuê *về* đơn vị. (**VS10**-375)

The party leader permits Khue to return her office.

### *6.3.1.2. Event structures of LEsCM in Vietnamese*

The event structures are concerned with an investigation into the lexical aspects denoted by the cause verbs. Table 6.9 summarizes the event structures of LEsCM including (i) event of States, (ii) event of Activities, (iii) event of Achievement, and (iv) event of Accomplishments.

**Table 6.7. Event structures of LEsCM in Vietnamese**

| **Event structures** | **Types of events** | **Lexical aspects** | **Verbs** | **%** |
|---|---|---|---|---|
| a. States | Bounded Punctual | Atelic Perfective | 16 | 18.1 |
| b. Activities | Unbounded Durational | Atelic Imperfective | 5 | 5.7 |
| c. Achievements | Unbounded Punctual | Telic/ Atelic Imperfective | 42 | 47.7 |
| d. Accomplishments | Bounded Durational | Telic Pefective | 25 | 28.4 |
| **Total** | | | **88** | **100** |

a. *Event of States*

The verbs denoting this type of event consist of two lexical aspects, which are the Atelic and Perfective. When the cause verbs are the atelic verbs, they do not always require endpoints, thus they can be either transitive or intransitive verbs as in (6.31). When the cause verbs have the perfective verbs, they are the stative verbs which cannot express the progressive situations. There are 16 cause verbs (making up 18.1%) found in the data (e.g., *chỉ đạo*, *dẫn, giúp đỡ* and *mời*, etc). More particularly, these verbs only can give rise to internal forces, which are considered as a kind of speech acts.

(6.31) Ông con bảo con **mời** ông xuống. (**VS06**-416)

My grandfather told me invite you come to his house.

*b. Event of Activities*

The verbs denoting this event have two lexical aspects, namely the Atelic and Imperfective. First, when these verbs are Atelic, they do not require endpoints to

complete events (e.g., *rung, lắc, bắn*, etc). Next, when these cause verbs are the imperfective verbs, they are always dynamic verbs and can express progressive situations (e.g, *hạ, xoạy, phun*, etc). Additionally, the events denoted by these verbs are occasionally unbounded and durational. That is, when expressing these events, speakers often focus on the whole process of motion from the starting point to the endpoint. With respect to duration, these events take an amount of time to complete.

However, these verbs denoting this event are intransitive because the Figure is directly concerned with motion. The Agent giving rise to external forces causing the Figure to move is not mentioned or implied as in (6.32) because the Figure "*Sàn Gác*" cannot shake by its self. In other words, this event may be considered as a conceptual metaphor of motion. As a result, this event is the least common in Vietnamese, which has only 5 cause verbs (5.7%) found in the data.

(6.32) Sàn gác **rung** giữ dội. (**VS08**-517)

The watch-tower shaked seriously.

*c. Event of Achievements*

The event of achievements consists of two lexical aspects which are the Telic and Imperfective. The first aspect depicts that this event always requires endpoints; therefore, the cause verbs are always transitive. In other words, these verbs denote the Agent's direct impact on the Figure, which causes the Figure to move. The second aspect posits that these cause verbs are dynamic. More importantly, this event is bounded and durational. When it is a bounded event, it depicts that speakers do not focus on the whole process of motion, but on only the endpoint of motion. For example, the speaker does not the whole trip of carrying the dead body (*xác của em*). Instead, the speaker only places his focus on the endpoint of motion (*rừng*). Finally, this event denotes duration, that means this motion must last a certain length of time.

(6.33) Chúng tôi được **mang** xác của em về rừng. (**VS04**-107)

We are allowed to carry the dead body to the forest.

This event occupies the greatest popularity among events including 42 verbs, making up 47.7% such as *chất, chêm, cuốn, mang, khuân, vác* and *nhồi nhét*.

*d. Event of Accomplishments*

The verbs denoting this event consist of two lexical aspects including Telic and Perfective. The cause verbs with the telic aspect depict that this event always has the endpoints, so they must be transitive verbs. The cause verbs with the second aspect are stative verbs, which cannot denote progressive situations or events. This event consists of 25 cause verbs, making up 28.4% found in the data, namely *duỗi, hất, ném, tung,* and *phóng*, etc.

Take the verb "*ném*" as an example, the speakers only place their focus on the endpoint of motion "*ném*", the emergency of the Figure " *hai người*" outside the Ground "*phòng*", in other words because this is a bounded event. Moreover, the motion of the verb "*ném*" takes a length of time for the Figure to move from the inside to the outside.

(6.34) Hắn nhanh chóng **ném** hai người *ra* ngoài phòng. (**VN03-**259)

He quickly threw two people out of the room.

## 6.3.2. Lexicalization patterns of LEsCM in Vietnamese

This section is concerned with the lexicalization patterns of LEsCM in Vietnamese, which are associated with the conflation of semantic components. The lexicalization patterns of LEsCM in Vietnamese are divided into three types including (i) the lexicalization pattern of the cause verbs, (ii) the lexicalization patterns of causes, and (iii) the lexicalization patterns of paths. This division is conducted on the basis of the semantic components lexicalized into the cause verbs and Paths.

### *6.3.2.1. Lexicalization patterns of the cause verbs in Vietnamese*

Table 6.8 summarizes lexicalization patterns of the cause verbs, which clarify the conflation of semantic components, namely Motion, Path, Cause and Manner conflated into the cause verbs in Vietnamese. This section is the answer to the question *What are semantic properties of LEsCM in terms of lexialization patterns in Vietnamese*. By this way, the researcher constituted the lexicalization patterns based on the conflation of semantic elements into verbs. The result shows that there are four lexicalization patterns of LEsCM in Vietnamese in which the lexicalization pattern with four semantic elements is the most common.

**Table 6.8. Lexicalization patterns of SC into the cause verbs in Vietnamese**

| Number of components | | Lexicalization patterns | Verbs | % |
|---|---|---|---|---|
| Types of components | | | | |
| 2 | External | a. Motion + Cause | 4 | 4.5 |
| | **Total** | | **4** | **4.5** |
| 3 | External | b. Motion + Cause +Path | 11 | 12.5 |
| | | c. Motion + Path + Ground | 18 | 20.4 |
| | **Total** | | **29** | **32.9** |
| 4 | External | d. Motion + Cause + Path + Manner | 55 | 62.5 |
| | **Total** | | **55** | **62.5** |
| **Total** | | | **88** | **100** |

*a. Lexicalization patterns:* ***Motion + Cause***

This expression consists of two semantic components, which are Motion and Cause. In this expression, the Agent generating a cause to make Figure move is not mentioned. Figure *bọt* as in (6.35) is non-agentative, which may probably be understood the Agent generating the cause (what makes the spume pounce) and the Figure. There are four verbs of Vietnamese cause verbs, making up 4.5%.

(6.35) Ở chỗ đó tiếng nước réo ồ ồ, bọt **tung** trắng xóa. (**VS08**-45)

At the running-water place, the white foam splashed.

*b. Lexicalization patterns:* ***Motion + Cause + Path***

Three semantic components such as Motion, Cause and Path are conflated into the cause verbs in this expression which denotes the Figure's motion, the Cause from the Agent making the Figure move with a certain path. As in (6.36), the verbs *phóng* denotes the motion of the Figure *pháo,* the cause from the Agent *máy bay* which makes the Figure move and gives rise to the Path of the Figure, which normally from a lower position of the Agent to a higher position. More particularly, the Figure normally moves according to an Arc-like path. There are 11 verbs (12.5%) found in the data, which denotes these semantic components (e.g., *cắm, phóng, hạ* and *tách*).

(6.36) Tám giờ sáng, máy bay **phóng** pháo ào ào. (**VS08**-217)

At 8 a.m, the jet launched rockets with howling sound.

*c. Lexicalization patterns:* ***Motion + Cause + Manner***

This expression consists of three semantic components such as Motion, Cause and Manner, which denotes that the Agent gives rise to the cause making the Figure move. In addition, this expression also clarifies the Figure's styles of motion such as *vác, khiêng* or *búng*, etc. Like the example below, the Agent is *Moan* which gives rise to cause to trigger the Figure *hai hòm đạn* to move. More particularly, the cause verb *vác* also denotes that the Figure is placed on Moan's shoulder and it simultaneously moves with Moan. There are 18 cause verbs found in the data denoting these semantic components, occupying 20.4% of Vietnamese cause verbs.

(6.37) Moan **vác** hai hòm đạn rời hầm Lữ trở về. (**VN02**-821)

Moan carried two boxes of bullets from Lu.

*d. Lexicalization patterns:* ***Motion + Cause + Manner + Path***

This expression with 55 cause verbs (62.5%) denotes four semantic components which are Motion, Cause, Manner and Path. Take (6.38) as an example, The Agent is *Chúng* giving rise to cause for Figure *bom*. The Figure moves from a higher position down a lower position toward Ground *các của rừng* along Path *xuống*. To be more specific, the verb *ném* also denotes the Figure is flushed from the plane by the military technology.

(6.38) Chúng **ném** bom các cửa rừng. (**VS06**-223)

They bombed the doors of forest.

### *6.3.2.2. Lexicalization patterns of Cause into the cause verbs in Vietnamese*

This section is analyzed on the basis of the semantic components together with types of causes which are lexicalized into the cause verbs. In general, the Causes are divided into two types, which are direct and indirect causes. The first type frequently has direct contacts between the Agent and the Figure, so the cause verbs must be transitive ones. In the second type, the Agent does not have direct contact with the Figure, so they are regarded as the volitional causes or speech acts. They are these causes which give rise to different patterns of the cause verbs. Table 6.9 summarizes the lexicalization patterns of the cause in Vietnamese. This table is summarized according to three categories such as types of cause, verbs denoting that cause and the contribution of those verbs.

**Table 6.9. Lexicalization patterns of Cause into the cause verbs in Vietnamese**

| Lexicalization patterns | Verbs | % |
|---|---|---|
| a. X di CAUSES Y to MOVE Z | 66 | 75 |
| b. X ind CAUSES Y to MOVE Z | 3 | 3.4 |
| c. X ENABLES Y to MOVE Z | 7 | 7.9 |
| d. X PREVENTS Y from MOVING COMP (Z) | 4 | 4.5 |
| e. X HELPS Y to MOVE Z | 8 | 9.0 |
| **Total** | **79** | **100** |

*a. Lexicalization patterns:* ***X di CAUSES Y to MOVE Z***

This expression denotes that the external agents have direct impacts on the Figure, which cause the Figure to move. This is the most popular expression in Vietnamese, which consists of 66 verbs of Vietnamese cause verbs, occupying 75% (*chất, hất, thổi* and *phóng*, etc). The external causes may derive from various sources such water (*cuốn*), wind (*thổi*), the weight of the Figure (*đánh rơi*) or the direct contact of the external agents (*ném, đẩy, kéo, rót*, and *bắn*).

(6.39) Lượm **ném** miếng giấy lót quai vào thùng. (**VS07**-236)

Luom threw a piece of paper into the wastebasket.

*b. Lexicalization patterns:* ***X indi CAUSES Y to MOVE Z***

In this expression, though the Agents do not have direct contact on the Figure, it still may move. This is because the cause may be considered to be perlocutionary acts which are generated by a certain utterance in a given context. Take the verb *mời* as an example, the Agent *tôi* only gives an utterance by an invitation or internal motivation, which does not give rise to direct contact on the Figure *đồng chí*, but it still moves *quá bộ*.

(6.40) Tôi **mời** đồng chí quá bộ lên tầng năm hỏi phòng tổ chức. (**VS04**-27)

I invite you to go to the fifth floor and ask the HR office.

There are three cause verbs found in the data denoting this cause such as *yêu cầu, ra lệnh* and *mời*. In general, this cause in Vietnamese is normally prescribed by different social classes, ages and cultures.

*c. Lexicalization patterns:* ***X ENABLES Y to MOVE Z***

The verbs denote this cause including 8 cause verbs, making up 9% (e.g., *cho phép, cấm, vẫy tay* and *thả*, etc). These verbs generally denote an inductive cause involving both the active removal of barriers and the failure to impose a potential barrier. More particularly, these verbs express two kinds of directions of motion, which are the motion away from the Ground (*vẫy tay*) or toward the Ground (*đuổi*).

(6.41) Các em **thả** cho tui về với vợ con. (**VN02**-403)

You **let** me go home with my wife and children.

*d. Lexicalization patterns:* ***X PRESENTS Y from MOVING Z***

The verbs denoting this cause include 4 cause verbs (e.g, *chặn, giữ, khóa* and *vây*), making up 4.5%. This cause reveals that Figure *hắn* cannot move toward the Ground by a barrier *Em*.

(6.42) Em **chặn** được hắn lại. (**VS03**-71)

I prevented him from going.

*e. Lexicalization patterns:* ***X HELPS Y to MOVE Z***

The verbs giving rise to this cause denote volitional causation generated by direct or indirect contacts on the Figure. There are 8 verbs of Vietnamese cause verbs denoting this cause found in the data, making up 9.0% (e.g., *thuyết phục, chỉ ra, chỉ đạo* and *giúp đỡ*). To be more particular, Agent *Đơn vị* and Figure *Nhân dân* in this expression must be agentive as the following example.

(6.43) Đơn vị **giúp đỡ** Nhân dân di chuyển đồ đạc đến chỗ ở mới. (**VS01**-19)

My unit helped the people to move luggages to the new place.

### *6.3.2.3. Lexicalization patterns of Paths into the cause verbs in Vietnamese*

Table 6.10 summarizes the lexicalization patterns of the Paths in Vietnamese, which is grouped into five categories (i) lexicalization patterns, (ii) Paths, (iii) semantic components of each Path, (iv) the cause verbs denote each type of Paths, and (v) the distribution of the cause verbs. This section is analyzed on the basis of the semantic components in terms of directions. As the result showed, the cause verbs in Vietnamese denote three kinds of Paths such as Source and Route, which refer to transition from one

spatial domain to a complementary spatial domain. First, the goal paths indicate the precise end-point location of the Path. Next, the source paths indicate the initial location of the Path. Finally, the route paths are not the end-point paths because they refer to the middle location of the Path.

**Table 6.10. Lexicalization patterns of Paths into the cause verbs in Vietnamese**

| Lexicalization patterns | Paths | Semantic features | Verbs | % |
|---|---|---|---|---|
| a. Motion + Goal Path | Tới<br>Vào<br>Lên<br>Xuống | Cofinal<br>Cofinal<br>Terminative<br>Terminative | 58 | 65.9 |
| b. Motion+ Source Path | Ra khỏi<br>Ra ngoài<br>Từ | Recessive<br>Coinitial<br>Coinitial | 16 | 18.1 |
| c. Motion+ Route Path | Dọc theo<br>Qua<br>Quanh | Prolative<br>Transitive<br>Prolative | 14 | 15.9 |
| **Total** | **10** | | **88** | **100** |

### *a. Lexicalization patterns: **Motion+ GoalPath***

This expression denotes that after there is a contact between the Agent and the Figure, the Agent transfers a force to the Figure, which causes the Figure to moves with the Goal paths. These Paths denote that the Figure moves from the Agent and towards the Ground, which are also termed as the goal-oriented paths such as *tới, vào, lên* and *xuống*. The Paths *tới* and *vào* are the cofinal paths, which suggest the endpoint as a termination with several properties such as translation, orientation and non-delimination as in (6.44). Meanwhile, the Paths *lên* and *xuống* are the terminative paths, which have all properties of the cofinal paths, but they also denote that the Figure's motion normally stops accurately at the Ground. This expression is the most common in Vietnamese, which consists of 58 cause verbs, making up 65.9%.

(6.44) Chúng hò nhau ném tới tấp đá và gạch **vào** em. (**VN02**-272)

We simultaneously threw stones and bricks into you.

*b. Lexicalization patterns:* ***Motion+ SourcePath***

This expression consists of three Source paths including *ra khỏi, ra ngoài* and *từ,* which are generally similar to the Goal paths, but they, additionally, refer to extreme points. First, the path *ra khỏi* is the Recessive path, which is not non-translational, oriented and non-delimited. Furthermore, this Path refers to the Figure's source orientation as in (6.45a). Next, the Path *từ* is the coinitial path, which is concerned with the Figure's translation from a starting point to a destination, but it does not specify the boundary of the starting point as in (6.45b). Finally, the path *ra ngoài* is the coinitial path, which is associated with a translation, no delimitation and orientation as in (6.45c). There are 16 the cause verbs found in the data in Vietnamese denoting this type of path.

(6.45) a. Em kéo được bạn **ra khỏi** khu vực giặc thì trời vừa hửng sáng. (**VS07**-85)
When I dragged my friend out of the occupied area at the dawn.

b. Một cụm khói lại đùn lên **từ** dưới chân một cây gạo. (**VS04**-35)
The smoke came from the root of the bombax tree.

c. Thằng bé có vẻ mặt liến láu, thổi qua bóng **ra ngoài** mui đò. (**VS06**-159)
The child quickly blew the balloon out of the hood of boat.

*c. Lexicalization patterns:* ***Motion+ RoutePath***

The route paths consist of three prepositions such as *dọc theo, qua* and *quanh* in Vietnamese, which are not concerned with orientation and direction but clarify the extreme points. First, *qua* and *dọc theo* are the transitive and prolative paths, respectively. The path *qua* denotes that the Figure undergoes two transitions; from one location outside the Ground, then move into the Ground and out at another location of the Ground as in (6.46a). Next, the path *dọc theo* posits that the Figure does not undergo a translation, but it is interpreted as an extended entity as in (6.46b). Finally, the path *quanh* is the recessive path, which is not associated with orientation, direction and extreme points. Also, it depicts that the Figure moves around the Ground in a whole-circular or semi-circular detour as in (6.46c). There are 14 verbs of Vietnamese cause verbs, making up 15.9 %, denoting this path.

(6.46) a. Người ta đẩy con đò **qua** khỏi ngã ba Sình. (**VS05**-71)

They pushed the boat through the Sinh intersection of river.

b. Hai đứa kéo chiếc xe **dọc theo** các con đường lớn trong thành nội. (**VS12**-3)

The two children drew their bike through the large roads in the city.

c. Vôi vữa gạch vụn bay rào rào **quanh** anh. (**VS10**-56)

Lime mortar and broken bricks flew around him.

## 6.4. Discussion and conclusion

This section is mostly conducted in the methodology of comparison of LEsCM between two languages in terms of lexicalization patterns and construction grammar. The first area is concerned with the lexicalization patterns of the cause verbs in which the semantic components conflated into the cause verbs. The second section is associated with construction grammar which reflects speakers' knowledge of LEsCM in two contexts.

### 6.4.1. Argument structures of LEsCM in English and Vietnamese

There are four argument structures of LEsCM found in each language in which the semantic components such as Agent, Figure, Path and Ground incorporate with the cause verbs to make up caused motion events. These structures present speakers' knowledge and experience of LEsCM including the syntactic properties of the cause verbs and their arguments.

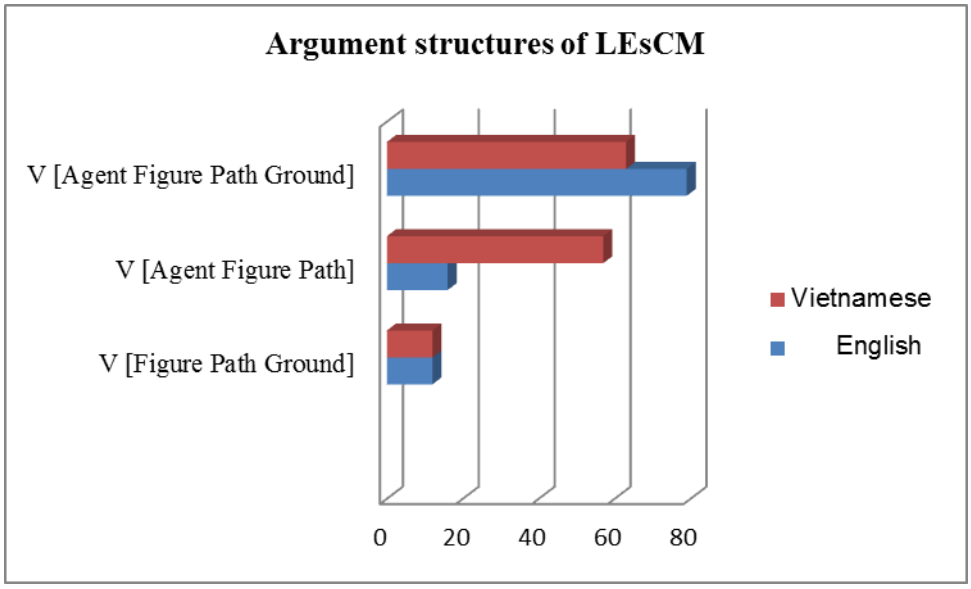



**Chart 6.1. Argument structures of LEsCM in English and Vietnamese**

The chart shows the number of path verbs used in each argument structure in English and Vietnamese. On the whole, the argument structure of *V [Agent Figure Path Ground]* is the most common in both languages (79 verbs in English and 63 verbs in Vietnamese). However, there is a great disparity between the argument structure of *V [Agent Figure Path]* in two languages in which the English cause verbs with this structure are used much more than the Vietnamese ones. This can be explained that when conceptualizing the causal chain of motion in space, Vietnamese speakers normally express LEsCM in a causal chain with enough the semantic components as in (6.47b) including the Agent *tôi*, the Figure *hắn*, the Path *vào* and the Ground *xe*. Meanwhile, English speakers tend to ignore the destinations of motion; they may focus on the Agent, Figure and Path as in (6.47a).

(6.47) a. They will **pull** their marketplace insurers *out.* (**EN01**-467)

b. Tôi **đẩy** hắn *vào* xe để giấu đi mấy giọt nước mắt sắp ứa ra. (**VN02**-562)

I pushed him into the car to hide the tears which were about to burst.

### 6.4.2. Event Structures of LEsCM in English and Vietnamese

This section is concerned with the comparison of the event structures of LEsCM between English and Vietnamese. Like the argument structures of LEsCM, the event structures are also associated with the illumination of speakers' knowledge of LEsCM through lexical aspects. Table 6.11 summarizes the event structures of LEsCM in English and Vietnamese.

**Table 6.11. Event structures of LEsCM in English and Vietnamese**

| Event structures | Types of event | Lexical aspects | English Verbs | Vietnamese verbs |
|---|---|---|---|---|
| Event of States | Bounded Punctual | Atelic Perfective | 15 | 16 |
| Event of Activities | Unbounded Durational | Atelic Imperfective | 26 | 5 |
| Event of Achievements | Unbounded Punctual | Telic/Atelic Imperfective | 21 | 42 |
| Event of Accomplishments | Bounded Durational | Telic Perfective | 17 | 25 |
| **Total** | | | **79** | **88** |

On the whole, there are no significant distinctions in terms of event structures between two languages. However, a number of the cause verbs in English (26 verbs) used to denote the event of Activities of LEsCM are far more than the cause verbs in Vietnamese (5 verbs). This is because the cause verbs denoting this event do not contain the endpoints of motion, so these verbs must be intransitive. More particularly, the Agent of the cause verbs is implied, and the Figure is considered as the Agent as in (6.48).

(6.48) Một bó mũi tên **bắn** ra bốn phía. (**VN01**-753)

A bundle of arrows came from several directions.

### 6.4.3. Lexicalization patterns of LEsCM in English and Vietnamese

Table 6.12 summarizes the lexicalization patterns of LEsCM in English and Vietnamese, which both consist of four patterns. The lexicalization patterns of LEsCM are concerned with their semantic properties. This section was conducted in the method of comparison of LEsCM between two languages.

The table reveals a considerable disparity between English and Vietnamese. First, the cause verbs in English used to denote the patterns of *Motion + Cause* and *Motion + Cause + Manner* are more than ones in Vietnamese. It could be concluded that Vietnamese speakers normally express caused motion in a full cause chain with enough semantic components. Hence, the cause verbs in the pattern of *Motion + Cause + Path + manner* in Vietnamese are much more than one in English.

**Table 6.12. Lexicalization patterns LEsCM in English and Vietnamese**

| **Number of components** / **Types of components** | | **Lexicalization patterns** | **English verbs** | **Vietnamese verbs** |
|---|---|---|---|---|
| 2 | External | a. Motion + Cause | 33 | 4 |
| | **Total** | | **33** | **4** |
| 3 | External | b. Motion + Cause + Path | 12 | 11 |
| | | c. Motion + Cause + Manner | 22 | 8 |
| | **Total** | | **34** | **29** |
| 4 | External | d. Motion + Cause + Path + Manner | 12 | 55 |
| | **Total** | | **12** | **55** |
| **Total** | | | **79** | **88** |

### 6.4.4. Varieties of lexicalization patterns

There is a great difference in a number of semantic components such as Cause, Manner, Motion and Paths lexicalized into the cause verbs in English and Vietnamese. In English, the semantic component of Cause is lexicalized into the cause verbs and the Paths into spatial prepositions. However, motion and manner are implicitly understood through the interpretation of force and Paths. In the Vietnamese case, while the Cause is lexicalized by the cause verbs, and Manner and Path are lexicalized by the path verbs. More particularly, the motion is explicitly expressed by the path verbs. This distinction could be termed as implicit lexicalization in English and explicit lexicalization in Vietnamese. This interpretation and analysis are mostly explored on the basis of semantic properties of the cause verbs.

#### *6.4.4.1. Implicit motion lexicalization patterns in English*

Beginning with an examination of semantic components in motion events proposed by Talmy (1985, 2000b), which are Figure, Motion, Path, Cause, Manner and Ground. As mentioned earlier, all verbs in LEsCM in English are transitive verbs whose roles are to generate force causing the Figure to move in terms of both indirect (internal) and direct (external) contact. Accordingly, the construction of LEsCM can be defined structurally as follows:

[AGENT [cause V FIGURE PATH GROUND]]

Basically, the semantics of this LEsCM can probably be understood that the Agent argument directly causes the Figure argument to move along a path designated by directional phrase; that is X CAUSES Y TO MOVE Z.

In reality, the verbs in this LECM can belong to different categories. When they express active events, they only denote direct contact between the Agent and Figure without revealing any information involved in motion as in (6.49a) and (6.49b). These are not LEsCM in English.

(6.49) a. Joe kicked the dog. (**ES08**-421)

b. Jack hit the ball. (**ES11**-250)

In another case, when the prepositional phrases such as *into the bathroom* and *across the field* accompany the abovementioned constructions as in (6.43a) and (6.43b), they actually become LEsCM. However, motion in these lexical expressions is implicitly understood thanks to the semantic aspects of *into* and *across.* The verbs *kick* and *hit* simply denote directional interaction between the Agent and the Figure, but motion and manner only can be inferred from meanings of the surface elements such as *into* in (6.43a) and *across* in (6.43b). As a result, the event structure of LEsCM in English can be roughly designated as follows:

[cause CAUSE ([thing/event], [path/ event], [thing/event])]

(6.50) a. Joe kicked the dog into the bathroom. (**ES01**-145)

b. Jim hit the ball across the field. (**ES09**-92)

### *6.4.4.2. Explicit motion lexicalization patterns in Vietnamese*

Unlike the case of implicit motion lexicalization in English, explicit motion lexicalization in Vietnamese has several different aspects. The first distinction lies at t surface elements lexicalizing semantic components which are proposed by Talmy (1985, 2000b), in which the Cause is lexicalized by the cause verbs, and Motion, Manner and Path are lexicalized by the path verbs. Given that the cause verbs in LEsCM in Vietnamese are transitive verbs, so the construction is structurally designated as follows:

[AGENT [cause VERB FIGURE path VERB GROUND]]

This expression may be termed as the serial verb construction because two verbs are associated with denoting motion as in (6.44), and it may contain two motion events. The cause verb *đẩy* denotes the Agent had a directional contact on the Figure while the path verb denotes motion and direction.

(6.51) Lê Hường **đẩy** lá đơn **tới** trước mặt sáu đứa nói giọng cười cười. (**VS10**-534)

Le Huong pushed the application to the six lispers who were laughing.

Semantically, a LECM normally consists of the Agent argument directly causing the Figure to move along a path. The basic semantics of this expression can be designated by the directional phrase as follows: X CAUSES Y TO MOVE Z.

As abovementioned, a LECM generally contains two verbs (one cause verb and one path verb), but they denote different semantic components. This expression always encompasses two events which are the cause event as (6.45a) and motion event as (6.45b).

(6.52) a. Lê Hường **đẩy** lá đơn. *Cause event*

Le Huong pushed the application.

b. Lá đơn **tới** trước mặt sáu đứa nói giọng cười cười. *Motion event*

The application came to six lispers who were laughing.

Thus, the event structures of LEsCM in Vietnamese can be designated as follows:

[*cause* CAUSE ([thing/event], [ event MOTION], [ thing/ event ])]

### 6.4.5. Constraints on semantic components

In this section, we will take in-depth insights into constraints of causer arguments which are assigned by their semantic roles as the Agents in LEsCM. In addition, constraints of direct causation also will be eliminated on the basis of lexical causatives.

#### *6.4.5.1. Constraints on the causer arguments*

As abovementioned, a LECM normally encompasses four arguments in both English and Vietnamese, which are the Agent, Figure, Path and Ground. However, in this section, we only focus on the stipulation of different types of the causer arguments which are assigned by their semantic roles as the nonagentive (Instrument) or agentive (Agent). In other words, identifying constraints of the causer arguments is to seek thematic roles of the Agents that are in harmony with the semantic aspects of the predicate.

*a. The causer arguments as agentive*

First of all, it is essential to take insights into the semantic properties of the causer arguments that function as the Agents. Cook (1989: 39) deposits that the Agent is the instigator of the action, the principal cause of the event as opposed to the immediate cause but excluding natural force. The agentive role is not restricted to animate nouns as (6.46a) and (6.46b), and inanimate Agents are also permitted as in (7.44.c).

(6.53) a. **The child** *pushed/ threw/ kicked* the keg into the storeroom.

b. **The cat** *blew/ flicked* the ant off my table.

c. **The wind** threw them into the hall. (Talmy, 2000b:47)

Thus, the conceptual structure of these expressions could be schematized as follows:

[Agentive CAUSE ([FIGURE], [PATH], [GROUND])]

The Agentive causer argument in this expression can be applied for the verbs which generate both types of forces such as indirect (internal) (e.g., *allow, ask, assist, urge*, etc,.) and direct (external) ( e.g., *draw, drift, throw, roll*, etc,. ) forces.

This expression also exists in Vietnamese in which the Agent of causer argument generating two forces can be the subjects of a sentence as in (6.47).

(6.54) a**. Đội trưởng** cho phép tôi về thăm mạ. (**VS07**-368)

The team leader permitted me to visit my mother.

b. Chốc chốc **nó** phải đưa tay đẩy vành mũ lên cao. (**VS11**-247)

Sometimes he had to push his hat up.

b. *The causer argument as non-agentive*

Nonagentive causer argument is the immediate cause of an event as opposed to the Agent as the principal cause. If the Agent and nonagentive causer argument co-occur, the Agent is the instigator of the event and the nonagentive causer argument is that cause more immediately in contact with the event as in (6.48).

(6.55) The napkin *blew* off the table. (Talmy, 2000b:26)

Syntactically, the verbs in this expression are intransitive and denote active events, which do not express the generation of forces any more but they seem to generate real actions. Thus, this expression can be designated as follows:

[Nonagentive CAUSE ([PATH], [GROUND])]

As a result, when the causer argument is the Agentive which generates forces causing the Figure to move, these verbs are transitive. However, when the causer argument is the Nonagnetive (the Figure), these verbs are intransitive. In this case, the causer argument of this expression can be implied because they are not focal participants. Dixon (1994) called this phenomenon ergativity. That is, the object in the transitive structure as (6.49a) becomes the subject in the intransitive structure as (6.49b)

(6.56) a. The cat *blew/ flicked* **the ant** off my table.

b. **The ant** *blew* off my table. (Talmy, 2000b:67)

### *6.4.5.2. Constraints on direct causation*

This section is concerned with specific constraints on what kinds of situations can be encoded by the caused motion construction which aims at explicating the single-clause causation expressions in English and double-clause causation expressions in Vietnamese.

*a. Single - clause causation expressions in English*

In English, most LEsCM are single- clause causation expressions, which contain only one cause verb. The role of this cause verb (*coaxed)* is to generate forces causing the Figure to move without mentioning motion explicitly. This motion of the Figure (*Bob)* only can be understood the semantic properties of the Path (*into*) implicitly as (6.50).

(6.57) Sam **coaxed** Bob into the room. (**ES09**-170)

Nonetheless, there are some cause verbs in English which cannot be applied in this type of expression as (6.51b) because they always require a manner motion verb to decode aspects of motion events as (6.51a). More specially, these verbs only generate internal forces, which are *convince, persuade, instruct and courage*.

(6.58) a. Sam encouraged Bob **to go into** the room. (**ES12**-106)

b. Sam encouraged Bob into the room.

*b. Double - clause causation expressions in Vietnamese*

In contrast to English, LEsCM in Vietnamese are always double-clause causation expressions. That is to say, a LEsCM constantly consists of two verbs which are a cause verb such as *đẩy, xô, tông, mời, yêu cầu, kéo, lôi*, etc., and a path verb such as *vào, ra, xuống, lên, tới, qua*, etc.,. The cause verb has a role in generating forces (*kéo*) while the motion verb (*ngồi xuống*) denotes aspects of motion events as (6.52).

(6.59) Lượm **kéo** tay nó **ngồi xuống** bên cạnh nói. (**VS11**-214)

Luom drew me to sit down next to him.

## 6.5. Summary

This section is associated with the investigation into structures and lexicalization patterns of LEsCM in English in contrast to Vietnamese. To begin with, the structures of LEsCM

are explored in terms of argument structures and event structures. The Argument structures are concerned with a wide range of arguments combining with the cause verbs in order to constitute different LEsCM in English, which are analyzed on the basis of Pereck's (2015) theory. Next, the event structures are shed light on Rothstein's (2004) classification of lexical meanings of the cause verbs. According to him, verbal predicates may be divided into four different classes: States, Activities, Accomplishments and Achievements. In addition, when delving into event structures of LEsCM, two main types of forces (internal and external) are simultaneously decomposed on the basis of lexical meanings of verbs.

Secondly, the lexicalization patterns of semantic components, causes and paths are analyzed in detail in terms of semantic properties. Talmy (1985) posits that lexicalization is the way of how the semantic elements are mapped onto the surface elements and via versa. First of all, the way of how the semantic components determined by Talmy such as Motion, Cause, Path and Manner are mapped on the surface elements to constitute different LEsCM in English. Next, on the basis of the theory of construction grammar by Goldberg (1995), the semantic elements of different types of causes which are lexicalized into the surface elements are radically decomposed. This may be explicated that different causes can generate different LEsCM. Last but not least, the analysis of how different Paths are rendered into the surface elements occupies an essential part. Pantcheva (2011) identifies three types of Paths on the basis of semantic properties of spatial adpositions, which are Goal, Source and Rout.

# Chapter 7

# CONCLUSION AND IMPLICATION

## 7.1. Conclusion

Geeraerts (1995: 111-112) says that cognitive linguistics sees language as embedded in the overall capacities of man, thus, topics of special interest for cognitive linguistics including the structural characteristics of natural language categorization; the functional principles of linguistic organization; the conceptual interface between syntax and semantics; the experiential and pragmatic background of language-in-use; and the relationship between language and thought have drawn much attention from language researchers. There are two branches of cognitive linguistics used to analyze linguistic phenomena, which are cognitive semantics and cognitive grammar. The first branch is associated with the mechanisms to forming meanings from interactions between humans and the external world. The second branch is involved in the study of the cognitive principles that give rise to the linguistic organization, and construction grammar aims to provide a more descriptively and formally detailed account of the linguistic units.

Motion in language is said to be a typical domain which is analyzed on the basis of the principles of cognitive linguistics because it is mostly concerned with conceptual areas such as attention, location and direction. As a result, a wide range of studies have been engendered under the title of motion. Talmy may be the pioneering linguist providing in-depth insights into motion from the theory of lexicalization patterns of SCs in motion events.

Talmy's seminal work has given rise to a good deal of research and debate in the literature on motion event descriptions over the last two decades. The linguistic investigation into the expression of motion has been resolved habitual ways of speaking and writing about motion which has considered as the groundwork for further exploration of how speakers acquire these language-specific semantic patterns, on the influence of these patterns in language processing, and on whether the effects affect non-linguistic cognition. In spite of the fact that the linguistic domain of motion has appealed to the bulk of studies, these studies have frequently overlooked the fact that motion verbs can also

encode more than one semantic component in their root verbs which are apart from Path of motion. However, these studies have neglected the investigation into path verbs and cause verbs in favor of the analysis of manner, and the expression of manner verbs has been so far the most interesting diverging point between satellite-and–verb framed languages. A few studies have conducted an in-depth analysis of semantic and syntactic features of three groups of motion verbs such as manner verbs, path verbs and cause verbs which give rise to different expressions of motion.

Research on motion verbs from a range of different theoretical backgrounds has provided precious foundations on the syntactic and semantic nature of motion verbs. The recent tendency of the analysis of motion has been to divide motion verbs into three types of motion verbs, which are path verbs, manner verbs and cause verbs. The path verbs have been often subdivided into two categories in terms of the trajectories they describe or in terms of whether or not they describe the event structure of achievement of an endpoint. Manner verbs have been often grouped into two types, which are translational motion verbs and self-contained motion verbs. The cause verbs have been grouped into two classes, namely, cause verbs of external force and cause verbs of internal force. Corresponding to each type of verbs, there are three classes of LEsM including LEsMM, LEsPM and LEsCM. Based on the semantic components conflated into motion verbs, and the argument and event structures of these verbs, this research focuses on the analysis of semantic and syntactic features of LEsM in English contrast to Vietnamese.

This research was aimed to contribute to the crosslinguistic study on LEsM by examining semantic and syntactic properties of the motion verbs in English and Vietnamese. The first attention has been given to the sorts of conflations which may be found in these motion verbs and the path notions in English in contrast to Vietnamese. The second attention has been given to the argument which may combine with the motion verbs to make up different motion events and event structures which clarify the semantic situations denoted by motion verbs. In this dissertation, the researcher has used an approach to the semantics and syntax of motion verbs in which the English language has been considered as the target language and analyzed radically. Then the Vietnamese

language has been elucidated on the basis of the English language in order to find out differences and similarities between the two languages. This framework derives from the general components for a motion event identified by Talmy but combines with a list of types of paths and a wide range of manner parameters which allows a much more detailed analysis of the semantics and syntax of motion verbs.

In doing so, the researcher mostly sought the answers to the research questions. For the first question, the researcher thoroughly decomposed the semantic properties of LEsM. Specifically, there are four event structures for three types of LEsM which were found in English and Vietnamese and analyzed on the basis of types of events and lexical aspects of each type of verbs, which are bounded/unbounded, durational/punctual, atelic/telic and perfective/imperfective (282 manner, 95 path and 79 cause verbs in English, and 224 manner, 38 path and 88 cause verbs in Vietnamese). Additionally, the semantic properties of LEsM were also investigated according to the lexicalization patterns in which the semantic elements, namely Figure, Ground, Manner, Path and Cause are conflated into verbs. The data revealed that there were 10 patterns for LEsMM, 4 patterns for LEsPM and 4 patterns for LEsCM in the two languages. Moreover, the lexicalization patterns of prepositions and causes were shed light on. The second answer focused on the syntactic analysis of LEsM in terms of argument structures which shown that the number of arguments of semantic elements could combine with the each type of motion verbs. There were six argument structures of LEsMM, five structures for LEsPM and three structures for LEsCM found in English and Vietnamese.

The contrast between the two languages has led to the identification of some differences and similarities, and this was the answer to the third question. First, the LEsMM in English is quietly similar to the LEsMM in Vietnamese because there are 11 lexicalization patterns in the two languages, which consist of 9 semantic components. However, there is a big difference in the surface structures of the Path in terms of independence and invariabilities. Additionally, the most characteristic difference lies in the relation between Figure and Ground. Second, in the case of LEsPM, both languages denote the similarity of the directional orientation of paths, but spatial and cultural

relations between the Figure and Ground also has given rise to considerable differences. Finally, the granular exploration was conducted on the basis of independence and invariability of the manner verbs. These tendencies suggest that the typical similarity is that both Vietnamese and English belong to satellite-framed language and verb-framed language. However, the English language belongs to the verb-framed language only when the path verbs are the borrowed roots of verbs from French and other languages. For Vietnamese, this phenomenon seems to be rather diverse because the Paths in Vietnamese have more than one surface forms. When they are purely prepositions, Vietnamese is grouped into the satellite-framed language. When the Paths are independent verbs, they are termed as the structure of serial verbs. More particularly, Vietnamese has a group of path verbs, which make the Vietnamese language be the verb-framed language.

In order to reach the given aims, the researcher formulated the theoretical frameworks as well as analytical frameworks. With respect to the theoretical frameworks, the dissertation mainly focused on cognitive linguistics which provides the researcher with deep insights into motion. Accordingly, this study was analyzed from the branches of cognitive linguistics. The cognitive grammar provided the frameworks to investigate the syntactic properties of LEsM through the analysis of argument structures and event structures. Also, cognitive semantics provides the frameworks to analyze the semantic properties of LEsM through the theory of lexicalization patterns.

Last but not least, the identification of research methods played a crucial role this study. The research methods were likened to the maps helping the researcher to look for steps, principles and procedures to collect and analyze the data. Several methods were selected, which included both general methods such as deductive and inductive, qualitative and quantitative helping to seek the principles of cognitive linguistics and specific methods such as descriptive and comparative providing concrete principles to analyze the data.

## 7.2. Suggestion for future research

In the future, the researcher intends to go on with the extra examination of the semantic and syntactic features of LEsM in English and Vietnamese from the cultural and metaphorical perspective. The semantic and syntactic features of LEsM carried out in Chapter 4, 5, 6 has raised the question of whether motion verbs mean exactly what dictionaries or stories say they do. In other words, the semantic representations for LEsM in English and Vietnamese which have appeared as a result our analysis calls for psycholinguistic and anthropological linguistic aspects.

Furthermore, there have been some conflicting cases and problems that need to be mentioned in future research. First, the lexicalization pattern is concerned with LEsPM which denotes *Figure + Motion+ Path+ Manner* in both English and Vietnamese. This pattern is one of the most interesting for further research because it is argued that it is still vague for several patterns consisting of some verbs such as *dive* (lặn), *plummet* (lao xuống*), plunge* (đâm vào) and *flee* (chạy trốn). The question arises here is that whether these verbs may encode both Path and Manner (besides the fact of Motion) or whether they only express Manner, and Path is understood implicitly. For example, would the lexical expression with the verb *dive* be labeled by *dive* or judged as characteristics of *diving* if (a) the Figure does not move in a quick way? or (b) if the Figure does not follow a downward path? Second, another conflictive expression which needs to be further explored is concerned with the LEsMM Figure+ Motion + Path + Ground. This expression normally consists of the verb *fly* in which the verb *fly* is the conflation of motion and manner. The problem lies in the Figure because the Figure of this expression can be both agentive and non-agentive. When the Figure is agentive, it seems that there are no arguments because the Figure, in fact, is the Agent of motion or it generates motion, to be precise. However, when the Figure is agentive, this expression is seemed to be a metonymical phenomenon. Examining the following example, Figure *I* is not obviously the Agent of motion and gives rise to motion as well, but the real Figure *plane* generating motion is implied. As a result, it could be concluded that these types simultaneously contains two Figures

(7.1) I have to **fly** around our hoops and stop the other team from scoring.

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Last, the expression is related to the LEsCM Agent + Cause+ Figure + Path + Ground. The information which needs to be discussed here is internal Cause. This type of cause exists in both English and Vietnamese, which does not have direct contact on the Figure and causes it to move. Therefore, the problem arises here is whether the motion of this expression is the result of the cause or it is just a type of pragmatic acts.

## 7.3. Implications

This research may have three main distinct applications: (i) for the study on this linguistic domain, (ii) for language teaching and (iii) for translation.

To begin with, research on LEsM may be benefited in a number of ways. First, the approach presented in this dissertation may be extended to study of LEsM of the Verb-framed and satellite-framed languages as well as to the study of other surface forms which also denote some other semantic components, such as satellites, verbs particles and verb lexicons. Moreover, the area of research could benefit from the better interpretation of semantic properties of English and Vietnamese motion verbs and from the universal tendencies observed through the two languages provided by this dissertation. A wide range of psycholinguistic studies on motion, including studies associated with linguistic reality; derive from linguistic data which may not be always validated. This current dissertation may provide a more firm bedrock for further psycholinguistic research.

Second, the semantic and syntactic features of LEsM proposed in this dissertation may have advantageous applications for teaching English as a foreign language, in particular, for teaching English to speakers of both verb-framed and satellite-framed languages. It is obvious that Vietnamese learners of English will find it very intricate to learn and master a huge number of English manner-of-motion verbs. If English manner verbs are presented to Vietnamese students in each type of lexicalization patterns, argument and event structures, it will be easier for them to understand the semantics and syntax of motion verbs.

Finally, this dissertation may bring considerable advantages to the field of translation. The complicated semantic nature of a huge amount of English and Vietnamese motion verbs has been explored and contrasted. Thanks to this comparison, translators may either choose the most semantically and syntactically equivalent verbs, or they might render the motion verbs by other surface forms in order to be as faithful to the original as possible while seeming to be natural in the target language.

## 7.4. Summary

This section is a summary of the main contents, the drawbacks and the applications of the dissertation. First, the contents of the dissertation revolve the syntactic and semantic properties of three types of lexical expressions denoting motion in English and in Vietnamese including LEsMM, LEsPM and LEsCM. Next, the section points out that despite the great attempt to delve into the syntax and semantics of LEsM in English and in Vietnamese, this dissertation have encompassed some linguistic points with respect to motion, which has not brought to light. For example, the internal motion considered to be a type of metaphor regarding motion has been left open. Finally, the application of this dissertation was taken into insights in two scales such as in language teaching and translation.

**REFERENCES**

## In English


Aitchison, J. (2012). *Words in the Mind: An introduction to the mental lexicon.* Wiley Blackwell.

Alexiadou, et al. (2015). *External arguments in transitivity alternations*. Oxford: Oxford University Press.

Antonijevie, S & Berthaud, S. (2009). Verbs of motion and sentence production in second language. In proceedings of the 25th Annual Meeting of the International Society for Psychophysics: International Society for Psychophysics (2009), pp. 497-492.

Ary et al. (2010). *Introduction to research in education*. Wadsworth Cengage Learning.

Aske, J. (1989). Path predicates in English and Spanish: A Closer Look. In Proceedings of the Fifteenth Annual Meeting of the Berkeley Linguistics Society (1989), pp. 1-14.

Barsalou, L. W. (2009). Simulation, situated conceptualization, and prediction. *Philosophical Transactions of the Royal Society of London*: Biological sciences.

Brala-Vukanovic, M.M & Memiševi Ć. A. (2014): English path verbs: A comparative Contrastive English-Croatian Analysis. University of Rijeka, pp.85

Beavers et al (2010). The typology of motion expressions revisited in Journal of Linguistics 46 (331-337)

Berlin, B & Kay, P. (1969): *Basic color terms: Their universality and evolution*. Berkeley: University of California Press.

Berman, R. & Slobin, D. I. (1994). *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Berthele, R. (2004). The typology of motion and posture verbs: A variationist account: In B. Kortmann (Ed): *Dialectology Meets Typology. Dialect Grammar from a Cross-* l*inguistic Perspective*. Berlin/ New York.

Blomberg, J. (2014). *Motion in language and experience: Actual and non-actual motion in Swedish, French and Thai*. Ph.D Thesis. Lund University.

Boer, F. (1996). *Spatial prepositions and metaphor: A cognitive-semantic journey along The UP DOW and FRONT-BACK dimension.* Tubingen: Gunter Narr.

Brala-Vukanovic, M& Memisevic, A. (2014). English path verbs: A comparative and Contrastive English Croatian analysis. *International Journal of Linguistics*, Vol 13.

Brendone, A. et al. (2007). Speaking for the Wordless: Methods for studying the foundations of cognitive linguistics in infants. In M. Gonzalez-Marquez, et al (2007): *Methods in Cognitive Linguistics*. Amsterdam, John Benjamins Publishing Company.

Bybee, J. (2010): *Language, Usage and Cognition. Cambridge*. Cambridge University Press.

Chilton, P. (2014). *Language, space and mind: The conceptual geometry of linguistic meaning.* Cambridge: Cambridge University Press.

Clark, M. (1975). *Co-verbs and Case in Vietnamese*. The Dissertation of Doctor of Philosophy In Linguistics. The University of Hawaii

Cook, W.A. (1989). *Case grammar theory*. Washington, D.C: Georgetown University Press.

Crawford, w.j & Csomay, E. (2016): Doing corpus linguistics. New York. Routledge.

Creswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches, 2nd edition*, California: Sage Publications, Inc.

Croft, W. (2012). *Verbs. Aspect and causal structure*. Oxford: Oxford University Press.

Crowley, T. (2002). *Serial verbs in oceanic: A descriptive typology*. Oxford: Oxford University Press.

Davidson, D. (1967). The logical form of action sentence. In N. Rescher (Ed.): *The Logic of Decision and Action*. Pittsburgh, PA: University of Pittsburgh of Press.

Delahunty, G. P & Garvey, J. J. (1994)**.** *Language, grammar, and communication***:** *a course for teachers of English***,** New York;London: McGraw-Hill.

Diessel, H. (2017). Usage-based Linguistics. In Mark Aronoff (2017): *Oxford research encyclopedia of linguistics*. New York: Oxford University Press, p.1-26.

Dimković-Telebaković, G. (2013). The semantics and pragmatics of motion verbs in air traffic English and general English. In J. G. Newman & S. Łodej: ***T****oken: A Journal of English Linguistics*: Volume 2

Dixon, R.M.W. (1991). *A semantic approach to English grammar*. Oxford: Oxford University Press.

Dixon, R.M.W. (1994). *Ergativity*. Cambridge: Cambridge University Press.

Downing, A & Locke, P. (1992). *A university course in English grammar.* London and New York. Routledge.

Drăgan, R. (2011). Motion verbs and the expression of directed motion in English. In Bucharest Working Papers in Linguistics, XIII (2).Bucureş ti.

Dudovskiy, J. (2016): The Ultimate Guide to Writing a Dissertation in Business Studies: a step by step assistance contains discussions of theory and application of research approaches. https://research-methodology.net/about-us/ebook/

Evans, N. (1992. Multiple semiotic systems, hyperpolysemy and the reconstruction of semantic change in Australian languages. In Guenter Kellermann and Michael D. Morrissey (eds.), *Diachrony within synchrony: Language history and cognition*, 475–508. *Duisburger Arbeiten Zur Sprach- Und Kulturwissenschaft / Duisburg Papers on Research in Language and Culture 14*. Frankfurt: Peter Lang.

Evans, V & Green, M. (2006). *Cognitive linguistics: An introduction*. Edinburgh: Edinburgh University Press.

Fauconnier, G. (1997). *Mental spaces: Aspects of meaning construction in natural language.* Cambridge: Cambridge University Press.

Ferez, P. C. (2008). Motion in English and Spanish: A perspective from cognitive linguistics, typology and psycholinguistics. Ph.D. Thesis. The University of Murcia.

Fillmore, C. (1982). Frame semantics. In the linguistic society of Korea (ed.) *Linguistics In the Morning Calm. Seoul*: Hanshin.

Fillmore, C. (1985). Frames and the semantics of understanding. *Quaderni Di Semantica*, Vol 6.

Fillmore, C.J & Kay, P. (1993). Construction grammar. The University of California, Berkeley

Filipovic, L. (2007). *Talking about motion: A crosslinguistic investigation of*

*lexicalization patterns*. John Benjamins Publishing Company.

Frawley, W. (2009). *Linguistic Semantics*. London: Routledge.

Fried, M & Boas, H. C. (2005). *Grammatical constructions: back to the root*. Amsterdam: John Benjamins Publishing Company.

Geeraerts, D. (2010). The doctor and the semantician. In Glynn, D & Fischer, K. (2010): *Quantitative methods in cognitive semantics: corpus- driven approaches*: Cognitive Linguistic Research Vol. 46: De Gruyter Mouton.

Gehrke, B. (2008). *Ps in motion: On the semantics and syntax of P elements and motion events*. Doctoral Thesis.

Gennari, P.S et al. (2002). Motion events in language & cognition. Cognition Vol.83. Elsevier Science B.V.

Goldberg, A.E. (1995). *A construction grammar approach to argument structure*. Chicago: The University of Chicago Press.

Goldberg, A.E. (2006). *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.

Hagège, C. (2010). *Adpositions*. Oxford: Oxford University Press.

Hazuka, T. et. al. (1992). *Flash fiction: 72 very short stories.* W. W. Norton & Company

Hickmann, Maya. (2006). The relativity of motion in first language acquisition. In: Maya Hickmann & Stéphane Robert (eds.), *Space across languages: linguistic systems And cognitive categories*. Amsterdam: John Benjamins.

Hilpert, M. (2015). *Construction grammar and its application to English*. Edinburgh: Edinburgh University Press

Huber, J. (2017). *Motion and the English verbs*: *A diachronic study*. Oxford: Oxford University Press.

Ibarretxe-Antunano, I. (2004a). Motion events in Basque Narratives. In S. Strömqvist & L.Verhoeven (Eds.), *Relating Events in Narrative. Typological and Contextual Perspectives*. Hillsdale, NJ: Lawrence Erlbaum, pp. 89-112.

Jackendoff, R. (1983). *Semantics and cognition*. Cambridge: MIT Press.

Jackendoff, R. (1990). *Semantic structure*. Cambridge: MIT Press.

James, C. (1980). Contrastive linguistics. London: Longman.

Kersten, A.W et al. (2003). *Differential sensitivity to the manner of motion in adult English and Spanish speakers*. Paper is given at Biennial Conference of the Society for Research in Child Development, Tampa, Florida.

Kika, S & Ozyurek, A. (2002). What does cross-linguistic variation in semantic coordination of speech and gesture reveal?: Evidence for an interface representation of spatial thinking and speaking. *Journal of Memory and Language*, 48, 16-32.

Kuno, S &Takami, K. (2004). *Functional constraints in grammar: On the unergative unaccusative distinction.* Amsterdam: John Benjamins Publishing Company.

Lakoff, G. (1987). *Women, fire, and dangerous thing: What categories reveal about the mind*. Chicago: University of Chicago Press.

Lakoff, G. & Johnson, M. (1980). *Metaphor we live by*. Chicago: University of Chicago Press.

Lakoff, G. & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought.* New York*:* Basic Books.

Langacker, R. (1987). *Foundation of cognitive grammar, Volume I*. Stanford: Stanford University Press.

Langacker, R. W. (1990). *Concept, image, and symbol: The cognitive basis of grammar*. Berlin : Walter de Gruyter.

Langacker, R. W. (2006). Subjectification, grammaticization and conceptual Archetypes. In A. Athanasiadou, C. Canakis and B. Cornille (eds.), *Subjectification: Various Paths to Subjectivity*. Berlin: Mouton de Gruyter.

Langacker, R. W. (2008). *Cognitive grammar: A basic introduction.* Oxford: Oxford University Press

Langacker, R. W. (2009). Constructions and constructional meaning**.** In V. Evans & S. Pourcel (2009): *New directions in cognitive linguistics*. Amsterdam and Philadelphia: John Benjamins.

Leedy, P. D. (1993). *Practical research: planning and design*. New Jersey: Prentice Hall.

Levin, B. (1993). *English verb classes and alternation: A primary investigation*. Chicago: The University of Chicago Press.

Levin, B & Rappaport Hovav, M. (1995). *Argument realization*. Cambridge: Cambridge University Press.

Levinson, S.C. (2003). *Space in language & cognition*. Cambridge: Cambridge University Press.

Lobner, S. (2002). *Understanding semantics*. New York: Routledge.

Lucy, J.A.(1985). Whorfs view of the Linguistic mediation of Thought. In E. Mertz & R.J. Parmentier (eds.) Semiotic Mediation: Sociocultural & Psychological Perspectives. Orlando, F L: Academic Press.

Lucy, J.A.(1992a). *Language diversity & thought*. Cambridge: Cambridge University Press.

Lucy, J.A.(1992b). *Grammatical categories & cognition*. Cambridge: Cambridge University Press.

Lucy, J.A. (1996). The scope of linguistic relativity: An analysis and review of empirical research. In J.J. Gumperz & S.C. Levinson (eds.) *Rethinking Linguistic Relativity* Cambridge: Cambridge University Press.

Lucy, J.A. (1997a). The linguistics of "color". In C.L. Hardin & L. Maffin (eds.) *Color Categories in Thought & Language*. Cambridge: Cambridge University Press.

Lucy, J.A. (1997b). Linguistic relativity. *Annual Review of Anthropology*. Vol 26

Mai Thi Thu Han, (2011): Verbs of motion and their lexicalization patterns in English and Vietnamese – A perspective from cognitive linguistics: VNU Journal of science, foreign languages 27, p. 107-114

Mani, I & Pustejovsky, J. (2012). *Interpreting motion: Grounded representations for spatial language*. Oxford: Oxford University Press.

Matlock, T. (2010). Abstract motion is no longer abstract. *Language & Cognition*. Vol 2

Mayer, M. (1969). *Frog, where are you?* New York: Dial Press.

McEnery, T & Hardie, A. (2011): *Corpus Linguistics: Method, Theory and Practice*. Cambridge: Cambridge University Press

Mcneill, D. (1992). *Hand and mind*. Chicago: University of Chicago Press.

McNeill, D & Duncan, S.D. (2000). Growth points in thinking-for-speaking. In D. McNeill (Ed.), *Language and Gesture*, 141-161.

Miller, G.A. (1973). English verbs of motion: A case study in semantics and lexical Memory. In A.W.

Melton & E. Martin .1972. *Coding Processes in Human Memory*. New York NY: John Wiley & Sons.

Miller, G.A & Johnson- Laird, P.N. (1976). *Verbs of motion*: *In language and perception*. Cambridge: Cambridge University Press.

Mitchell, M.L & Jolley, J.M. (2010). *Research design: Explained*. Belmont: Wadsworth.

Nam, S. (1995). *The semantics of locative prepositional phrases in English*. PhD. Los Angeles: University of California.

Narasimhan, B. (2003). Motion events and the lexicon: a case study of Hindi. *Lingua*. Volume 113

Ostran, J-Ola & Fried, M. (2005). *Construction grammars: Cognitive grounding and theoretical Extensions.* Amsterdam: John Benjamins Publishing Company.

Özçalışkan, S.( 2004). Typological variation in encoding the manner, path, and ground components of a metaphorical motion event. *Annual Review of Cognitive Linguistics* 2: p.73

Ozyurek, A & Kita, S. (1999). Expressing manner and path in English and Turkish: Differences in speech, gesture, and conceptualization. In M. Hahn & S. C. Stoness (Eds.), *Proceedings of the Twenty-first Annual Conference of the Cognitive Science Society*. Mahwah, NJ:
Lawrence Erlbaum Associates, pp. 507-512.

Pace, C. (2009). The typology of motion verbs in Northern Vietnamese. *Rice Working Paper in Linguistics 1: p.52-64.* University of Thailand.

Pantcheva, M. B. (2011). *Decomposing path: The nanosyntax of directional expressions*. PhD. CASTL: University of Tromsϕ.

Papafragou, et al. (2002). Shake, Rattle, "N" Roll: The Representation of Motion in Language and Cognition. *Cognition 3:*p.102

Payne, Th. (2011). *Understanding English grammar: A linguistic introduction.* Cambridge: Cambridge University Press.

Perek, F. (2015). *Argument structure in usage- based construction grammar*. Amsterdam. John Benjamins Publishing Company.

Pinon, C.J. (1993). Paths and their names. In K. Beals, G. Cooke, et at. Chicago Linguistic Society, Vol.29. Chicago: Chicago Linguistic Society.

Postma, A. (2017). *Neuropsychology of space: Spatial functions of the human brain.* Oxford: Oxford University Express.

Pourcel, S. S**. (**2005). Relativism in the Linguistic Representation and Cognitive Conceptualization of Motion Events across Verb-framed and Satellite-framed languages. Ph.D thesis: University of Durham.

Radden, G & Dirven, R. (2007): *Cognitive English Grammar*. John Benjamins Publishing Company

Ramchand, G, C. (2008). *Verb meaning and the lexicon: A first phase syntax*. Cambridge: Cambridge University Press.

Rasinger, S.M. (2008). *Quantitative research in linguistics: An introduction*. London: Bloomsbury

Reppen, T & Biber, D. (2015). *The Cambridge handbook of English corpus linguistics*. Cambridge: Cambridge University Press.

Rothmayr, A. (2009). *The structure of stative verbs*. Amsterdam: John Benjamins Publishing Company.

Rothstein, S. (2004). *Structuring events: A study in the semantics of lexical aspect*. London. Blackwell.

Rudzka-Ostyn, B**. (**1988). Semantic extensions into verbal communication. In *Topic Cognitive Linguistics*. Current Issues in Linguistic Theory, Vol 50. Amsterdam: John Benjamins.

Saeed, S.T (2016). *Space and events: Spatial PPs and motion VP3*. Newcastle. Cambridge Scholars Publishing.

Saint-Dizier, P. (2006). *Syntax and semantics of prepositions*. New York: Springer publishing.

Shapard, R & Thomas, J. (1986). *Sudden fiction: American short-short stories.* Gibbs Smith Publisher: Salt Lake City.

Shibatani, M. 2002. Some basic issues in the grammar of causation. In M Shibatani (2002): *The grammar of causation and interpersonal manipulation.* Amsterdam: John Benjamins publishing company.

Slobin, D.I. (1996). Two ways to travel: Verbs of motion in English and Spanish. In M. Shibatani & S.A. Thompson (Eds), *Grammatical constructions: Their form and meaning*. Oxford: Clarendon Press.

Slobin, D. I. (1998). From "thought and language" to "thinking for speaking". In J. Gumperz & S. Levinson (eds.), *Rethinking Linguistic Relativity*. Cambridge: Cambridge University Press

Slobin, D.I. (2000). Verbalized events: A dynamic approach to linguistic reality & determination. In S. Niemeier & R. Dirven (eds): *Evidence for Linguistic Reality*. Amsterdam: John Benjamins.

Slobin, D.I. (2003). Language and thought online: Cognitive consequences of linguistic relativity. In D. Gentner & S. Goldin-Meadow (Eds), Language in mind: Advances in the investigation of language and thought. Cambridge, MA: the MIT Press.

Slobin, D. I. (2004). The many ways to search for a frog: Linguistic typology and the expression of motion events. In S. Strömqvist & L. Verhoeven (Eds.), *Relating events in narrative: Typological and contextual perspectives in Translation*. Mahwah, NJ: Lawrence Erlbaum Associates.

Slobin, D.I. (2006a). What Makes Manner of Motion Salient? Exploration in Linguistic Typology, Discourse and Cognition. In Maya Hickmann & Stephane Robert

(eds): *Space in Language: Linguistic Systems and Cognitive Categories*. Amsterdam: John Benjamins.

Slobin, D.I. (2006b). *Typology and Usage: Exploration of Motion Events across Languages*. Paper given at the V International Conference of the Spanish Cognitive Linguistic Association, University of Murcia, Spain.

Snell-Hornby, M. (1983). *Verb-descriptivity in German and English: A contrastive study in semantic field*. Heildelberg: Carl Winter Universitatsverlag.

Sophana, S (1998). Prepositional vs. directional coverbs in Vietnamese**.** Mon-Khmer Studies, 28, 63-83

Steen, G.J. (2007). *Finding Metaphor in Grammar and Usage: A Methodological Analysis of Theory and Research. Amsterdam*. John Benjamins Publishing company.

Svorou, S. (1994). *The Grammar of space*. Amsterdam: John Benjamins.

Talmy, L. (1974). Semantics and syntax of motion. In *Syntax and Semantics* 4, ed. John Kimball. New York: Academic Press.

Talmy, L. (1985). Lexicalization patterns: Semantic structure in lexical forms". In T. Shopen (Ed.), *Language typology and lexical descriptions: Vol. 3.Grammatical Categories and the Lexicon*. Cambridge: Cambridge University Press.

Talmy, L. (1991). Path to realization: a typology of event conflation. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society*: *General Session and Parasession on the*
*Grammar of Event Structure* (1991), pp. 480-519

Talmy, L. (2000a). *Toward a cognitive semantics: Vol. I: Concept Structuring System*. Cambridge, MA: MIT Press.

Talmy, L. 2000b. *Toward a cognitive Semantics: Vol. II: Typology and process in concept structuring*. Cambridge, MA: MIT Press.

Taylor, J.R. (2002). *Cognitive Grammar*. Oxford: Oxford University Press.

Taylor, J.R & Littlemore, J. (2014). *The Bloomsbury companion to cognitive linguistics*. New York: Bloomsbury

Thompson, L.C. (1998). *A Vietnamese Grammar*. Honolulu: University of Hawaii Press.

Ungerer, F & Schmid, H.J. (1996). *An introduction to cognitive linguistics*. New York: Parson. Longman

Ungerer, F (2007. Derivational morphology and word-formation. In Dirk Geeraerts and Hubert Cuyckens (eds.): *The Oxford handbook of Cognitive Linguistics*, 991–1025. Oxford: Oxford University Press.

Urban, M (2012). *Analyzability and semantic associations in referring expressions: A study in comparative lexicology*. Leiden: Leiden University PhD thesis.

Zwarts, J. (2005). Prepositional aspect and the algebra of paths. Linguistics and Philosophy. *Linguistics and Philosophy* Vol. 28, No. 6 (Dec., 2005), pp. 739-779

Vandeloise, C. (1991). *Spatial prepositions: A case study from French*. Chicago: University of Chicago Press.

Vendler , Z. (1967). *Linguistics in philosophy*. Ithaca, New York: Conrnell

Voorst, J.v. (1988). *Event structures*. Current Issues in Linguistic Theory. Vol 59. Amsterdam: Benjamins of Publishing Company.

Walchli, B. (2001). *Lexicalization patterns in motion events revised*. [http://ling.unikonstanz.de/pages/home/a20_11/waelchi/publications.htm]

Williams, A. (2015). *Arguments in syntax and semantics*.Key Notes in Syntax. Cambridge: Cambridge University Press.

Wierzbicka, M. (1972). *Semantic primitives*. Frankfurt: AthennaumVerlag.

Wolman, B. B. (1981). *Contemporary theories and systems in psychology*. New York and London: Plenum Press.

Zlatev, J & David, C. (2003). Manner vs. path in the language and cognition of Swedish &French speakers. Conference Presentation, Language, Culture, & Cognition, Braga, Portugal.

Zlatev, J & David, C. (2004a). Three ways to travel: motion events in French, Swedish & hai. In A. Soares da Silva, A. Torres & M. Gonçalves (eds.) Linguagem, Cultura e Cognição: Estudos de LinguisticaCognitiva. Volume 2. Coimbra: Almedina.

Zlatev, J &David,C. (2004b). Do Swedes & French view motion differently? Conference Presentation, Language, Culture, & Mind, Portsmouth

Zlatev, J & Yangklang, P. (2004). A third way to travel: The place of Thai and serial verb languages in motion event typology. In S. Stromqvist & L. Verhoeven (Eds.*), Relating events in narrative: Typological and contextual perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates, pp.159-190.

Zwarts, J. (2005). Prepositional aspect and the algebra of paths. Linguistics and Philosophy.

Zwarts, J & Winter, Y, (2000). Vector space semantics: A Model-Theoretic Analysis of Locative Prepositions.Journal of Logic, Language and Information.

**In Vietnamese**

Diệp Quang Ban. (2013). *Ngữ pháp tiếng Việt*. Hanoi: NXB Giáo Dục Việt Nam.

Nguyễn Cảnh Hoa. (1998). Nghiên cứu nhóm từ có hướng trong tiếng Việt. Tạp chí ngôn ngữ học Ứng Dụng và Giảng Dạy Tiếng Việt

Nguyễn Đình Hòa. (1924). *Tiếng Việt không son phấ*n. Philadelphia: ohn Benjamins

Nguyễn Lai. 2001. *Nhóm từ chỉ hướng vận động. Tiếng Việt hiện đại*. Hanoi: NXB Khoa Học Xã Hội.

Nguyễn Thanh Minh. (2015). Phân loại động từ chuyển động trong tiếng Việt. Nhìn từ Ngôn ngữ học Tri nhận. Tạp chí ngôn ngữ học..

Lê Kính Thắng . (2016). *Phạm trù nội động/ ngoại động trong tiếng Việt.* Huế: NXB Đại Học Huế

Lý Toàn Thắng. (1994). Ngôn ngữ và tri nhận không gian. Ngôn ngữ học. Viện ngôn ngữ học Việt Nam. Số 4- tr75.

Lý Toàn Thắng. (2001). Đặc tính Văn hóa: Từ quan điểm ngôn ngữ học tâm lý. Ngôn ngữ học. Viện ngôn ngữ học Việt Nam. Số 15-tr59.

Lý Toàn Thắng. (2004). *Ngôn ngữ học tri nhận : Từ lý thuyết đến thực hành trong tiếng Viêt.* TPHCM*:* NXB Phương Nam. Việt Nam.

Nguyễn Kim Thản. (1976). *Động từ trong tiếng Việt*. Hanoi: NXB Xã Hội Nhân Văn

## Dictionaries

### In English

1. Longman Dictionary of Contemporary English, Longman, 1978.

2. Advanced English Dictionary. Oxford: Oxford University Press, 2002.

### In Vietnamese

1. Từ Điển Tiếng Việt. Trung Tâm Từ Điển Học: NXB Đà Nẵng, 1997.

2. Từ Điển Tiếng Việt. KH-XH-NV: NXB Từ Điển Bách Khoa, 2013.

## APPENDIX 1

## Titles of English stories and novels

| N0 | Titles of stories | Authors | Code | Year |
|---|---|---|---|---|
| 1 | The Running Man | Rohaizad Roslan | **ES 01** | 1968 |
| 2 | Never Touch a Butterfly | John Batki | **ES 02** | 1972 |
| 3 | Minds Meet | Walter Abish | **ES 03** | 1975 |
| 4 | The Nightmare Begins | Jerry Ahern | **ES 04** | 1981 |
| 5 | Amazing | Jim Aikin | **ES 05** | 1984 |
| 6 | Silver Water | Amy Bloom | **ES 06** | 1991 |
| 7 | Strands of Sunlight | Gael Baudino | **ES 07** | 1994 |
| 8 | Point of Hopes | Lisa A. Barnett | **ES 08** | 1995 |
| 9 | Bring! Bring! | Conrad Aiken | **ES 09** | 1996 |
| 10 | Wet Places at Noon | Lee K. Abbott | **ES 10** | 1997 |
| 11 | Joy Ride | Richard Russo | **ES 11** | 1998 |
| 12 | Where the Sea Used to Be | Rick Bass | **ES 12** | 1999 |
| **N0** | **Titles of novels** | **Author** | **Code** | **Year** |
| 1 | Go Tell It on the Mountain | James Baldwin | **EN 01** | 1953 |
| 2 | A Dance to the Music of Time | Anthony Powell | **EN 02** | 1975 |
| 3 | Midnight's Children | Salman Rushdie | **EN 03** | 1981 |

**APPENDIX 2**

**Titles of Vietnamese stories and novels**

| **N$_0$** | **Titles of stories** | **Authors** | **Code** | **Year** |
|---|---|---|---|---|
| 1 | Sống mòn | Nam Cao | **VS 01** | 1956 |
| 2 | Vợ nhặt | Kim Lân | **VS 02** | 1962 |
| 3 | Bất khuất | Nguyễn Đức Thuận | **VS 03** | 1967 |
| 4 | Tuổi thơ dữ dội | Phùng Quán | **VS 04** | 1968 |
| 5 | Dấu chân người lính | Nguyễn Minh Châu | **VS 05** | 1972 |
| 6 | Sông núi Điện Biên | Trần Lê Văn | **VS 06** | 1979 |
| 7 | Bí mật của một võ sĩ | Nguyễn Nhật Ánh | **VS 07** | 1989 |
| 8 | Ăn mày dĩ vãng | Chu Lai | **VS 08** | 1991 |
| 9 | Phố nhà binh | Chu Lai | **VN 09** | 1992 |
| 10 | Người không cô đơn | Minh Chuyên | **VS 10** | 1995 |
| 11 | Ông già và đấu sĩ | Trần Văn Thước | **VS 11** | 1998 |
| 12 | Chút phấn của đời | Nguyễn Khải | **VS 12** | 1999 |
| **N$_0$** | **Titles of stories** | **Authors** | **Code** | **Year** |
| 1 | Đôi bạn | Nhất Linh | **VN 01** | 1936 |
| 2 | Thuốc mê | Minh Tâm | **VN 02** | 1943 |
| 3 | Chùa Đàn | Nguyễn Tuân | **VN 03** | 1954 |

## APPENDIX 3

## LIST OF EXAMPLES DISCUSSED IN ENGLISH

| $N_0$ | Content | Coded genre | Page |
|---|---|---|---|
| 1.1 | a. He **left** his house at dawn.<br>b. The car **crashed into** the bush. | ES09-142 | 1 |
| 1.2 | The cat **jumped** *over* the wall. | Evans & Green | 2 |
| 2.1 | a. He is **coming** *out of* the coma.<br>b. He e**ntered** a state of euphoria.<br>c. He **fell** *into* a depression. | Lakoff & Johnson | 10 |
| 2.2 | a. John gave the book to Marry.<br>b. John gave Mary the book. | Lee | 10 |
| 2.3 | a. John gave a new coat of paint to the fence.<br>b. He brought the table the wine. | Langacker<br>Lee | 10 |
| 2.4 | a. George **has left** the party.<br>b. George **is leaving** the party. | **EN02**-451 | 11 |
| 2.5 | a. The car **crashed into** the tree.<br>b. The tree **was crashed into** by the car. | **ES09**-118 | 12 |
| 2.6 | a. George finished the champagne before he went home.<br>b. Before he went home, George finished the champagne | Evans & Green | 12 |
| 2.7 | a. The bottle *rolled* down the slope.<br>b. We happily *rolled* down the slope.<br>c. They *pushed* the car down the slope. | Radden & Dirven | 18 |
| 2.8 | The storm **blew** the roof **off** the police station | **ES12**-106 | 19 |
| 2.9 | Harry **walked** quietly down the stairs. | **EN01**-501 | 20 |
| 2.10 | a. Ray **entered** the room<br>b. The butterfly *hovered* over the flower<br>c. Claire *slid* through the hall in her socks | **Talmy** | 21 |
| 2.11 | John **limped into** the house. | **ES10**-541 | 23 |
| 2.12 | His wife **entered** the house. | **ES12**-268 | 23 |
| 2.14 | We walk to school | **ES10**-76 | 24 |

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|---|---|---|---|
| 2.16 | I ran across the road. | **ES09**-72 | 35 |
| 3.1 | The dog ran into the kitchen. | **ES07**-42 | 46 |
| 3.3 | a. The man ran into the house.<br>b. The road goes through the tunnel. | **EN01**-52<br>**ES08**-113 | 48 |
| 3.5 | a. The rock *slid/rolled/bounced* down the hill.<br>b. The gate *swung/ creaked* shut on its rusty hinges.<br>c. The smoke *swirled/ squeezed* through the opening. | **Talmy** | 52 |
| 3.7 | a. It *rained* in through the bedroom window.<br>b. I *spat* into the cuspidor. | **Talmy** | 54 |
| 3.9 | a. George *died*.<br>b. They *love* their parents.<br>c. The soldiers *put* their guns on the table. | Goldberg | 55 |
| 3.10 | George ate the caviar | Evans & Green | 56 |
| 4.1 | He **ran** *into* the house | **ES09-207** | 61 |
| 4.2 | a. All sorts of lizards and snakes were **crawling.**<br>b**.** The pages of the diary began to **blow**. | **ES06**-156<br>**ES11**-321 | 62 |
| 4.3 | A cold breeze was **blowing hard.** | **EN02**-83 | 62 |
| 4.4 | The opponent is **bouncing** *up and down*. | **ES07**-75 | 62 |
| 4.5 | I was able to **outrun** him, but I knew he was clever. | **ES10**-41 | 63 |
| 4.6 | The British troop **marched** in the parade | **EN03**-66 | 63 |
| 4.7 | They **walked through** the little town to the station. | **ES09**-175 | 63 |
| 4.8 | a. She's **flying** back to the States tomorrow.<br>b. Her long hair was **flying** in the wind. | **EN01**-96 | 63 |
| 4.9 | He **crawled back** onto the bed. | **ES04**-290 | 64 |
| 4.10 | a. Professor McGonagall was **running** toward them.<br>b. Hermione was walking across the entrance hall. | **ES08**-144<br>**EN02**-467 | 65 |
| 4.11 | Dobby was bowing his head. | **ES08**-144 | 65 |
| 4.12 | a. She **leaped** over the fence.<br>b. The car accelerated smoothly away. | **ES02**-349<br>**EN04**-421 | 65 |
| 4.13 | Jill **darted** forward the fire. | **EN02**-521 | 66 |
| 4.14 | He **walked** away. | **ES07**-464 | 67 |
| 4.15 | Dobby **jumped** out of reach. | **ES11**-432 | 67 |

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| 4.16 | Then, we **fly** above the clouds. | **ES02**-329 | 67 |
| 4.17 | Hermione **nodded** fervently, but Harry didn't say anything. | **ES12**-438 | 68 |
| 4.18 | He **crashed** down the stairs. | **ES03**-321 | 68 |
| 4.19 | He has moonwalked for an hour | **EN03**-256 | 68 |
| 4.20 | Peggy **followed** her out onto the landing. | **ES08**-341 | 69 |
| 4.21 | They **stepped** through the archway | **ES07**-255 | 69 |
| 4.22 | Tourists **overran** a group of children | **EN02**-651 | 69 |
| 4.23 | She **bikes** to work every day. | **ES12**-277 | 70 |
| 4.24 | He crawled **under** the bed and armchair. | **EN03**-524 | 71 |
| 4.25 | They crept **near** Ms Morris. | **ES06**-397 | 71 |
| 4.26 | Jumping **up** and raising his own wand, but Jim said to his friend. | **ES07**-95 | 72 |
| 4.27 | Hermione marched **away** with her nose in the air. | **ES04**-521 | 72 |
| 4.28 | I have to fly **around**. | **ES08**-271 | 72 |
| 4.29 | They hurtled **round** tight corners. | **ES06**-432 | 72 |
| 4.30 | He'd followed **through** the ticket box | **ES11**-327 | 73 |
| 4.31 | He **walked** away. | **ES07**-464 | 73 |
| 4.32 | Professor McGonagall was **running** *toward* them. | **ES04**-218 | 74 |
| 4.65 | When he was dressed, he jumped **down** the hall into the kitchen. | **ES08**-76 | 95 |
| 5.1 | He hadn't expected something like this the moment they **arrived.** | **ES08**-145 | 98 |
| 5.2 | We've got to ***get*** back to Gryffindor Tower," said Ron. | **ES12**-367 | 98 |
| 5.3 | He was the first to ***enter*** the room. | **ES06**-428 | 98 |
| 5.4 | They joined the crowds ***descending*** the staircases. | **EN01**-245 | 99 |
| 5.5 | John ***departed*** Boston by car. | **ES12**-136 | 99 |
| 5.6 | The apples are beginning to **drop** from the trees. | **ES10**-398 | 100 |
| 5.7 | They **reached** the market. | **EN03**-568 | 101 |
| 5.8 | The apples are beginning to **drop** from the trees. | **EN03**-271 | 101 |
| 5.9 | They ***approached*** the giant heads. | **ES11**-41 | 102 |
| 5.10 | Hary had been ***climbing*** school buildings | **EN01**-521 | 103 |
| 5.11 | Passengers should assemble in the lounge before ***embarking*** | **ES07**-249 | 103 |
| 5.12 | The horses **forded** the river without any problem. | **EN03**-301 | 104 |
| 5.13 | a. He had mercifully ***abandoned*** his bunches.<br>b. I was terrified they would ***desert*** me the moment. | **ES08**-412<br>**ES12**-371 | 105 |
| 5.14 | Three of the soldiers ***strayed*** into enemy territory. | **ES03**-214 | 105 |

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| 5.15 | a. But the other night they ***went to*** a carnival at Amphi.<br>b. Harry ***went*** back to the kitchen.<br>c. They ***went*** to sleep. | **ES10**-216<br>**ES04**-179<br>**ES11**-43 | 105 |
| 5.16 | He ***mounted*** the stairs and looked around him slowly. | **ES09**-318 | 106 |
| 5.17 | a. It would be indeed ***hound*** him forever.<br>b. Detectives ***shadowed*** him for weeks. | **ES08**-172<br>**ES11**-294 | 106 |
| 5.18 | | | 107 |
| 5.19 | He **stumbled** backwards and knocked over his lamp. | **ES10**-126 | 107 |
| 5.20 | She ***alighted*** from the train at 74th Street. | **EN02**-406 | 108 |
| 5.21 | His footsteps ***receded*** along the out-of-sight corridor. | **ES10**-170 | 108 |
| 5.22 | The horse ***reared*** and threw me off. | **ES06**-28 | 108 |
| 5.23 | They had just passed a bend in the path. | **ES12**-117 | 109 |
| 5.24 | They joined the crowd thronging the corridor. | **ES07**-325 | 109 |
| 5.25 | They approached the giant heads. | **ES09**-307 | 110 |
| 5.26 | a. Everybody else ***proceeded*** to the front doors<br>b. Suddenly, he's ***heading*** for the third floor. | **EN03**-657<br>**ES05**-77 | 110 |
| 5.27 | I exited through a side window. | **ES04-254** | 110 |
| 5.28 | The crowd ***stampeded*** backward. | **EN02**-1305 | 110 |
| 5.51 | David **arrived** at Ocosingo on Tuesday. | **ES07**-205 | 124 |
| 5.52 | John **ascended** the ladder. | **ES02**-42 | 125 |
| 5.53 | The comet is **nearing** the planet. | **EN01**-207 | 125 |
| 6.1 | Clouds scudding across it kept ***throwing*** them into darkness. | **EN02**-654 | 129 |
| 6.2 | a. The napkin *blew* off the table.<br>b. He *blew* the napkin off the table. | **Talmy 2000b** | 131 |
| 6.3 | A luxury yacht was **sunk down** the bottom of the sea. | **ES06**-249 | 131 |
| 6.4 | a. **The wind** flicked the roof off my house.<br>b. **I** pushed the keg into the storeroom. | **ES09**-127<br>**ES11**-109 | 131 |
| 6.5 | She pushed him **away**. | **ES10**-118 | 131 |
| 6.6 | I pushed the keg **into** the storeroom. | **EN03**-217 | 132 |
| 6.7 | We won't **let** him go to the Hunt. | **ES07**-243 | 133 |
| 6.8 | a. He've come to **bring** Harry to his aunt and uncle<br>b.They had been **pushed** the letter under the door. | **ES11**-304<br>**ES01**-122 | 133<br>134 |
| 6.9 | He **kicked** the diary right *through* the door. | **ES02**-423 | 134 |

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| 6.10 | I **flicked** the ant off my plate. | **ES05**-352 | 135 |
| 6.11 | Smoke ***drifted*** over the heads of the chattering crowd. | **ES06**-276 | 136 |
| 6.12 | A stack of plates swayed and began to ***topple*** over | **ES08**-306 | 136 |
| 6.13 | I'll ***send*** this with Hedwig when she gets back. | **ES10**-60 | 136 |
| 6.14 | Sirius had had to ***flee*** for his life. | **ES04**-278 | 137 |
| 6.15 | Harry dropped the bit of sausage. | **EN02**-234 | 137 |
| 6.16 | a. Jerry's too scared to ***ask*** her ***out***.<br>b. I ***invited*** him ***inside***. | **EN02**-724 | 138 |
| 6.17 | Potter **allowed** them the Blugers away from their team. | **ES11**-51 | 138 |
| 6.18 | The Beaters **keep** the Bludgers away from their team. | **ES10**-43 | 138 |
| 6.19 | She began ***urging*** him towards the front door. | **ES05**-106 | 139 |
| 6.20 | They allowed the burglar **to/into** the house. | **ES10**-234 | 140 |
| 6.21 | He kicked the ball ***up to*** the roof of the house. | **ES10**-225 | 140 |
| 6.22 | Philip pushed him **towards** the door. | **ES12**-231 | 140 |
| 6.23 | He'd snatched the keys **from** the table . | **ES07**-514 | 140 |
| 6.24 | Keith snatches toys **away from** the other children. | **EN01**-921 | 141 |
| 6.25 | a. One of the firemen dragged my husband **out of** the flames.<br>b. He sneezes the piece of paper **off** the table. | **ES11**-241<br>**ES09**-135 | 141 |
| 6.26 | a. He shoved her **past** the car.<br>b. Don't drag them **along** the floor | **ES05**-207<br>**ES12**-97 | 141 |
| 6.27 | a. Peter shoved his way **through** the dense crowd.<br>b. He blew smoke rings **across** the table. | **ES06**-82<br>**ES04**-128 | 142 |
| 6.47 | a. They will **pull** their marketplace insurers *out.* | **EN01**-467 | 155 |
| 6.49 | a. Joe kicked the dog.<br>b. Jack hit the ball. | **ES08**-421 | 157 |
| 6.50 | a. Joe kicked the dog into the bathroom<br>b. Jim hit the ball across the field. | **ES11**-250<br>**ES09**-92 | 158 |
| 6.53 | a. **The child** *pushed/ threw/ kicked* the keg into the storeroom.<br>b. **The cat** *blew/ flicked* the ant off my table.<br>c. **The wind** threw them into the hall. | **Talmy 2000b** | 159 |
| 6.55 | The napkin *blew* off the table. | Talmy 2000b | 160 |
| 6.56 | a. The cat *blew/ flicked* **the ant** off my table. | Talmy | 160 |

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|---|---|---|---|
| | b. **The ant** *blew* off my table. | 2000b | |
| 6.57 | Sam **coaxed** Bob into the room | **ES09**-170 | 161 |
| 6.58 | a. Sam encouraged Bob **to go into** the room. | **ES12**-106 | 161 |
| | b. Sam encouraged Bob into the room. | **EN03**-261 | |
| 7.1 | I have to fly around our hoops and stop the other team from scoring | **EN03-261** | 168 |

## APPENDIX 4

## LIST OF EXAMPLES DISCUSSED IN VIETNAMESE

| $N_0$ | Content | Coded genre | Page |
|---|---|---|---|
| 1.3 | a. Bọn trẻ đang **chạy** nháo nhác *trong sân trường*.<br>b. Trời xẩm tối, cô ấy đang **rảo bước** ***về*** *nhà*. | **VS02**-303<br>**VS07**-213 | 2 |
| 2.13 | Bọn trẻ **chạy ra** ngoài sân. | **VS03**-264 | 23 |
| 2.15 | a. Tôi sắp **qua** cầu.<br>b. Tôi nhìn **qua** của kính. | **VS08**-223 | 34 |
| 2.17 | Tôi *đến tìm* em. | Beecher | 35 |
| 2.18 | Gió *thổi bay* mái nhà. | Beecher | 35 |
| 2.19 | Tôi *rơi vào* một cái hố. | Beecher | 35 |
| 2.20 | a. Xe đã chạy qua *cầu.*<br>b. The car **ran across** the bridge | | 36 |
| 3.2 | Speaker Anh đi đâu tuần rồi last month?<br>Speaker 2: Đà Lạt | **VS07-13** | 48 |
| 3.4 | Chúng nó chẳng đi đến đâu. | **VS11**-294 | 48 |
| 3.6 | a. Tiếng động vang dội **vào** tận lèn đá.<br>b. Bao nhiêu gánh xiếc **tới** Huế. | **VN01**-1123 | 53 |
| 3.8 | a. Cả đội ùa hết ra sân mặc dầu trời vẫn lắc rắc *mưa.*<br>b. Tên cai ngục *khạc nhổ*, đóng ập cửa lại, đập chốt sắt. | **VS11**-362<br>**VN02**-107 | 54 |
| 4.33 | a. Tôi **bơi** qua sông.<br>b. Gió **thổi** hiu hiu và thỉnh thoảng có gió giật. | **VS12**-235 | 76 |
| 4.34 | a. Hai người **nhảy** *ra*.<br>b. Những dáng núi xanh mờ suốt ngày đầy sương mù **vây** quanh. | **VS06**-142<br>**VS11**-184 | 77 |
| 4.35 | Khẩu súng từ trong bụng **văng** *ra.* | **VN03-601** | 77 |
| 4.36 | *Chị vợ* áo váy tơi tả **chạy trước** *tay chồng* chỉ vài bước. | **VS04**- 232 | 77 |
| 4.37 | Hoa **bò** *cạnh* Nhẫn thì thào | **VS05**- 253 | 78 |
| 4.38 | Nhưng sao giọt nước mắt **rơi** *xuống* mu bàn tay tôi. | **VS08**- 391 | 78 |
| 4.39 | Tiền sợ hãi vội vàng **chạy** ra phía ngoài cửa. | **VS11**-108 | 79 |
| 4.40 | Tau với mi cũng phải tìm cách mà **chuồn** ra khỏi thành thôi. | **VN01**-1250 | 79 |

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|---|---|---|---|
| 4.41 | Cận ôm súng **chạy** tạt sang một bìa rừng bên cạnh | **VS07**-106 | 80 |
| 4.42 | Hắn **chồm** tới ôm chặt lấy người bạn. | **VS07**-354 | 80 |
| 4.43 | Lam Dạ Ảnh **đạp** lên chân ga chạy thẳng đến bờ biển. | **VN01**-288 | 81 |
| 4.44 | Chúng tôi **di chuyển** lên đây từ trước. | **VS02**-209 | 82 |
| 4.45 | Cả trung đội đang thận trọng **bò** lên tiếp cận vị trí giặc. | **VS07**-95 | 82 |
| 4.46 | Máy bay đang gầm rít tức tối **lượn** đảo quanh bầu trời. | **VN01**-432 | 82 |
| 4.47 | Có có, ông cũng có nghe nói. - Cụ **gật gật.** | **VS11**-209 | 83 |
| 4.48 | Mình mẩy **va vào** đá khi lăn xuống khe. | **VN03**-1110 | 83 |
| 4.49 | Bọn trẻ đang **bơi** ì oạp | **VS09**-233 | 83 |
| 4.50 | Hắn dậm một chân lên ngực ông cụ. | **VS10**-356 | 84 |
| 4.51 | Nó chợt thấy có hai người **đi xe đạp** ngang qua. | **VS04**-341 | 84 |
| 4.52 | Lượm **chạy trước**, các bạn líu ríu chạy theo sát sau lưng. | **VS04**-340 | 84 |
| 4.53 | Chắc hắn bỏ **chạy trốn** về với Tây rồi | **VS05**-107 | 85 |
| 4.54 | Họ phải **vượt qua** cả bọn giặc | **VS08**-412 | 85 |
| 4.55 | Những con dòi bò **trên** tóc lượm | **VS03**-87 | 86 |
| 4.56 | Một cánh quân Mỹ đổ xuống **sau** lưng đội hình của trung đoàn. | **VS03**-224 | 86 |
| 4.57 | Bất ngờ đại đội trưởng Đăng đi **ra** khỏi phòng. | **VS05**-333 | 87 |
| 4.58 | Lượm lao xuống | **VN03**-344 | 87 |
| 4.59 | Tây ngó lơ đi một chút, rồi đàng hoàng đi **ra ngoài.** | **VS10**-43 | 88 |
| 4.60 | a. Cái chai **trôi vào** trong động.<br>b. Cái chai **trôi** trong động.<br>c. Cái chai **vào** trong động. | **Talmy**<br>2000b | 91 |
| 4.61 | Các anh **đang chạy** lúp xúp trên những ngọn đồi trọc xa xa. | **VN03**-824 | 93 |
| 4.62 | Gạch lại tới tấp rơi **quanh** mình nó. | **VS06**-241 | 94 |
| 4.63 | Gạch **quanh** mình nó. | **VS10**-98 | 94 |
| 4.64 | Con mèo **nhảy qua** của sổ. | **VN03**-236 | 94 |
| 5.29 | Em không **đi.** | **VS08**-125 | 111 |
| 5.30 | Bỗng *một bóng người* cứng nhắc xồng xộc **vào** *trong ngõ.* | **VS01**-647 | 112 |
| 5.31 | Nguyễn Miên Miên đành phải cẩn thận khi **lên** cầu thang. | **VN05**-146 | 112 |
| 5.32 | Đã mấy lần Loan ngập ngừng muốn **quay** *về*. | **VS10**-379 | 112 |
| 5.33 | Nó chợt thấy có hai người **đi** *xe đạp* ngang qua chợ | **VS04**-103 | 113 |
| 5.34 | Phi cơ bắt đầu **hạ** thấp cao độ. | **VN02**-541 | 114 |
| 5.35 | Anh sẽ **ngả** con chó nằm ngửa trên một tấm ny lông. | **VS12**-234 | 114 |

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| 5.36 | Nguyễn Miên Miên mới **trốn** ra khỏi biệt thự. | **VS09**-350 | 115 |
| 5.37 | Không một thằng địch nào dám **đến** gần cái đống đất ấy! | **VS09**-423 | 116 |
| 5.38 | Em cầm lấy chim, **ữỡn** người trễ về phía bọn giặc. | **VN01**-967 | 116 |
| 5.39 | Tại sao máy bay vận tải lẻ tẻ còn **hạ cánh** xuống sân bay được? | **VS07**-124 | 116 |
| 5.40 | Hai người vừa **đi khỏi** Xiêm đã sập hết các phên cửa. | **VS12**-229 | 117 |
| 5.41 | Lượng **trèo** (lên) những bậc đá. | **VS07**-54 | 117 |
| 5.42 | Chị em chỉ có thể bố trí từng tốp **theo** Bộ đội. | **VN03**-237 | 118 |
| 5.43 | a. Kinh **quay** người và nói nhỏ hơn | **VS09**-431 | 118 |
| | b. Nó cũng tò mò ghé **lại** coi chút cho biết. | **VN02**-657 | 118 |
| 5.44 | Vịnh hơi **ngả** người về phía trước. | **VS06**-43 | 118 |
| 5.45 | Em **đến** cạnh giường bạn. | **VS02**-78 | 119 |
| 5.46 | Tảng sáng, đò cập bến làng Trò | **VN03**-453 | 120 |
| 5.47 | Lép-sẹo nhanh tay khép vội hai tà áo. | **VS08**-242 | 120 |
| 5.48 | Sắp **đến gần** cầu ván Mậu Tài, Lượm nói với Tư dát | **VS09**-97 | 120 |
| 5.49 | Cả đội ùa hết **ra** sân mặc dầu trời vẫn lắc rắc mưa. | **VS07**-428 | 121 |
| 5.50 | Kim dạo chơi vùng tiền Chiến khu. | **VS02**-537 | 121 |
| 5.54 | Lượm **sang** tận chợ Bến Ngự. | **VS05**-119 | 126 |
| 5.55 | a. Mời chú em **lên** xe! | **VS10**-26 | 126 |
| | b. Cháu chưa kịp **xuống** đò thì tụi hắn ập tới. | **VN03**-904 | |
| 5.56 | a. Bà O vào **nhà** để gặp mọi người. | **VN02**-867 | 127 |
| | b. Nó ra **bãi** thả trâu, đánh bạn với bọn giữ trâu. | **VS06**-113 | |
| 5.57 | a. Tối nay tôi LÊN nhà Chủ tịchViện. | **VS01**-74 | 127 |
| | b. Chị ấy XUỐNG huyện công tác. | **VS11**-352 | |
| 5.58 | a. Tôi phải **về** nhà tôi trong đêm nay. | **VS09**-92 | 128 |
| | b. Họ **sang** Pháp cùng nhóm nghiên cứu. | **VS12**-205 | |
| 6.28 | Chiếc L.19 như chiếc ô tô sắp **lăn** bánh *xuống* phà. | **VN01**-703 | 144 |
| 6.29 | Rồi thị **kéo** hắn lên. | **VS07**-39 | 144 |
| 6.30 | a. Đồng chí nào **vác** mấy bao gạo ướt ra đây cho tôi. | **VS06**-438 | 144 |
| | b. Chính ủy **cho phép** Khuê về đơn vị. | **VS10**-375 | |
| 6.31 | Ông con bảo con lên xem ông dậy chưa, **mời** ông xuống. | **VS06**-416 | 145 |
| 6.32 | Sàn gác **rung** giữ dội | **VS08**-517 | 146 |
| 6.33 | Chúng tôi được mang được xác của em về rừng. | **VS04**-107 | 146 |
| 6.34 | Hắn nhanh chóng **ném** hai người *ra* ngoài phòng. | **VN03**-259 | 147 |

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| 6.35 | Ở chỗ đó tiếng nước réo ồ ồ, bọt **tung** trắng xóa. | **VS08**-45 | 148 |
| 6.36 | Tám giờ sáng, máy bay **phóng** pháo ào ào. | **VS12**-217 | 148 |
| 6.37 | Moan **vác** hai hòm đạn rời hầm Lữ trở về. | **VN02**-821 | 149 |
| 6.38 | Chúng **ném** bom các cửa rừng. | **VS06**-223 | 149 |
| 6.39 | Lượm **ném** miếng giấy lót quai vào thùng. | **VS07**-236 | 150 |
| 6.40 | Tôi **mời** đồng chí quá bộ lên tầng năm hỏi phòng tổ chức. | **VS04**-27 | 150 |
| 6.41 | Các em thả cho tôi về với vợ con. | **VN02**-403 | 151 |
| 6.42 | Em **chặn** được hắn lại. | **VS03**-71 | 151 |
| 6.43 | Đơn vị **giúp đỡ** Nhân dân di chuyển đồ đạc đến chỗ ở mới. | **VS01**-19 | 151 |
| 6.44 | Chúng hò nhau ném tới tấp đá và gạch **vào** em. | **VN02**-272 | 152 |
| 6.45 | a. Em kéo được bạn **ra khỏi** khu vực giặc thì trời vừa hửng sáng<br>b. Một cụm khói lại đùn lên **từ** dưới chân một cây gạo.<br>c. Thằng bé có vẻ mặt liến láu, thổi qua bóng **ra ngoài** mui đò. | **VS07**-85<br>**VS04**-35<br>**VS06**-159 | 153 |
| 6.46 | a. Người ta đẩy con đò **qua** khỏi ngã ba Sình.<br>b. Hai đứa kéo chiếc xe **dọc theo** các con đường lớn trong thành nội.<br>c. Vôi vữa gạch vụn bay rào rào **quanh** anh. | **VS05**-71<br>**VS12**-3<br>**VS10**-56 | 153 |
| 6.47 | b. Tôi **đẩy** hắn *vào* xe để giấu đi mấy giọt nước mắt sắp ứa ra. | **VN02**-562 | 155 |
| 6.48 | Một bó mũi tên **bắn** ra bốn phía. | **VN01**-753 | 156 |
| 6.51 | Lê Hường **đẩy** lá đơn **tới** trước mặt sáu đứa nói giọng cười cười. | **VS10**-534 | 158 |
| 6.52 | a. Lê Hường **đẩy** lá đơn.<br>b. Lá đơn **tới** trước mặt sáu đứa nói giọng cười cười. | **VN02-8**14<br>**VS06**-160 | 159 |
| 6.54 | a. **Đội trưởng** cho phép tôi về thăm mạ.<br>b. Chốc chốc **nó** phải đưa tay đẩy vành mũ lên cao. | **VS07**-368<br>**VS11**-247 | 160 |
| 6.59 | Lượm **kéo** tay nó **ngồi xuống** bên cạnh nói. | **VS11**-214 | 161 |

## APPENDIX 5

## MOTION VERBS IN ENGLISH AND VIETNAMESE

| Motion verbs | English | Vietnamese |
|---|---|---|
| **Manner verbs** | Accelerate, amble, backpack, balloon, bend, bike, boat, bob, bobsled, bolt, boogie, bounce, bound, bow, bowl, bus, cab, cancan, canoe, canter, caper, capriole, capsize, caravan, careen, career, cavort, chariot, circle, circuit, circulate, clamber, clip, clump, coach, coil, conga, crash, crawl, creep, crouch, cruise, curvet, cycle, dance, dart, dash, dawdle, decelerate, dodder, dodge, dogsled, dribble, drive, edge, ferry, file, flap, flick, flip, flit, float, flounder, flutter, fly, foxtrot, frisk, frolic, gallop , gambol, gimp, glide, gondola, goosestep, grovel, hare, hasten, helicopter, hike, Hobble, hop, hover, hurl, hurry, hurtle, inch, jeep, jet, jig, jitterbug, jive, jog, journey, jump, kayak, keel, kneel, lean, leap, leap-frog, limp, lope, lumber, lurch, march, meander, mince, moonwalk, moped, mosey, motor, motorbike, move, nip, nod, oar, outrun, overturn, pace, pad, paddle, parachute, parade, pedal, perambulate, pirouette, plod, polka, pop, prance, promenade, prank, prowl, punt, quake, quickstep, quiver, race, raft, ramble, recline, reel, revolve, rickshaw, ride, rise, roam, roar, rock, rocket, roll, rollerblade, romp, rotate, rove, row, rumba, run, rush, sail, samba, sashay, saunter, scamper, scoot, scramble, | bạnh, bay, bay bổng, bay lượn, bay nhảy, bay vèo, bật, bén mảng, bệt, biến, bò, bơi, bơi ếch, bơi xuồng, bước, bỏ, buột, bung, cập bến, cất cánh, chành, chảy, chạy, chạy bay, chạy bền, chạy bộ, chạy đua, chạy lao đi, chạy lung tung, chạy mau, chạy nhốn nháo, chạy mất, chạy, nước rút, chạy theo, chạy thoát, chạy trốn chạy trước, chạy tung tang, chạy xô, chạy, việc dã, chèo thuyền, chìa, chìm, choài, chồm, chui, chuồn, chuyển, chúi, cúi, cuốn, cút, dao động, dạo, dạo chơi, dạt, dậm, dập dờn, di chuyển, diễu hành, duỗi, đạp, đập, đi ca nô, đắm, đâm, đi bộ, đi câu, đi chập chững, đi chợ, đi chùa, đi học, đi khệnh khạng, đi làm, đi lòng vòng đi nước kiệu, đi cà kheo, đi la cà, đi lạc, đi lạch bạch, đi lảo đảo, đi lang thang, đi õng ẹo, đi phà, đi rón rén, đi thành hang, đi theo, đi thơ thẩn, đi xe buýt, đi xe đạp, đi khập khiễng, đi xe máy, đi xe taxi, đi xe trượt tuyết, đi xe ngựa, đi xe đò, đi thuyền, đổ, đung đưa, đuổi theo, đưa đẩy, gạt, gật đầu, giang, giạng, |

| | | |
|---|---|---|
| | scud, scurry, scuttle, seesaw, shake, shamble, ship, shiver, shoot, shudder, shuffle, shuttle, sidle , skate, skateboard, ski, skid, skim, skip, skitter, skulk, sledge, sleepwalk, slide, slip, slip, slither, slog, slouch, sneak, somersault, somnam- bulate, speed, spin, spring, sprint, squat, square-dance, stagger, stalk, stamp, step, stomp, stoop, storm, streak, stretch, stride, stroll, strut, stumble, stump, swagger, sway, sweep, swim, swing, swirl, tango, tapdance, taxi, tear, teeter, thunder, tiptoe, tittup, toboggan, toddle, totter, tour, traipse, tram, tramp, trample , travel, tread, trek, tremble, trip, trolley, troop, trot, truck, trudge, trundle, turn, twine, twirl, twist, twist, vault, vibrate, waddle, wade, waft, wag, walk, waltz, wander, wave, wheel, whirl, whisk, whiz, wiggle, wind, wobble, wriggle, yacht, zigzag<br>Zoom | giãn, giậm, giẫm, gục, hạ cánh, hụp, khép, khua, khuấy, kiễng, khúm núm, kiệu, lan truyền, lái xe, lan, lách, lang thang, lảng, lánh, lao, lảo đảo, loạng choạng, lắc, lắc lư, lăn, lật, len, lẻn, leo, lê, liệng, loạng choạng, lò cò, lồi, lộn, lộn nhào, luân chuyển, lúc lắc, lùi, lượn, lượn lờ, lướt, mò, mọc, múa, múa ba lê, múa lân, múa sạp, múa máy, mưa, nặn, ngả, ngã, ngẩng, ngoảnh, ngoi, ngồi, ngồi xổm, ngoe, nguẩy, nhảy, nhảy cỡn, nhảy dây, nhảy dù, nhảy đầm, nhảy múa, nhảy nhót, nhảy lò cò, nhảy lồng, nhảy phóc, nhảy rào, nhảy sào, nhảy sạp, nhảy vòng, nhảy vọt, nhảy xa, nhảy xà, nảy, nổi, nội suối, phất phới, phóng, quanh, quẩn, quay, ra khơi, rảo bước,rẽ, rơi, rũ, run, rung, rượt, sà, sập, sụp, sụt, toài, thoát, tong, trào, trèo, trèo đèo, trôi, trườn, trượt, tuôn, tuột, tụt, ưỡn, va, văng, vẫy tay, vòng, vọt, vỗ, vung, vụt, vượt, xoắn, xoay, xô, xông |
| **Total** | **282** | **224** |
| **Path verbs** | abandon , advance,alight , arise, approach, arrive, ascend, back, chase , circle, climb,collapse, come, crash , cross, crumple , depart, descend, desert , disembark, dismount , distance , divert, dive, dodge, drop, emanate , embark, emerge, emigrate, enter, erupt , escape, exit, fall, flee, flop , follow, ford, forge , get, go, head , hound, immigrate, join, | Biến khỏi, Bỏ xa, Cập, Chúm, Co, Chụm, Cúi, Co quắp, Dạo, Doãi, Đến, Đến gần, Đi, Đi đầu, Đi khỏi, Đột kích , Ghé, Gục, Hạ cánh , Khép, Khuỳnh, Khuỵu, Lại, Lên, Lùi, Ngả, Nhập cư, Qua, Ngoảnh, Quay, Ra, Tản cư, Theo đuổi, Tới, Trèo , Trở lại, Trốn thoát, Vào, |

| | | |
|---|---|---|
| | land, leave, lunge, mount, near, part, pass, penetrate, plunge, plummet, pounce, proceed, pursue, reach,, rear , recede, recoil, retire, retreat, return, rise, scale, scatter, scram, separate, shadow, shinny , sink, skedaddle, skydive, slink, slump, soar, stalk, stampede, stray, submerge , surge , surface , swerve, swoop, tack, tail, topple , track, trail, transit ,, traverse, tumble, turn | Xuống, Ưỡn. |
| **Total** | **95** | **38** |
| **Cause verbs** | Allow, ask ,assist, barricade , beckon , blow , bring, carry , charge , chase , coax, cram, deliver , drag , draw, drift , drive, drop, flee, flick , flip , free, guide, hammer , help, hurtle , keep, kick, launch , let, lock, order , insert , invite , lead, lower , pitch , plump , point , pour, precipitate, propel, pull , push , raise release , remove , rinse, roll, scatter , separate , send, shake, shot, shove , show, sink , slide, snatch , sneeze , spin , splash , spray , sprinkle , squeeze , stab, stuff, suck , take, throw , thrust, topple , toss, transfer , uproot, urge , walk , wave | Chất, Chêm, Chỉ, Cho phép, Cắm , Cuộn, Duỗi, Hất, Yêu cầu, Giúp đỡ, Cản lại, Vẫy tay, Thổi, Mang, Khuân, Vác , Nạp , Đuổi , Nhồi nhét, Ném, Lôi, Kéo , Tung, Dồn, Nén, Hất , Phóng , Búng,Thả, Chỉ đạo,Đập, Ném mạnh , Giữ, Đá , Hạ , Chèn , Khóa , Ra lệnh, Lồng , Mời, Dẫn, Khiếng, Lao , Phóng , Đổ, Lôi, Xô, Kéo, Đẩy , Nâng, Phóng thích, Bỏ, Tách , Lăn, Vác,Chia ra, Gửi, Rung Lắc , Nạp , Nhét , Nhấn chìm Giật , Chộp, Phà hơi, Xoay, Bắn, Phun, Bơm, Rắc, Rải, Vắt, Đâm , Bịt, Hút , Đưa, Ném, Ấn, Vật ngã, Quăng,Bấm, Nhổ, Thuyết phục, Buông , Vẫy |
| **Total** | **79** | **88** |

## APPENDIX 6

## LEXICAL EXPRESSIONS OF MANNER MOTION (LEsMM) in ENGLISH

### I. Lexicalization patterns of LEsMM

***. M = Motion** ***. MM = Motion + Manner** ***. MG = Motion + Ground**

***. MF= Motion + Figure** ***. MC= Motion + Concurrent result** ***. MFM= Motion + Figure + Manner**

***. MMV= Motion + Manner + Vehicle** ***. MMC = Motion + Manner + Co-motion** ***. MMG= Motion + Manner + Ground**

***. MMCP= Motion + Manner + Co-motion + Purpose** ***. MMCR = Motion + Manner + Concurrent result**

### II. Lexicalization patterns of Prepositions

***P= Projective** ***T= Topological** *** G= Goal** *** S= Source** *** R= Route**

### III. Argument structures

**1= V [Figure]** **2= V [Figure Satellite]** **3= V [Figure Figure]**

**4= V [Figure Place]** **5= V [Figure Path Ground]** **6. V [Figure Satellite Place]**

### IV. Event structures

**a. Types of events**

**1= Event of states** **2= Event of activities**

**3= Event of achievements** **4= Event of accomplishments**

**b. Types of motion**

**1= Translational motion** **2= Self-contained motion**

| [Manner] Vs | Lexicalization patterns of the manner verbs | Lexicalization patterns of Prepositions | | | Argument structures | Event structures | |
|---|---|---|---|---|---|---|---|
| | | Motion + $REL_{PLACE}$ $P_S$ | Motion + $Rel_{PATH}PS$ | Motion + $Rel_{PATH+PS}$ + Ground | | Types of events | Types of motion |

| | M | MM | MG | MF | MC | MFM | MMV | MMC | MMG | MMCP | MCR | P | T | G | S | R | G | S | R | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 1 | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Accelerate | | ✓ | | | | | | | | | | | ✓ | | ✓ | | ✓ | | | ✓ | ✓ | | | | | | | ✓ | | ✓ | |
| Amble | | ✓ | | | | | | | | | | ✓ | | ✓ | | | | | ✓ | | ✓ | | ✓ | | | | | ✓ | | | ✓ | |
| Backpack | | ✓ | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ | | | | | | | | ✓ | | | ✓ | |
| Balloon | | | | | | | ✓ | | | | | ✓ | | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | ✓ | | | ✓ | |
| Bend | | ✓ | | | | | | | | | | ✓ | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | ✓ | | | ✓ | |
| Bike | | | | | | | ✓ | | | | | | ✓ | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | | | | ✓ | | | ✓ | |
| Boat | | | | | | | ✓ | | | | | | ✓ | | ✓ | | ✓ | | | ✓ | | | ✓ | | | | | ✓ | | | ✓ | |
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| Shuffle | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | | ✓ | | ✓ | | ✓ | | | | ✓ | | | ✓ | | |
| Shuttle | | ✓ | | | | | | | | | | | ✓ | ✓ | | | | ✓ | | | | | | ✓ | | | ✓ | | | ✓ | | |
| Sidle | | ✓ | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | | ✓ | | ✓ | | ✓ | | ✓ | | | ✓ | | |
| Skate | | | | | | | ✓ | | | | | | ✓ | | | ✓ | ✓ | | | | | | | ✓ | | | ✓ | | | ✓ | | |
| Skateboard | | | | | | | ✓ | | | | | | ✓ | | | ✓ | ✓ | | | ✓ | | | | ✓ | | | ✓ | | | ✓ | | |
| Ski | | | | | | | | ✓ | | | | | ✓ | | ✓ | | | ✓ | | ✓ | | | | | | | ✓ | | | ✓ | | |
| Skid | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | ✓ | | ✓ | | | | ✓ | | | | ✓ | | ✓ | | |
| Skim | | ✓ | | | | | | | | | | | ✓ | | | ✓ | | | ✓ | | | | ✓ | | | | | ✓ | | ✓ | | |
| Skip | | ✓ | | | | | | | | | | | ✓ | | | ✓ | | | ✓ | | | | | | | | | ✓ | | ✓ | | |
| Skitter | | ✓ | | | | | | | | | | | ✓ | ✓ | | | | | ✓ | | | | ✓ | | | | ✓ | | | ✓ | | |
| Skulk | | ✓ | | | | | | | | | | | ✓ | | | ✓ | | | ✓ | | ✓ | | | | | | ✓ | | | ✓ | | |
| Sledge | | | | | | | ✓ | | | | | | ✓ | | ✓ | | ✓ | | | | | | | ✓ | | | ✓ | | | ✓ | | |
| Sleepwalk | | ✓ | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | | | | ✓ | | | | ✓ | | | ✓ | | |
| Slide | | ✓ | | | | | | | | | | ✓ | ✓ | | ✓ | | ✓ | | | | | | ✓ | | ✓ | | ✓ | | | ✓ | | |
| Slip | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | | ✓ | | | | | ✓ | | | | ✓ | | ✓ | | |
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| Slither | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | | ✓ | | | | ✓ | | | | | ✓ | | ✓ | | |
| Slog | | ✓ | | | | | | | | | | | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ | | | | ✓ | | | ✓ | | |
| Slouch | | ✓ | | | | | | | | | | | ✓ | ✓ | | | | | ✓ | | | | ✓ | ✓ | | | | ✓ | | ✓ | ✓ | |
| Sneak | | ✓ | | | | | | | | | | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ | | ✓ | | | | | ✓ | | ✓ | | |
| Somersault | | ✓ | | | | | | | | | | | ✓ | ✓ | | | | | ✓ | ✓ | | | | ✓ | | | ✓ | | | ✓ | | |
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| **282** | **1** | **244** | **4** | **2** | **1** | **4** | **20** | **1** | **5** | **0** | **1** | **37** | **245** | **114** | **95** | **73** | **130** | **39** | **113** | **118** | **61** | **1** | **175** | **79** | **17** | **0** | **229** | **47** | **6** | **212** | **70** | |

## APPENDIX 7

## LEXICAL EXPRESSIONS OF MANNER MOTION (LEsMM) in VIETNAMESE

### I. Lexicalization patterns of LEsMM

***. M = Motion** ***. MM = Motion + Manner** ***. MG = Motion + Ground**

***. MF= Motion + Figure** ***. MC= Motion + Concurrent result** ***. MFM= Motion + Figure + Manner**

***. MMV= Motion + Manner + Vehicle** ***. MMC = Motion + Manner + Co-motion** ***. MMG= Motion + Manner + Ground**

***. MMCP= Motion + Manner + Co-motion + Purpose** ***. MMCR = Motion + Manner + Concurrent result**

### II. Lexicalization patterns of Prepositions

***P= Projective** ***T= Topological** *** G= Goal** *** S= Source** *** R= Route**

### III. Argument structures

**1= V [Figure]** **2= V [Figure Satellite]** **3= V [Figure Figure]**

**4= V [Figure Place]** **5= V [Figure Path Ground]** **6. V [Figure Satellite Place]**

### IV. Event structures

**a. Types of events**

**1= Event of states** **2= Event of activities**

**3= Event of achievements** **4= Event of accomplishments**

**b. Types of motion**

**1= Translational motion** **2= Self-contained motion**

| [Manner] Vs | Lexicalization patterns of manner verbs | Lexicalization patterns of Prepositions | | | Argument structures | Event structures | |
|---|---|---|---|---|---|---|---|
| | | Motion + $REL_{PL}$ $_{ACE}$ $P_S$ | Motion + Satellite | Motion + Path + G | | Types of events | Types of motion |

| | **M** | **MM** | **MG** | **MF** | **MC** | **MFM** | **MMV** | **MMC** | **MMG** | **MMCP** | **MMCR** | **P** | **T** | **G** | **S** | **R** | **G** | **S** | **R** | **1** | **2** | **3** | **4** | **5** | **6** | **1** | **2** | **3** | **4** | **1** | **2** |
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| Bay lượn | | | ✓ | | | | | | | | | ✓ | | | | ✓ | | | ✓ | ✓ | | | ✓ | | | | ✓ | | | ✓ | |
| Bay nhảy | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | | ✓ | ✓ | | | ✓ | | | | ✓ | | | ✓ | |
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| Tụt | | ✓ | | | | | | | | | | | ✓ | ✓ | | | ✓ | | | | ✓ | | | ✓ | ✓ | | | | ✓ | ✓ | |
| Ưỡn | | | | ✓ | | | | | | | | | ✓ | | ✓ | | | ✓ | | | ✓ | | | | | | ✓ | | | ✓ | |
| Va | | | | | ✓ | | | | | | | | ✓ | ✓ | | | ✓ | | | | | | | ✓ | | | | | ✓ | ✓ | |
| Văng | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | ✓ | | | ✓ | | | | | | ✓ | | | ✓ | |
| Vẫy tay | | | | ✓ | | | | | | | | ✓ | | | | ✓ | | | ✓ | ✓ | | | | | | | ✓ | | | | ✓ |

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| Vòng | | | ✓ | | | | | | | | | | ✓ | | | ✓ | | | ✓ | | | | | | | | ✓ | | | ✓ | |
| Vọt | | ✓ | | | | | | | | | | | ✓ | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | ✓ | | ✓ | |
| Vỗ | | | | | | | | | | | | | ✓ | | | | | ✓ | | | | | | | | | ✓ | | | ✓ | |
| Vung | | ✓ | | | | | | | | | | | ✓ | ✓ | | | ✓ | | | | ✓ | | | | | | ✓ | | | ✓ | |
| Vụt | | | | | | | | | | | | | ✓ | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | ✓ | | ✓ | |
| Vượt | | | | | | | | ✓ | | | ✓ | | ✓ | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | ✓ | |
| Xoắn | | | ✓ | | | | | | | | | | ✓ | ✓ | | | ✓ | | | | | | | | | | ✓ | | | | ✓ |
| Xoay | | | ✓ | | | | | | | | | | ✓ | ✓ | | | ✓ | | ✓ | | | | | | | | ✓ | | | | ✓ |
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| **224** | **2** | **167** | **9** | **8** | **5** | **4** | **11** | **1** | **8** | **7** | **2** | **58** | **166** | **124** | **48** | **52** | **119** | **37** | **68** | **65** | **68** | **1** | **23** | **62** | **22** | **3** | **147** | **36** | **38** | **172** | **52** |

## APPENDIX 8

## LEXICAL EXPRESSIONS OF PATH MOTION (LEsPM) in ENGLISH

**I. Lexicalization patterns of Semantic components**

*** 1= Motion + Path** *** 2= Motion + Path + Manner**

*** 3= Motion + Path + Ground** *** 4= Motion +Path + Ground + Manner**

**II. Lexicalization patterns of Paths**

*** 1= Away from G** *** 2= Up/ Onto G-Upwards** *** 3 = After G** *** 4= Change direction**

*** 5= Down from/ to G-Downwards** *** 6= To/ towards G** *** 7= Back to G/ Backwards** *** 8= Pass/ Cross G**

*** 9 = Into G** *** 10= Closer to G** ***11= Forwards** ***12= Out of G**

*** 13= Multiple directions**

**III. Argument Structures**

*** 1= V [Figure]** *** 2= V [Figure Place]**

*** 3= V [Figure Ground]** *** 4= [Figure Path]**

**IV. Event Structures**

**a. Types of events**

*** 1= Events of States** *** 2= Events of Activities**

*** 3= Events of Accomplishments** *** 4= Events of Achievements**

**b. Types of motion**

***1= Translational motion** *** 2= Self-contained Motion**

| Path Verbs | Lexicalization patterns of the path verbs | | | | Lexicalization patterns of Paths | | | | | | | | | | | | | Argument Structures | | | | | Event Structures | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | Types of events | | | | Types of motion | |
| | MP | MPM | MPG | MPGM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 1 | 2 |
| Abandon | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Advance | ✓ | | | | | | | | | | | | | | ✓ | | | ✓ | | | | | | ✓ | | | ✓ | |

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| Alight | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | | ✓ | | | | ✓ | | | ✓ | |
| Arise | ✓ | | | | | ✓ | | | | | | | | | | | | ✓ | | | | | | ✓ | | | ✓ | |
| Approach | ✓ | | | | | | | | | | | | | ✓ | | | | ✓ | | ✓ | | | | ✓ | | | ✓ | |
| Arrive | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | ✓ | | | | | ✓ | | | ✓ | |
| Ascend | ✓ | | | | | ✓ | | | | | | | | | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | |
| Back | ✓ | | | | | | | | | | ✓ | | | | | | | ✓ | | ✓ | | | | | | | ✓ | |
| Chase | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | ✓ | | | ✓ | |
| Circle | ✓ | | | | | | | | | | | | | | | | | ✓ | | ✓ | | | | ✓ | | | ✓ | |
| Climb | | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | ✓ | |
| Collapse | ✓ | | | | | | | | ✓ | | | | | | | | | | ✓ | | | | | | | | ✓ | |
| Come | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | |
| Crash | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Cross | ✓ | | | | | | | | | | | ✓ | | | | | | | | ✓ | | | | | | | ✓ | |
| Crumple | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | ✓ | | | | | | | ✓ | |
| Depart | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | ✓ | | | | | ✓ | |
| Descend | ✓ | | | | | | | | ✓ | | | | | | | | | ✓ | | | ✓ | | | | | | ✓ | |
| Desert | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Disembark | | | ✓ | | | ✓ | | | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Dismount | | | ✓ | | | | | | ✓ | | | | | | | | | ✓ | | ✓ | | | | | | | ✓ | |
| Distance | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Divert | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | ✓ | |
| Dive | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Dodge | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | ✓ | |
| Drop | ✓ | | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | ✓ | | | ✓ | |
| Emanate | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Embark | | | ✓ | | | ✓ | | | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Emerge | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Emigrate | | | ✓ | | ✓ | | | | | | | | | | | | | | ✓ | | | | | | | | ✓ | |

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| Enter | ✓ | | | | | | | | | | | | ✓ | | | | | | | ✓ | | | | | | | ✓ | |
| Erupt | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | ✓ | | | ✓ | |
| Escape | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | ✓ | ✓ | | | | | | | ✓ | |
| Exit | ✓ | | | | ✓ | | | | | | | | | | | ✓ | | | | ✓ | | ✓ | | | | | ✓ | |
| Fall | ✓ | | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | ✓ | | | ✓ | |
| Flee | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | | | | | | ✓ | |
| Flop | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Follow | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Ford | | | | ✓ | | | | | | | | | | | | | | | | | ✓ | | | | | | ✓ | |
| Forge | ✓ | | | | | | | | | | | | | | ✓ | | | | | ✓ | | | | | | | ✓ | |
| Get | ✓ | | | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | |
| Go | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | |
| Head | | ✓ | | | | | | | | | | | | | ✓ | | | ✓ | | ✓ | | | | | | | ✓ | |
| Hound | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Immigrate | | | ✓ | | | | | | | | | | ✓ | | | | | ✓ | | | | | | | | | ✓ | |
| Join | ✓ | | | | | | | | | | | | ✓ | | | | | | | ✓ | | | | | | | ✓ | |
| Land | | | ✓ | | | | | | ✓ | | | | | | | | | ✓ | ✓ | ✓ | | | | ✓ | | | ✓ | |
| Leave | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | ✓ | ✓ | | ✓ | | | | | ✓ | |
| Lunge | | ✓ | | | | | | | | | | | | | ✓ | | | ✓ | | | | | | | | | ✓ | |
| Mount | ✓ | | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | ✓ | |
| Near | ✓ | | | | | | | | | | | | | ✓ | | | | | | ✓ | | | | ✓ | | | ✓ | |
| Part | ✓ | | | | | | | | | | | | | | | | ✓ | | | ✓ | | | | | | | ✓ | |
| Pass | ✓ | | | | | | | | | | | ✓ | | | | | | ✓ | | | ✓ | | | | | | ✓ | |
| Penetrate | ✓ | | | | | | | | | | | | ✓ | | | | | | | ✓ | | | | | | | ✓ | |
| Plunge | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | | ✓ | | | | | | ✓ | |
| Plummet | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | | ✓ | | | | | | ✓ | |
| Pounce | | ✓ | | | | | | | | | | | | | | | | | ✓ | | | | | | | | ✓ | |
| Proceed | ✓ | | | | | | | | | | | | | | ✓ | | | | | ✓ | | | | | | | ✓ | |
| Pursue | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |

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| Reach | ✓ | | | | | | | | | ✓ | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Rear | ✓ | | | | | | | | | | ✓ | | | | | | | | | | | | | | | | ✓ | |
| Recede | ✓ | | | | ✓ | | | | | | ✓ | | | | | | | | ✓ | | | | | | | | ✓ | |
| Recoil | ✓ | | | | | | | | | | ✓ | ✓ | | | | | | | | ✓ | | | | | | | ✓ | |
| Retire | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Retreat | ✓ | | | | ✓ | | | | | | ✓ | | | | | | | | ✓ | | | | | | | | ✓ | |
| Return | ✓ | | | | | | | | | | ✓ | | | | | | | | ✓ | | ✓ | | | | | | ✓ | |
| Rise | ✓ | | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | ✓ | | ✓ | |
| Scale | ✓ | | | | | ✓ | | | | | | | | | | | | | | | | ✓ | | | | | ✓ | |
| Scatter | ✓ | | | | | | | | | | | | | | | | ✓ | ✓ | | ✓ | | | | | | | ✓ | |
| Scram | | ✓ | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Separate | ✓ | | | | | | | | | | | | | | | | ✓ | | | ✓ | | | | | | | ✓ | |
| Shadow | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Shinny | | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | | ✓ | |
| Sink | ✓ | | | | | | | | ✓ | | | | | | | | | | | ✓ | | | | ✓ | | | ✓ | |
| Skedaddle | | ✓ | | | | | | | | | | | | | | | ✓ | ✓ | | | | | | | | | ✓ | |
| Skydive | | | | ✓ | | | | | ✓ | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Slink | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | ✓ | | | | | | | ✓ | |
| Slump | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | ✓ | | | | | | | ✓ | |
| Soar | | ✓ | | | | ✓ | | | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Salk | | ✓ | | | | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Stampede | | ✓ | | | | | | | | | | | | | | | ✓ | ✓ | | ✓ | | | | | | | ✓ | |
| Stray | ✓ | | | | ✓ | | | | | | | | | | | | | | ✓ | | | | | | | | ✓ | |
| Submerge | ✓ | | | | | | | | ✓ | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Surge | | ✓ | | | | | | | | | | | | | ✓ | | | ✓ | | | | | | | | | ✓ | |
| Surface | | | | ✓ | | ✓ | | | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Swerve | ✓ | | | | | | | ✓ | | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Swoop | | | | ✓ | | | | | ✓ | | | | | | | | | ✓ | | | | | | | | | ✓ | |
| Tack | ✓ | | | | | | | ✓ | | | | | | | | | | | | ✓ | | | | | | | ✓ | |

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| Tail | | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | ✓ | ✓ | | | | | | ✓ | |
| Topple | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | | | | ✓ | |
| Track | | ✓ | | | | | | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Trail | | ✓ | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| Transit | ✓ | | | | | | | | | | | | | | ✓ | | | ✓ | | | | | | | | | ✓ | |
| Traverse | ✓ | | | | | | | | | | | ✓ | | | | | | | | ✓ | | | | | | | ✓ | |
| Tumble | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | | | | ✓ | |
| Turn | ✓ | | | | | | | ✓ | | | | | | | | | | | | ✓ | | | | | | | ✓ | |
| **95** | **62** | **25** | **5** | **3** | **19** | **11** | **6** | **4** | **21** | **6** | **6** | **3** | **4** | **2** | **7** | **1** | **5** | **50** | **13** | **49** | **11** | **5** | **0** | **33** | **4** | **22** | **95** | **0** |

## APPENDIX 9

## LEXICAL EXPRESSIONS OF PATH MOTION (LEsPM) in VIETNAMESE

### I. Lexicalization patterns of Semantic components

*** 1= Motion + Path** *** 2= Motion + Path + Manner**

*** 3= Motion + Path + Ground** *** 4= Motion +Path + Ground + Manner**

### II. Lexicalization patterns of Paths

*** 1= Away from G** *** 2= Up/ Onto G-Upwards** *** 3 = After G** *** 4= Change direction**

*** 5= Down from/ to G-Downwards** *** 6= To/ towards G** *** 7= Back to G/ Backwards** *** 8= Pass/ Cross G**

*** 9 = Into G** *** 10= Closer to G** ***11= Forwards** ***12= Out of G**

*** 13= Multiple directions**

### III. Argument Structures

*** 1= V [Figure]** *** 2= V [Figure Place]**

*** 3= V [Figure Ground]** *** 4=V [Figure Path]** *** 5=V [Figure Ground Manner]**

### IV. Event Structures

**a. Types of events**

*** 1= Events of States** *** 2= Events of Activities**

*** 3= Events of Accomplishments** *** 4= Events of Achievements**

**b. Types of motion**

***1= Translational motion** *** 2= Self-contained Motion**

| Path Verbs | Lexicalization patterns of the path verbs | Lexicalization patterns of Paths | Argument Structures | Event Structures | |
|---|---|---|---|---|---|
| | | | | Types of events | Types of motion |

| | **MP** | **MPM** | **MPG** | **MPGM** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **1** | **2** | **3** | **4** | **5** | **1** | **2** | **3** | **4** | **1** | **2** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Biến khỏi | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | | | | ✓ | | ✓ | |
| Bỏ xa | ✓ | | | | ✓ | | | | | | | | | | | | | | | ✓ | | | | | ✓ | | ✓ | |
| Cập | | | ✓ | | | | | | | | | | ✓ | | | | | | | ✓ | | | | | ✓ | | ✓ | |
| Chúm | | ✓ | | | | | | | | | | | ✓ | | | | | | | | ✓ | | | ✓ | | | ✓ | |
| Chụm | | ✓ | | | | | | | | | | | ✓ | | | | | | | | ✓ | | | ✓ | | | | ✓ |
| Co | | ✓ | | | | | | | | | | | ✓ | | | | | | | | ✓ | | | ✓ | | | | ✓ |
| Cúi | | ✓ | | | | | | | ✓ | | | | | | | | | | | ✓ | ✓ | | | ✓ | | | | ✓ |
| Co quắp | | ✓ | | | | | | | | | | | ✓ | | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | |
| Dạo | ✓ | | | | | | | | | | | | | | | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | |
| Doãi | | ✓ | | | ✓ | | | | | | | | | | | | | | | | ✓ | | | ✓ | | | | ✓ |
| Đến | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | | ✓ | | ✓ | | | ✓ | | ✓ | |
| Đến gần | ✓ | | | | | | | | | | | | | | ✓ | | | ✓ | | ✓ | | | | ✓ | | | ✓ | |
| Đi | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Đi đầu | | ✓ | | | | | | | | ✓ | | | | | | | | ✓ | ✓ | | | | | ✓ | | | ✓ | |
| Đi khỏi | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | | | | ✓ | | ✓ | |
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| Ghé | ✓ | | | | | | | ✓ | | | | | | | | | | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | |
| Gục | | ✓ | | | | | | | ✓ | | | | | | | | | | ✓ | | ✓ | | | ✓ | | | | ✓ |
| Hạ cánh | | | ✓ | | | | | | ✓ | | | | | | | | | ✓ | ✓ | | | | | ✓ | | | ✓ | |
| Khép | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | | | ✓ | | | ✓ | |

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| Khuỳnh | | ✓ | | | ✓ | | | | | | | | | | | | | | | | ✓ | | | | ✓ | ✓ | | |
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| Lùi | ✓ | | | | | | | | | | ✓ | | | | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | |
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| Ngoảnh | | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | ✓ | | | ✓ |
| Quay | ✓ | | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | ✓ | | | ✓ |
| Ra | ✓ | | | | | | | | | | | | | | | ✓ | | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | |
| Tản cư | | | ✓ | | ✓ | | | | | | | | | | | | | ✓ | | | | | | | ✓ | | ✓ | |
| Theo | ✓ | | | | | | ✓ | | | | | | | | | | | | | ✓ | | | | | ✓ | | ✓ | |
| Tới | ✓ | | | | | | | | | ✓ | | | | | | | | ✓ | | ✓ | | ✓ | | | ✓ | | ✓ | |
| Trèo | ✓ | | | | | ✓ | | | | | | | | | | | | | | ✓ | | | | | ✓ | | ✓ | |
| Trở lại | ✓ | | | | | | | | | | ✓ | | | | | | | ✓ | | ✓ | | ✓ | | | | ✓ | ✓ | |
| Trốn thoát | ✓ | | | | ✓ | | | | | | | | | | | | | ✓ | ✓ | ✓ | | | | | ✓ | | ✓ | |
| Vào | ✓ | | | | | | | | | | | | ✓ | | | | | ✓ | ✓ | ✓ | | | | | ✓ | | ✓ | |
| Xuống | ✓ | | | | | | | | ✓ | | | | | | | | | ✓ | | ✓ | | | | | ✓ | | ✓ | |
| Uỗn | | ✓ | | | ✓ | | | | | | | | | | | | | | | | ✓ | | | | ✓ | | | ✓ |
| **38** | **23** | **12** | **3** | **0** | **7** | **2** | **1** | **3** | **5** | **4** | **3** | **1** | **7** | **1** | **1** | **1** | **2** | **18** | **11** | **23** | **17** | **9** | **0** | **10** | **26** | **2** | **30** | **8** |

## APPENDIX 10

## LEXICAL EXPRESSIONS OF CAUSED MOTION (LEsCM) in ENGLISH

### I. Lexicalization patterns of semantic components

***MC= Motion + Cause** ***MCP= Motion + Cause + Path**

***MCM= Motion + Cause + Manner** ***MCPM= Motion + Cause + Path + Manner**

### II. Lexicalization patterns of cause

***1= X di CAUSES Y to MOVE Z** *** 2= X ind CAUSES Y to MOVE Z**

***3 = X ENABLES Y to MOVE Z** *** 4= X PREVENTS Y from MOVING COMP (Z)**

***5= X HELPS Y to MOVE Z**

### III. Argument structures

*** 1= V [Figure Path Ground]** *** 2= V [Agent Figure Path]** *** 3= V [Figure Path Ground]**

### IV. Event structures

**a. Types of events**

***1= Events of states** ***2= Events of actives**

***3= Events of accomplishments** *** 4 = Events of achievements**

**b. Types of force**

***1= External force** ***2 = Internal force**

| Cause Verbs | Lexicalization patterns of the cause verbs | | | | Lexicalization patterns of causes | | | | | Lexicalization patterns of paths | | | Argument structures | | | Event structures | | | | | |
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| | | | | | | | | | | | | | | | | Types of events | | | | Types of forces | |
| | MC | MCP | MCM | MCPM | 1 | 2 | 3 | 4 | 5 | Goal | Source | Route | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 1 | 2 |
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| Bring | | | ✓ | | ✓ | | | | | | | ✓/ | | | ✓ | | ✓ | | | ✓ | |
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| Charge | | | | ✓ | ✓ | | | | | | | ✓ | | | ✓ | | | ✓ | | ✓ | |
| Chase | | | ✓ | | ✓ | | | | | ✓ | | | | | ✓ | | ✓ | | | ✓ | |
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| Deliver | | | | ✓ | ✓ | | | | | ✓ | | | | | ✓ | | | ✓ | | ✓ | |
| Drag | | | ✓ | | ✓ | | | | | | ✓ | | | ✓ | ✓ | | ✓ | | | ✓ | |
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| Guide | | | ✓ | | | | | | ✓ | ✓ | | | | | ✓ | ✓ | | | | | ✓ |
| Hammer | | ✓ | | | ✓ | | | | | ✓ | | | | | ✓ | | | ✓ | | ✓ | |
| Help | ✓ | | | | | | | | ✓ | | ✓ | | | | ✓ | ✓ | | | | | ✓ |
| Hurtle | ✓ | | | | ✓ | | | | | ✓ | | | ✓ | | ✓ | | | | ✓ | ✓ | |
| Keep | ✓ | | | | | | | ✓ | | | ✓ | | | | ✓ | ✓ | | | | | ✓ |
| Kick | | | | ✓ | ✓ | | | | | | ✓ | | | ✓ | ✓ | | | | ✓ | ✓ | |
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| Pitch | ✓ | | | | ✓ | | | | | | | ✓ | | | ✓ | | | ✓ | | ✓ | |
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| Release | ✓ | | | | | | ✓ | | | | ✓ | | | | ✓ | | ✓ | | | ✓ | |
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| Shake | ✓ | | | | ✓ | | | | | | ✓ | | | ✓ | ✓ | | ✓ | | | ✓ | |
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| Thrust | ✓ | | | | ✓ | | | | | ✓ | | | | ✓ | ✓ | | | ✓ | | ✓ | |
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| Toss | ✓ | | | | ✓ | | | | | | ✓ | | | | ✓ | | | | ✓ | ✓ | |
| Transfer | ✓ | | | | ✓ | | | | | ✓ | | | | | ✓ | | ✓ | | | ✓ | |
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| Wave | | | ✓ | | | | ✓ | | | | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | |
| **79** | **33** | **12** | **22** | **12** | **56** | **7** | **5** | **4** | **7** | **42** | **23** | **14** | **12** | **16** | **79** | **15** | **26** | **21** | **17** | **66** | **13** |

## APPENDIX 11

## LEXICAL EXPRESSIONS OF CAUSED MOTION (LEsCM) in VIETNAMESE

**I. Lexicalization patterns of semantic components**

***MC= Motion + Cause** ***MCP= Motion + Cause + Path**

***MCM= Motion + Cause + Manner** ***MCPM= Motion + Cause + Path + Manner**

**II. Lexicalization patterns of cause**

***1= X di CAUSES Y to MOVE Z** *** 2= X ind CAUSES Y to MOVE Z**

***3 = X ENABLES Y to MOVE Z** *** 4= X PREVENTS Y from MOVING COMP (Z)**

***5= X HELPS Y to MOVE Z**

**III. Argument structures**

*** 1= V [Figure Path Ground]** *** 2= V [Agent Figure Path]** *** 3= V [Agent Figure Path Ground]**

**IV. Event structures**

**a. Types of events**

***1= Events of states** ***2= Events of actives**

***3= Events of accomplishments** *** 4 = Events of achievements**

**b. Types of force**

***1= External force** ***2 = Internal force**

| Cause Verbs | LEsCM IN VIETNAMESE | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lexicalization patterns of the cause verbs | | | | Lexicalization pattern of causes | | | | | Lexicalization patterns of paths | | | Argument structures | | | Event Structures | | | | | |
| | | | | | | | | | | | | | | | | Types of events | | | | Types of forces | |
| | MC | MCP | MCM | MCPM | 1 | 2 | 3 | 4 | 5 | Goal | Source | Route | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 1 | 2 |

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| **88** | **4** | **11** | **18** | **55** | **66** | **3** | **7** | **4** | **8** | **58** | **16** | **14** | **12** | **57** | **63** | **16** | **5** | **42** | **25** | **72** | **16** |