EXPRESSIONS OF EMANATION FICTIVE MOTION EVENTS IN THAI

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This study investigates Thai expressions of emanation fictive motion events within the framework of cognitive linguistics. An emanation event is an imagined event in which an intangible entity moves from a source entity relative to a reference entity. The analysis of the data of Thai emanation expressions, which are gathered from published literary books, shows the followings. First, there are two basic types of the idealized cognitive model (ICM) for Thai emanation event: (1) thematic ICM's consisting of two role archetypes, i.e., a mover and an absolute; (2) agentive ICM's consisting of three role archetypes, i.e., a mover, an absolute and an agent. Second, Thai emanation event can be classified into four specific semantic types according to the kinds of mover: (1) perception emanation, including (1.1) visual emanation (line of vision), (1.2) auditory emanation (sound), (1.3) olfactory emanation (smell), (1.4) tactile emanation (air in motion); (2) radiation emanation (light); (3) shadow emanation (shadow); (4) orientation emanation (the fucus of an observer's attention). Third, the structure of Thai emanation events can be categorized into two main types, based on the surface forms of their predicates: (1) a simplex structure represented by a single verb phrase, and (2) an integrated structure represented by a serial verb construction or a verb phrase combined with a prepositional phrase. The integrated structure includes two subtypes: (2.1) simultaneous structures described in more than one perspective, and (2.2) sequential structures consisting of two sub-events occurring in succession. These emanation event subtypes in Thai are language-particular and reflect an aspect of the Thai speaker's understanding of the world.

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ในงานวิจัยชิ้นนี้ผู้วิจัยศึกษารูปภาษาแสดงการเคลื่อนที่สมมุติแบบไร้ตัวตนในภาษาไทยโดยใช้หลักเกณฑ์ของภาษาศาสตร์ปริชาน(การรับรู้และรู้คิด) ในเหตุการณ์การเคลื่อนที่สมมุติแบบไร้ตัวตน สิ่งซึ่งไม่มีตัวตนและจับต้องไม่ได้ เช่น สายตา เสียง กลิ่น ลม แสง เงา เป็นต้น จะเคลื่อนย้ายไปจากจุดเริ่มต้นตามเส้นทางที่กำหนดด้วยจุดอ้างอิง เช่น จุดผ่านและจุดปลายทาง วัตถุประสงค์ในการศึกษามีสองประการ ได้แก่ ๑. เพื่อจำแนกเหตุการณ์ดังกล่าวออกเป็นประเภทต่างๆโดยใช้รูปแบบทางปริชาน (cognitive models) และ ๒. เพื่อวิเคราะห์กระสวนของรูปภาษาแสดงเหตุการณ์ดังกล่าว ผู้วิจัยเก็บข้อมูลของรูปภาษาแสดงเหตุการณ์ดังกล่าวจากสิ่งตีพิมพ์ต่างๆซึ่งเป็นนวนิยายและหนังสือรวมเรื่องสั้น ผลจากการวิเคราะห์ข้อมูลพบว่า รูปแบบทางปริชานสำหรับเหตุการณ์การเคลื่อนที่สมมุติแบบไร้ตัวตนในภาษาไทยสามารถจำแนกออกเป็นประเภทใหญ่ๆได้สองประเภท ได้แก่ ประเภทที่ประกอบด้วยสิ่งที่ร่วมอยู่ในเหตุการณ์สองอย่าง ได้แก่ สิ่งที่เคลื่อนที่และสิ่งที่ถูกอ้างอิงในการพรรณนาเส้นทางในการเคลื่อนที่ และประเภทที่ประกอบด้วยสิ่งที่ร่วมอยู่ในเหตุการณ์สามอย่าง ได้แก่ สิ่งที่เคลื่อนที่ สิ่งที่ถูกอ้างอิง และสิ่งที่ก่อให้เกิดการเคลื่อนที่ ประธานของรูปภาษาแสดงเหตุการณ์ประเภทแรกมักจะเป็นสิ่งที่เคลื่อนที่เป็นส่วนใหญ่ แต่บางกรณีอาจเป็นสิ่งที่ถูกอ้างอิงก็ได้ ส่วนประธานของรูปภาษาแสดงเหตุการณ์ประเภทหลังจะต้องเป็นสิ่งที่สามารถก่อให้เกิดการเคลื่อนที่ได้เท่านั้น

เหตุการณ์การเคลื่อนที่สมมุติแบบไร้ตัวตนในภาษาไทยยังสามารถจำแนกได้ด้วยลักษณะคุณสมบัติของสิ่งที่เคลื่อนที่ ได้แก่ ๑. การเคลื่อนที่ของสายตา เสียง กลิ่นและลม ซึ่งมีความสัมพันธ์กับกระบวนการการรับรู้ ๒. การเคลื่อนที่ของแสง ๓. การเคลื่อนที่ของเงา และ ๔. การเคลื่อนที่ของจุดสนใจของผู้มอง

โครงสร้างเหตุการณ์การเคลื่อนที่สมมุติแบบไร้ตัวตนในภาษาไทยสามารถจำแนกเป็นประเภทใหญ่ๆได้สองประเภท ประเภทที่หนึ่งประกอบด้วยเหตุการณ์เพียงเหตุการณ์เดียวซึ่งแสดงด้วยกริยาวลีตัวเดียว ประเภทที่สองประกอบด้วยเหตุการณ์ย่อยสองเหตุการณ์ขึ้นไปซึ่งแสดงด้วยกริยาวลีและบุพบทวลีอย่างละหนึ่งตัวหรือกริยาวลีสองตัวเป็นอย่างน้อย โครงสร้างเหตุการณ์ประเภทที่สองยังสามารถจำแนกเป็นประเภทย่อยได้อีกสองประเภท คือ ประเภทที่แสดงการเกิดของเหตุการณ์แบบพร้อมกัน และประเภทที่แสดงการเกิดของเหตุการณ์แบบเรียงต่อ

ความหลากหลายของเหตุการณ์เหล่านี้เป็นลักษณะเฉพาะตัวของภาษาไทย และแสดงให้เห็นการเข้าใจโลกของผู้พูดภาษาไทยในอีกแง่มุมหนึ่ง

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Chapter 1

Introduction

1.1. Rationale

This thesis examines expressions of emanation fictive motion events in Thai within the theoretical framework of cognitive linguistics. "Emanation" is one subtype of "fictive motion" which has been investigated by Talmy (1989, 1990, 1996). Fictive motion is spatial motion that does not objectively take place but is subjectively construed. In other words, it is an abstract, subjective motion on the part of the conceptualizer (which occurs in the conceptualizer's mental space), as opposed to a concrete, objective motion on the part of the conceived entity (which occurs in the physical space).

In this study, an "emanation fictive motion event" (henceforth, "emanation event") is defined as an imagined event involving motion of an intangible entity (e.g. light, shadow, sound, smell, gaze, and any other abstract conceptual essence of motion or directedness) away from some source entity. In an emanation event, an intangible entity emerges from a source entity and steadily moves on relative to a reference entity. (1) exemplifies emanation event expressions (henceforth, "emanation expressions") in Thai.

(1) a.

ไฟ	ส่อง	แสง	สาด	เข้า	มา	ใน	สนาม
fay	sɔ̀ɔŋ	sɛ̌ɛŋ	sàat	khâw	maa	nay	sanăam
lamp	shine	light	splash	enter	come	in	field

หญ้า
yâa
grass

The lamp sent light flashing into the field.

b.

ปลา	ที่	เน่า	ส่ง	กลิ่น	เหม็น
plaa	thîi	nâw	sòŋ	klîn	mĕn
fish	RELATIVE PRONOUN	rotten	send	smell	bad-smelling

ออก	มา
ʔɔ̀ɔk	maa
exit	come

The rotten fish gave off a bad smell.

c. เสียง เล็ดลอด ออก มา
sĭaŋ lét lɔ̂ɔt ʔɔ̀ɔk maa
sound sneak exit come

The sound sneaked out.

d. สาย ตา ทุก คู่ พุ่ง ตรง มา ยัง
săay taa thúk khûu phûŋ troŋ maa yaŋ
line eye every pair dart go straight come toward

เรา
raw
PRONOUN

Everyone's line of vision beamed straight at us.

e. เล็ง ปืน เข้า ใส่ ข้าศึก
leŋ puuun khâw sày khâa sùk
aim gun enter put in enemy

(S/he) aimed the gun at the enemy.

In (1a), the lamp is described as sending light into the field; in (1b), the bad smell as being given off from the rotten fish; in (1c), the sound as escaping out of somewhere; in (1d), the gaze as beaming at the observers; and, in (1e), something abstract as proceeding from the gun to the enemy. Consider light radiation, as in (1a); indeed we can see the light, but we cannot directly detect any photons or their motion. Thus, an emanation event is not explicitly seen (or physically perceived), but it is implicitly sensed via the tangible objects associated with it (or conventionally construed).

Fictive motion expressions have attracted the attention of a number of linguists in recent years. Talmy (1983) first discussed expressions of fictive motion, though he called it "virtual motion" at the time. Talmy (1983: 236) claimed that the road described in (2) is conceptualized as having a leading edge that is in virtual motion or as being scanned along its length by the observer's focus of attention.

(2) a. This road runs past the factory.

b. This road extends through the tunnel.

c. This road goes from Burney to Redding.

Since then, fictive motion expressions have been studied by linguists who place importance on human conceptualization (e.g. Kunihiro 1985; Langacker 1986, 1987, 1988, 1991a, 1998b, 1999; Talmy 1989, 1990, 1996; Matsumoto 1996a, 1996b, 1996c, 1997a, 1997b, 1998a; Fauconnier 1997; Takahashi 1998, in press). Talmy (1996) was the first to give an in-depth study on fictive motion expressions based on English data. Langacker (1986, 1987, 1988, 1991a, 1998b, 1999) also analyzed phenomena related to fictive motion, which he called "abstract motion," "subjective motion," "virtual motion," and "virtual change." Talmy's "fictive motion" and Langacker's "virtual motion" refer to fictive or virtual motion in space, while Langacker's "abstract motion" and "subjective motion" encompass non-spatial motion such as motion in the temporal domain, as illustrated in (3).

(3) a. He is going to finish soon.

b. This milk is about to go sour.

c. The concert went from midnight to 4AM.

Furthermore, Langacker's "virtual change" has a much broader sense. It refers to a change invoked to contrast the profiled configuration with a canonical entity. Any departure from a virtual canonical entity such as a norm, ideal or expectation is regarded as virtual change, as illustrated in (4). In Langacker's view, virtual motion (fictive motion) is just a special case of virtual change.

(4) a. The trees got shorter at higher altitudes.

b. Something is rough/ crooked/ sloping/ limp/ dirty (in comparison with an imagined counterpart that is smooth/ straight/ level/ stiff/ clean).

This study focuses on emanation which is one subtype of fictive/virtual spatial motion. Expressions of motion or change in more abstract domains (abstract or subjective motion and virtual change), as in (2) and (3), are outside the scope of this study.

Emanation expressions I investigate in the present study form one major subcategory of fictive motion expressions. Emanation expressions abound in everyday language, and I found I could gather the emanation type of Thai fictive motion expressions more easily than the other types. For this reason, I decided to investigate the emanation type as a case study of Thai fictive motion expressions. To my knowledge, so far no study has dealt with the full range of emanation expressions in one language other than English (cf. Talmy 1996). This study aims to explicate the meanings and syntactic structures of the full range of emanation expressions in Thai. With the assumption that linguistic structures are associated with conceptual structures in the mind, I will investigate how Thai speakers conceptualize and structure emanation events and how emanation events are linguistically encoded in the Thai language. I will relate various syntactic patterns of Thai emanation expressions to Thai speakers' conventional conceptualizations, that is, imposed schematic images with regard to emanation events.

I argue that linguistic representations for emanation events are motivated by the speakers' conventional conceptualizations including "schematization" (viz. a process that involves the systematic selection of certain aspects of a referent scene to represent the whole, while disregarding the remaining aspects (Talmy 1983: 225)); and "conceptual blending" (viz. the cognitive process of mapping of mental spaces (Fauconnier 1997: 149)) with respect to emanation events. I also argue that such conventional conceptualizations are language-particular even though they are subject to certain conditions related to human cognition which is assumed to be universal (cf. Croft 1998a).

1.2. Objectives

The objectives of this study are as follows.

a. to classify emanation events in the Thai language using cognitive models, namely propositional, image-schematic, metaphoric and metonymic

models.

b. to examine syntactic patterns of emanation event subtypes in the Thai language.

1.3. Hypotheses

The hypotheses of this study are summarized below.

a. Types of emanation events are language-specific.

b. Syntactic patterns of emanation event subtypes differ, reflecting different underlying cognitive models.

1.4. Data

Data used in this study are Thai emanation expressions that appear in the following published literary books: กฤษณา อโศกสิน (2525a, 2525b, 2534), ชาติ กอบจิตติ (2541), ปรียา อิงคาภิรมย์ โยริเอะ และกนก ศฤงคารินทร์ (ผู้แปล) (2538), พงาพันธ์ (ผู้แปล) (2542), พิสิฐ ภูศรี (2542), ไพฑูรย์ รัญญา (2541), ว.วินิจฉัยกุล (2535a, 2535b), วาศนา ชลศึกษ์ เคนแมน (บรรณาธิการ) (2538), สมาคมนักเขียนแห่งประเทศไทย (2541), ศิลา โคมฉาย (2536).

1.5. Procedure

This study was conducted according to the following steps.

Stage 1: Review previous studies of fictive motion and relevant theoretical frameworks.

I mainly refer to the following works: Langacker (1987, 1991a, 1991b, 1998a, 1998b, 1999), Fauconnier (1985, 1997), Lakoff (1987), Talmy (1988, 1996), and Croft (1991, 1993, 1998a, 1998b).

Stage 2: Gather data from Thai discourses.

I collect examples of Thai emanation expressions from randomly selected Thai printed texts (see Section 1.4 above).

Stage 3: Analyze the data, and then identify and classify all subtypes of Thai emanation events.

With the aforementioned data, I attempt to identify all subtypes of emanation events in Thai, taking account of Thai speakers' conceptualizations of emanation events.

Stage 4: Examine the syntactic patterns of emanation subtypes.

I attempt to identify basic predicate patterns for each subtype. I examine their verbal forms, argument structures, and whole constructions.

Stage 5: Discuss the findings.

I examine the correlation between semantic and syntactic aspects of emanation expressions, e.g., what syntactic constructions represent what relationships among emanation event participants, what verbal forms specify what paths and manners of emanation, etc. I, then, summarize all the findings in a conclusion.

Chapter 2

Theoretical Background

This study is done within the theoretical framework of cognitive linguistics. As Ungerer and Schmid (1996: 278) state, cognitive linguistics has not yet developed into a comprehensive theory. However, a number of approaches within the realm of cognitive linguistics do share a common basis, namely the idea that linguistic structures, essentially semantic structures, are associated with encyclopedic world-knowledge. In cognitive linguistics, language is considered "an integrated part of cognition which reflects the interaction of cultural, psychological, communicative, and functional considerations, and which can only be understood in the context of a realistic view of conceptualization and mental processing" (Aims and Scope of the International Cognitive Linguistics Association; http://www.unm.edu/~icla/). Cognitive approaches to language thus take into account our experience of the world and the way we conceptualize it. Cognitive linguists take for granted that meaning is conceptual and cannot be accounted for by describing objective reality, but only by describing the cognitive routines that constitute one's understanding of it (Langacker 1987: 194), and that the cognitive construal of experience in language is ultimately done for the purpose of communication in discourse and cannot be separated from that function (Croft 1998b: 90).

My investigation of Thai emanation expressions relies on the theories of fictive motion and idealized cognitive models (ICM's). These theories offer the best frameworks for examining Thai emanation expressions. Below, I introduce these theories in Section 2.1 and review related studies on motion verbs and emanation events in Section 2.2.

2.1. Theoretical Frameworks

This section is divided into two subsections. Sections 2.1.1 and 2.1.2 respectively account for the theories of fictive motion and ICM's, mainly referring to Talmy (1996) and Lakoff (1987).

2.1.1. Fictive Motion

Fictive motion is fictively conceived motion in space. It is not concrete motion in the physical world, but is abstract motion that is ascribed to one's focus of attention shifting over a conceived scene. The first scholar to give attention to the phenomenon of fictive motion was Talmy (1983), but he used the term virtual motion to refer to the phenomenon. The earliest detailed work on fictive motion is Talmy (1989). The theory of fictive motion was further developed in Talmy (1996) (see below for the details). Langacker (1986, 1987, 1991a) also analyzed the phenomenon of fictive motion, using the terms abstract motion and subjective motion. Langacker (1998b) then used the term virtual motion. Following Fauconnier's (1997) analysis of fictive motion, Langacker (1998b) explained fictive motion from the perspective of conceptual blending. "Conceptual blending" (cf. Fauconnier and Turner 1996) is a general cognitive process that allows several connected but heterogeneous mental spaces to be maintained simultaneously within a single mental construction. "Mental spaces" (cf. Fauconneir 1985) are partial conceptual structures that proliferate when we think and talk, allowing a fine-grained partitioning of our discourse and knowledge structure. They are interconnected and can be modified as thought and discourse unfold. According to Fauconnier (1997) and Langacker (1998b), the conception of fictive motion results from the blending of two mental spaces, namely, space for the actual stationary scene and space for the virtual motion scene (which Faucounnier called "input 1" and "input 2" and Langacker named these the "actual plane" and the "virtual plane").

There are also works on particular subtypes of fictive motion expressions, as follows. Matsumoto (1996a, 1996b, 1996c, 1997a) conducted contrastive studies on English and Japanese expressions for advent path, coverage path and access path (the first two of which he calls subjective change and subjective motion). I (Takahashi 1998) examined semantic constraints on Thai ~~and Japanese~~ expressions for advent path and coverage path (which I call resultative fictive motion and potential fictive motion). Kunihiro (1985) discussed the cognitive basis for advent path and coverage path expressions in Japanese. Matsumoto (1998b) discussed some Japanese expressions of emanation. I (Takahashi, in press) investigated access path expressions in Thai. In

addition, Matsumoto (1997b) provided linguistic evidence for fictive motion of the coverage path subtype.

Since this study is based on Talmy's (1996) seminal work on fictive motion, I extensively review this below.

Talmy (1996: 212) states that in his study the term fictive is used to refer to the imaginary capacity of cognition. Although he does not explicitly give a definition of fiction motion, from this his statement we know that fictive motion is defined in terms of its relation to the imaginary capacity of cognition. Talmy (1996: 210) regards fictive motion as the product of two overlapping cognitive subsystems: language and visual perception. We observe the more palpable stationariness of an entity and concurrently sense the less palpable motion of the same entity. The two discrepant representations of the same scene, i.e. less palpable motion (fictive motion) vs. more palpable stationariness (actual stationariness), are alternative perspectives. This view substantially corresponds to Fauconnier and Langacker's treatment of fictive motion as the product of conceptual blending as stated above.

In Talmy's (1996: 246-248, 251) view, fictive motion is neither seen at the fully concrete level nor felt at the fully abstract level, but rather is sensed at the semiabstract level of the "palpability-related parameters," as follows. Fictive motion itself is intangible and nonmanifest, as well as vague or indefinite and relatively faint. It has little or no ostension, and no quality of direct visibility. It is of relatively low salience in consciousness or attention, seems less certain, and is difficult to act on. But we do experience it as present in association with other entities that are currently observed at the fully concrete level, and we often understand it as a structural or relational characteristic of the concrete entities seen. Its geometry is regularly topology-like and approximative.

What I think most important in Talmy's account of fictive motion above is the suggestion concerning restrictions on our experiences of fictive motion, that is, the experienced fictive motion is always associated with concrete entities and often understood as a relativistic (non-absolute) characteristic of the entities. Emphasizing the

speaker's or conceptualizer's motivation to imagine fictive motion, I interpret this suggestion as follows: Fictive motion is evoked in the mind when one holistically views concrete entities in the physical world as being situated related to each other in a global structure or network embodied by virtue of fictive motion.

I propose that the function of emanation is to create a conventional setting for the predication of entities around us by spatially connecting them to each other. Emanation expressions are linguistic realizations of such conventional cognitive impositions of emanation. Our motivation to use emanation expressions is the need to spatially and globally relate, by means of the fictive path of emanation, entities that otherwise are disconnected, and further to convey to others our experiences and ideas about relationships the entities hold. In other words, we use emanation expressions to share with others our experiences and ideas about implicit spatial relationships of entities. The imagined emanation is a crucial component of an idealized framework for describing entities which do not physically interact but are related in one's perception and conception.

There are six main categories of fictive motion classified by Talmy (1996): emanation, pattern path, frame-relative motion, advent path, access path, and coverage path. A description of each type is given below.

(5) The cliff wall faces toward the island. (emanation)

Emanation, as illustrated in (5), is one major class of fictive motion. An emanation is characterized as an intangible entity's moving from a source entity in relation to a reference entity. The fictively moving intangible entity may be light (photons), shadow, sound (sonic waves), smell (odorous particles), the conceptual equivalent of the focus of attention, or any other abstract conceptual essence of motion. In (5), the observer's focus of attention moves from the cliff wall toward the island.

(6) As I painted the ceiling, a line of paint spots slowly progressed across the floor

(pattern path).

Pattern path, as in (6), is a fictive motion of some pattern in which physical entities are arranged. In (6), each drop of paint actually moves vertically from the ceiling to the floor, whereas the linear pattern of paint spots already located on the floor fictively moves horizontally along the floor.

(7) I sat in the car and watched the scenery rush past us. (frame-relative motion)

Frame-relative motion, as in (7), involves fictive motion of a person's surroundings relative to that person. In (7), the person sitting in the car is represented as stationary and the scenery outside the car as moving relative to her/him from her/his perspective.

(8) The beam leans away from the wall. (advent path)

Advent path, as in (8), involves an object that fictively arrives or manifests at its site. In (8), the beam is described as having gradually leaned away from the wall although actually it remains stationary.

(9) The vacuum cleaner is down around behind the clothes hamper. (access path)

Access path, as in (9), is a fictive path along which some entity is imagined to follow to the point of encounter with a stationary object whose exact location is at issue. In (9), the location of the vacuum cleaner is characterized in terms of a path that is fictively followed by someone's arm extending.

(10) This fence goes from the plateau to the valley. (coverage path)

Coverage path, as in (10), involves a dimensionally extended object over which something is imagined to traverse, or which is imagined to enlarge its shape. In (10), the fence lying between the plateau to the valley is described as being followed by an observer or a conceptualizer's focus of attention or as advancing its own axis.

Talmy (1996: 216-217) states that these subtypes of fictive motion differ in the following features:

1. Factive motion of some elements {need not / must} be present for the fictive effect.
2. The fictively moving entity is itself {factive / fictive}.
3. The fictive effect is {observer-neutral / observer-based} and, if observer-based, the observer is {factive / fictive} and {moves / scans}.
4. What is conceived as fictively moving is {an entity / the observation of an entity}.

According to Talmy, the feature values for the emanation subtype are as follows:

1. Factive motion of some elements need not be present for the fictive effect.
2. The fictively moving entity is itself fictive.
3. The fictive effect is observer-neutral.
4. What is conceived as fictively moving is an entity.

Value 1 means that a tangible entity's actual motion is not necessarily involved in an emanation event (unlike pattern path and frame-relative motion). Value 2 means that the moving entity in an emanation event is an imagined intangible entity (unlike other subtypes of fictive motion). Value 3 means that the motion of an imagined intangible moving entity in an emanation event does not depend on a localized observer (unlike frame-relative motion). Value 4 means that an entity, but not the observation of it, is imagined to move in an emanation event (unlike frame-relative motion).

Talmy (1996: 216) defines emanation as the fictive motion of something intangible emerging from a source. Talmy (1996: 217-226) further classifies emanation into the following subtypes based on English emanation expressions.

1. *Orientation paths* are formed out of a continuous linear intangible entity that emerges from the front of some object and moves steadily away from it. The line is wholly imperceptible. The subtypes differ with respect to whether the front is a face-type or a point-type, whether the fictive motion of the intangible line is axial or lateral, etc.

1.1. *Prospective paths* are the orientation that an object with a face-type front has in relation to its surroundings. For example: The cliff wall faces {toward/ away from/ into/ past} the valley.

1.2. *Alignment paths* involve a stationary straight linear object with a point-type front, orientation of which is conceptualized in terms of something intangible that moves along the axis of the object, emerges from its front end, and continues straight along a path relative to some distant object. For example: The snake is lying {toward/ away from} the light.

1.3. *Demonstrative paths* involve a linear object with a point-type front from which an intangible line emerges, functioning to direct someone's attention, gaze, or physical motion along its path. For example: I pointed {toward/ away from/ into/ past} the town; The arrow on the signpost pointed {toward/ away from/ into/ past} the town; {pointed/ directed} him {toward/ past/ away from} the lobby.

1.4. *Target paths* are formed by an agent who intentionally sets the orientation of a front-bearing object so that a fictive line emerging from this front follows a desired path relative to the object's surroundings. For example: I {pointed/ aimed} {into/ past/ away from} the living room; I {pointed/ aimed} my {gun/ camera} {into/ past/ away from} the living room.

1.5. *Line of sight* is an intangible line that emerges from the visual apparatus (canonically located on the front of an animate or mechanical entity) and shifts in its orientation. The turning visual apparatus stays in the same location relative to the reference object, while the gaze follows the intangible line and shortens its distance from the referent object. For example: I slowly {turned (my camera)/ looked} toward the door; I slowly {turned (my camera)/ looked} around the room; I slowly {turned (my camera)/ looked} away from the window; I slowly {turned (my camera)/ looked} from the

painting, past the pillar, to the tapestry.

2. *Radiation paths* refer to radiation that emanates continuously from an energy source, moves steadily away from it, and impinges on an irradiated object. One can often detect the presence of the radiation (e.g. light radiation); nevertheless one cannot directly detect motion of that radiation. For example: The sun is shining into the cave; The sun is shining onto the back wall of the cave; The light is shining (from the sun) into the cave; The light is shining (from the sun) onto the back wall of the cave.

3. *Shadow paths* refer to a situation in which the shadow of an object visible on a surface has fictively moved from that object to that surface. For example: The tree threw its shadow down {into/ across} the valley; The pillar {cast/ projected} a shadow {onto/ against} the wall.

4. *Sensory paths* involve the conceptualization of the experiencer (of vision, audition, olfaction, and so on) and the experienced, and of something intangible that moves in a straight path between the two entities in one direction or the other. For example: I looked {into/ toward/ past/ away from} the valley; The enemy can see us from where they're positioned; We can be seen by the enemy from where they're positioned; We can be seen by the enemy from where we're standing; Even a casual passer-by can see the old wallpaper through the paint; The old wallpaper shows through the paint even to a casual passer-by.

Talmy (1996: 226-230) claims that there is a unifying cognitive basis underlying the distinct types of emanation. That is, in all the types of emanation events, the object taken to be active or determinative (in other words, cognitively less dependent) is conceptualized as the source of emanation. Talmy termed this the "active-determinative principle." This principle is based on the model of an individual's experience of "agency"(Talmy 1976: 85), namely the generation of an intention and the realization of that intention. If an agent intends to affect some distant object, she must either move to it with her whole body, reach to it with a body part, or cause some intermediary object to move to it. The determining event (the act of intention) takes place at the initial locus of the agent; the ensuing agentivity progresses through space to the distant object; and

finally, that object is affected (the accomplishment of intention). Talmy termed this pattern the "agent-distal object pattern." The active-determinative principle corresponds to the agent-distal object pattern in that the more active or determinative entity is the source from which fictive motion emanates through space until reaching the less active or determinative entity, the distant object. Thus, the perception of an agent's motion in the physical world is mapped onto the conceptualization of an emanation fictive motion.

2.1.2. Idealized Cognitive Models

Cognitive linguists presuppose the existence of idealized cognitive models (ICM's) in human mind. ICM's are mental structures of our knowledge of the world (Lakoff 1987: 68). They are a gestalt-like complex structure composed of a number of background knowledge structures (or frames) arising from our daily experiences in a certain society and culture. The theory of ICM's, thus, encompasses the social and cultural contexts under which we understand things. In short, ICM's are encyclopedic knowledge structures used for categorizing meanings and organizing the relationship among them. It is supposed that meanings and categories are always characterized with respect to ICM's. Meanings and categories never have values independent of our world knowledge. In cognitive linguistics it is assumed that linguistic structures are associated with ICM's and therefore linguistic structures should be explained making reference to underlying ICM's.

According to Lakoff (1987: 68, 113-114), each ICM may use the following four types of structuring principles:

a. Propositional structure (cf. Fillmore's (1982) Frame Semantics)
b. Image-schematic structure (cf. Langacker's (1987) Cognitive Grammar)
c. Metaphoric structure (cf. Lakoff and Johnson (1980))
d. Metonymic structure (cf. Lakoff and Johnson (1980))

Propositional models specify elements, their properties, and their interrelationships within conceptual space. Our knowledge is largely structured in the

form of a propositional model. What Langacker calls the billiard-ball model and the stage model are good illustrations of propositional models. Those models are used for understanding events occurring in the world. In a billiard-ball model, discrete objects move about and interact with others energetically through physical contact. In a stage model, distinct participants interact within an inclusive setting, and a viewer observes the event from a vantage point external to the setting (Langacker 1987: 283-284).

Image-schematic models specify schematic images with entities and the relations existing among them. They can spell out various kinds of conceptions by virtue of their graphic nature. An image schema has a gestalt structure in the sense that the parts make no sense without the whole, and it is topological in the sense that it can be expanded, shrunk, or deformed. Examples of image schemas include: the Container Schema, the Source-Path-Goal Schema, the Part-Whole Schema, the Link Schema, and the Center-Periphery Schema. These image-schemas are common structures that emerge from our constant bodily functioning. The Source-Path-Goal Schema, for example, comes from our bodily experience that every time we move anywhere there is a place we start from, a place we arrive at, a sequence of contiguous locations connecting the source and the goal, and a direction. The basic logic of this schema is that if you go from a source to a goal along a path, then you must pass through each intermediate point on the path; and that the further along the path you are, the more time has passed since starting (Lakoff 1987: 275).

Metaphoric models refer to mapping from a model in one domain to a corresponding structure in another domain. This model is typically used to understand less concrete experiences in terms of more concrete and more highly structured experiences. For example:

(11) a. You're wasting my time.

b. I will give you that idea.

In (11a), abstract 'time' is taken as a concrete thing, which wastes away. In (11b), abstract 'idea' is taken as a concrete thing, which is sent to someone.

Metonymic models are models containing stands-for relationships, in which one well-understood or easy-to-perceive aspect of something stands for the thing as a whole or for some other aspect or part of it. For example:

(12) a. The White House isn't saying anything.

b. I hate to read Shakespeare.

In (12a), 'the White House' is standing for the president who usually works inside it. In (12b), 'Shakespeare' is standing for literary works written by him.

In this study I will use all of these models to explain Thai speakers' conceptualizations of emanation events. Propositional models are involved in the categorization of emanation event types. Image-schematic models are involved in the characterization of configuration of emanation. Metaphoric models are involved in the analogy of intangible entities in emanation events to tangible entities in physical motion events. Metonymic models are involved in those emanation expressions like (13). ตา taa 'eye' in (13) metonymically represents an unnamed viewer's line of vision.

(13) ตา ทอด ไป สู่ ท้องฟ้า

taa thɔ̂ɔt pay sùu thɔ́ɔŋ fáa

eye stretch go get to sky

The eyes (gaze) stretched toward the sky.

2.2. Previous Studies on Motion Verbs and Emanation Events

This section is divided into two subsections. In Section 2.2.1 I review studies on Thai motion verbs used to express emanation, i.e., Rungkupan (1992), Teramoto (1992), โสภาวรรณ แสงไชย (2537) and ชัชวดี ศรลัมพ์ (2538). In Section 2.2.2 I review a study on Japanese emanation expressions, i.e., Matsumoto (1998b).

2.2.1. Studies on Motion Verbs in Thai

Rungkupan (1992), Teramoto (1992), โสภาวรรณ แสงไชย (2537) and ชัชาดี ศรลัมพ์ (2538) have analyzed Thai motion verbs to be used for expressing emanation, though in an indirect manner. I will in brief summarize their relevant findings below.

In her study of meanings of the subsidiary verbs ไป pay 'away from some reference point (to go)' and มา maa 'toward some reference point (to come),' Rungkupan (1992: 48, 60-70) explained that the moving entity of motion represented by these subsidiary verbs is incorporated in the preceding main verb's meaning when the main verb expresses: (a) direct bodily action (e.g. pointing, stepping); (b) communication act (e.g. talking, telephoning); or (c) vision (looking). For example:

(14)	น้ำค้าง	แก	บอก	มา	เดี๋ยวนี้	นะ
	námkháaŋ	kɛɛ	bɔ̀ɔk	maa	đĭaw níi	náʔ
	Namkhaang	PRONOUN	tell	come	right now	MODAL

Namkhaang, tell me right now.

The moving entity in (14) is not the subject argument's referent 'Namkhaang' (the addresee). We construe in this case that what moves toward the reference point (the speaker's position) is the message, which is inherent in the meaning of the main verb บอก bɔ̀ɔk 'tell' (Rungkupan 1992: 48).

Teramoto (1992: 53) also claimed, in her study of two-verb concatenations in Thai, that the directional verb ไป pay 'go' following the verb of vision เหลือบ lɯ̀ap 'glance' in (15) expresses an abstract motion, that is, the direction of viewer's attention.

(15)	ตา	ของ	ผม	เหลือบ	ไป	เห็น	ชาย	ทุ่ง	ไกล
	taa	khɔ̌ɔŋ	phǒm	lɯ̀ap	pay	hěn	chaay	thûŋ	klay
	eye	of	PRONOUN	glance	go	see	edge	field	far
	โน้น								
	nóon								
	yonder								

I cast a glance and saw the edge of paddy fields over there.

โสภาวรรณ แสงไชย (2537) analyzed the meanings of the subsidiary verbs ขึ้น khûn 'up (to ascend)' and ลง loŋ 'down (to descend)' and found that these verbs express an invisible upward/downward motion when preceded by a verb of vision, as in (16a), or a verb of communication, as in (16b). The moving entities imagined in (16a) and (16b) are the viewer's gaze and the message transmitted from the speaker to the hearer, respectively (โสภาวรรณ แสงไชย 2537: 32, 64-65, 77).

(16)	a.	ฉัน	มอง	ตาม	ขึ้น	ไป	ข้างบน
		chán	mɔɔŋ	taam	khûn	pay	khâaŋ bon
		PRONOUN	look	follow	ascend	go	above
		I looked upward following (something).					
	b.	เขา	ร้อง	ด่า	ลง		มา
		kháw	rɔ́ɔŋ	dàa	loŋ		maa
		PRONOUN	cry	abuse	descend		come
		ว่า...					
		wâa...					
		COMPLEMENTIZER					
		S/he loudly cried abuses at someone downstairs saying ...					

ชัชวดี ศรลัมพ์ (2538) examined conceptual and contextual meanings of the directional verb เข้า khâw 'enter.' Among this verb's contextual meanings is the invisible motion of sound waves, visual rays, and the smell of air, respectively, into our ears, eyes, and nose, which gives rise to our perception of them (ชัชวดี ศรลัมพ์ 2538: 53-54, 93, 97-98). Furthermore, she explained that the verb เข้า khâw 'enter' in (16) implies an imagined enclosed space in front of a desk. What enters the space is not the observer herself. As she turns the face to the desk, her gaze enters the space (ชัชวดี ศรลัมพ์ 2538: 105).

(17)	หัน	เข้า	หา	โต๊ะ
	hăn	khâw	hăa	tó?
	turn	enter	seek	desk

(S/he) turned to the desk.

2.2.2. Studies on Emanation Events in Japanese

Some Japanese expressions of emanation were analyzed by Matsumoto (1998b). He explained that the post-positioned motion verbs in V-V lexical compounds in Japanese, such as *-ageru* 'raise' in *mi-ageru* 'look-raise' (meaning 'look up') and *-wataru* 'cross' in *nari-wataru* 'ring-cross' (meaning 'resound'), represent emanation (ibid: 59-66). He commented that the second verb *-wataru* 'cross' describes the aurally sensed pervasion of sounds, but not the pervasion of the acts generating sounds which are directly denoted by the first verb *nari-* 'ring' (ibid: 60-61).

2.3. Summary

In this chapter I presented the theoretical frameworks of this study. I first introduced the theory of fictive motion and then outlined the theory of idealized cognitive models (ICM's). I will employ these for analyzing Thai emanation events in a later chapter. These frameworks will enable me to show how emanation expressions reflect our conventional conceptualizations. I also looked at related studies on motion verbs and emanation events. I will explore Thai emanation expressions expanding on the cognitive accounts given in these previous studies.

Chapter 3

The Semantics of Emanation Event

The purpose of this chapter is to identify all semantic types of emanation events which are linguistically coded in Thai and discuss differences among them. This chapter consists of two main sections. Section 3.1 presents various semantic types of Thai emanation events and Section 3.2 compares specific semantic types.

First of all, I should clarify how an emanation expression is identified. I posit the following two criteria for the identification of an emanation expression. If an expression meets both of these criteria, I consider it an emanation expression.

(a) The expression in question must have a lexical element referring to motion (i.e. a motion verb and a locative preposition implying motion) so that it, in effect, represents an emanation event (i.e. something intangible moves away from a source entity relative to a reference entity).

(b) In spite of the presence of a word expressing motion, the scene described by the expression as a whole must be actually stationary, as illustrated in (18), or at the very least, the motion word must not indicate the actual change of location of the focal figure in the scene (the subject's referent) but must however indicate fictive motion of some intangible entity, as in (19).

(18) a.

ตา	ทอด	ไป	สู่	ท้องฟ้า
taa	thɔ̂ɔt	pay	sùu	thɔ́ɔŋ fáa
eye	stretch	go	get to	sky

The eyes (gaze) stretched toward the sky.

b.

ตัว	ตึก	หัน	หน้า	เข้า	หา	ทะเล
tua	tùk	hăn	nâa	khâw	hăa	thalee
body	building	turn	face	enter	seek	sea

The building faces toward the sea.

(19) a.

หล่อน	ชี้	มือ	ไป	ยัง	ดอกไม้
lɔ̀ɔn	chíi	mɯɯ	pay	yaŋ	dɔ̀ɔk máy
PRONOUN	point	hand	go	toward	flower

She pointed to the flower.

b.	เขา	นั่ง	หัน	หน้า	เข้า	หา	ตู้
	kháw	nâŋ	hăn	nâa	khâw	hăa	tûu
	PRONOUN	sit	turn	face	enter	seek	cabinet

S/he sat facing the cabinet.

3.1. Semantic Types of Thai Emanation Event

This section is divided into two subsections. Section 3.1.1 describes basic semantic types of Thai emanation events, namely thematic and agentive types. Section 3.1.3 discusses specific semantic types of Thai emanation events, namely perception, radiation, shadow, and orientation types. The perception type consists of visual, auditory, olfactory, and tactile subtypes. Before describing my categorization of Thai emanation events in the following sections, however, I first introduce the theoretical concepts that are relevant to the categorization: the "canonical event model," "action chains," "role archetypes," "scope of predication" and "imagery."

To explain the structure of Thai emanation events, I will employ the "canonical event model" formulated by Langacker (1991a: 210-211; 1991b: 285-286). It represents the normal observation of a canonical event profiled by a prototypical transitive clause. A canonical event emerges in the form of an "action chain" originating with a canonical agent (volitional energy source) and terminating with a canonical patient (energy sink).

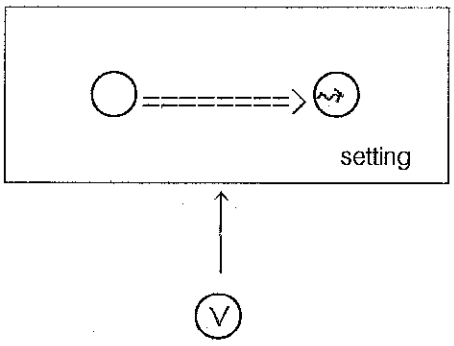


Figure 1: Canonical Event Model

(adapted from Figure 1 in Langacker (1991a: 211))

Figure 1 graphically represents the canonical event model, which comprises: (a) the participants (at least an agent and a patient) and their interaction (transmission of energy from an agent to a patient); (b) the setting within which the process unfolds; and, (c) the viewer of the process. The double arrow indicates the transmission of energy. Two main participants, namely an agent and a patient, are at the upstream and downstream ends of the energy flow, respectively. There may be an instrument manipulated by the agent to affect the patient (intermediary in transmitting energy). The squiggly arrow in the patient circle indicates the patient's resulting change of state. The rectangle stands for the setting in which the two participants interact. The circle V stands for a viewer who observes the event from a vantage point external to the setting.

The canonical event model is a synthesis of propositional and image-schematic models. Two basic propositional models constitute the canonical event model, i.e., the billiard model and the stage model, which I have explained in Section 2.1.2. In accordance with the billiard model, the canonical event consists of discrete participants interacting energetically through physical contact. The stage model contributes the notion of a viewer observing the event from a vantage point external to its setting.

An event must entail one or more than one participant. Langacker (1991a: 210) argues that six semantic roles of participants in an event are sufficiently fundamental and cognitively salient enough to be considered archetypal, as listed below. He calls those semantic roles "role archetypes."

(a) Agent: a person who volitionally initiates physical activity resulting, through physical contact, in the transmission of energy to an external entity

(b) Patient: an inanimate entity that absorbs the energy transmitted by externally initiated physical contact and thereby undergoes an internal change of state

(c) Instrument: a physical entity that is manipulated by an agent to affect a patient. It serves as an intermediary in the transmission of energy

(d) Experiencer: a person who is engaged in mental (intellectual, perceptual, emotive) activity

(e) Mover: an entity that undergoes a change of location with respect to its surroundings

(f) Absolute: an non-energetic entity whose role in a process is viewed in isolation from the flow of energy

Among these, the agent and the patient are the maximally opposite role archetypes in the sense that the former is at the head of the profiled action chain (the energy source) while the latter is at the tail (the energy sink). Additionally, the semantic role of an entity that merely occupies a location or exhibits a static property is termed 'zero' (to be precise, 'zero-absolute').

Langacker (1991a: 210, 213; 1991b: 285) notes that there are deviations from these archetypes (e.g. nonhuman animate agent) and certain hybrid roles (e.g. agent-mover (subject of 'jump'), experiencer-patient (object of 'injure'), absolute-patient (subject of 'melt'), absolute-mover (subject of 'sail')), and that the entities construed as participants in an event are not necessarily concrete, "basic level" objects such as human, hammer and glass (e.g. 'Floyd's hammer-blow broke the glass'). The "basic level" is a level of special cognitive significance at which we tend to operate unless there is some reason to resort to either a more specific or a more schematic notion (cf. Rosch et al. 1976).

Figure 2 represents typical connections among the role archetypes.

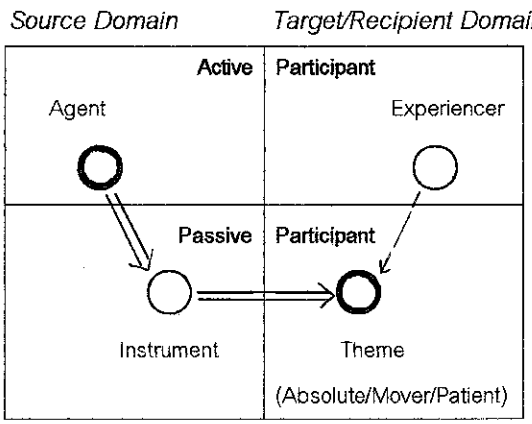


Figure 2: Relationships among Role Archetypes
(adapted from Figure 7.5 in Langacker (1991b: 327))

The sequence 'Agent --> Instrument --> Theme (patient, mover)' constitutes a canonical action chain that results in some internal or external change of the theme. The sequence 'Experiencer --> Theme (absolute-zero)' corresponds to a perceptual or conceptual relationship in which the experiencer establishes mental contact with the theme. Agent and Theme are depicted with heavy lines to suggest their inherent cognitive salience (the polar opposites), which make them the unmarked choices to be coded as focal participants related to each other (subject and direct object). Note that the thematic participants (i.e. experiencer, patient, mover, absolute-zero) are within the target or recipient domain in terms of energy transmission. They, except absolute-zero as a limiting case, undergo a certain kind of resulting change (i.e. an experiencer undergoes internal mental change; a patient undergoes internal physical change; a mover undergoes external physical change). The generalized notion "theme" is neutral as to whether the change is internal or external, and whether it occurs in physical or mental space.

Role archetypes are arranged in two hierarchies with respect to cognitive salient parameters of two kinds: (a) energy flow hierarchy (source domain > target or recipient domain) which is defined by the flow of energy along an action chain: Agent > Instrument > Patient/ Mover/ Experiencer (Theme); (b) initiative hierarchy (active participant > passive participant) which reflects the capacity of a participant to function as an original source of energy and thereby initiate contact with other entities: Agent > Experiencer > Other.

In the conception of an event or an action, however, the action chain connecting the agent and the patient (through the instrument) can be profiled either entirely or partially, as respectively illustrated in (20a) and (20b-c).

(20) a. Floyd broke the glass (with the hummer).

b. The hummer easily broke the glass.

c. The glass easily broke.

In (20a), 'broke' profiles the entire action chain. That is, the energy is transmitted from the agent (Floyd) to the patient (glass). On the other hand, 'broke' in (20b) and

(20c) profiles only a part of the action chain. In (20b), 'broke' profiles the part beginning with the instrument (hummer) and ending up with the patient (glass). In (20c), 'broke' profiles only the patient (glass)'s change of state. Thus, (20a) to (20c) differ in "the scope of predication," which is one important dimension of "imagery." Imagery is defined as our capacity to structure the content of a scene in a particular way for the purpose of linguistic expression (Langacker 1987: 39; 1991a: 5-12; 1991b: 5-12).

Langacker claims that the full conceptual or semantic value of a conceived situation is a function of not only its content but also how we structure this content. The same objective situation can be described by more than one expression, because we have the capacity to construe a situation and organize it by means of alternative images, e.g., emphasizing certain facets of it at the expense of others, viewing it from a certain perspective, construing it in terms of a certain metaphor, and so forth. He calls this human capacity imagery. (21) serves an example.

(21) a. McMurtry climbed the mountain.

b. McMurtry climbed up the mountain.

(21a) is transitive (taking the direct object 'the mountain') and highlights the climber's taking over the mountain. By contrast, (21b) is intransitive (including the prepositional phrase 'up the mountain') and highlights the climber's traveling to the top of the mountain. The mountain is virtually affected by the climber in (21a) while it is taken as the reference entity for designating the climbing route in (21b).

Another example is our mental contact with something (e.g. to see, to want, to love, to fear, to understand), a fundamental conception grounded in our mental life. English speakers use transitive clauses to express mental contact (e.g. 'I see it') presumably because they take their attention to a particular object as analogous to some energy flow from them to that object, or they evoke a more specific metaphor such as SEEING IS TOUCHING. But speakers of other languages may conceptualize some abstract entity (equivalent to their attention) spontaneously moving along a spatial path and reaching a particular object, and so they use intransitive clauses to express this

conceptualization. Since the choice of images is a matter of linguistic convention, semantic structure is language-specific to a considerable degree.

3.1.1. Basic Semantic Types

The analysis of my data of Thai emanation expressions shows that a Thai emanation event ICM may include two or three role archetypes as its participants. According to the number of role archetypes that participate in the emanation event ICM, Thai emanation events can be categorized into two basic semantic types:

1. thematic type involving two role archetypes (i.e. mover and absolute)
2. agentive type involving three role archetypes (i.e. mover, absolute and agent)

Thus, the two types differ in the scope of predication. The thematic type includes, while the agentive type excludes, an agent. A mover moves of its own accord in a thematic emanation event, while it is moved by the instigation of an agent in an agentive emanation event. In other words, the agentive type involves, while thematic type does not involve, some force-dynamic interaction between a mover and an agent.

Below I describe the thematic and agentive types of Thai emanation events.

3.1.1.1. Thematic Emanation Event

In a thematic emanation event, a mover emanates from one absolute and moves in relation to another absolute, as illustrated in (22). A mover by itself, without any external force, moves with respect to absolute(s).

(22) a.

สายตา	ไป	หยุด	ที่	เขา
săay taa	**pay**	**yùt**	**thîi**	**kháw**
line of vision	go	stop	at	PRONOUN

(Her) line of vision went and stopped at him.

b.

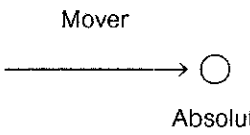
เสียง	ต่างๆ	ดัง	มา	กระทบ หู
sĭaŋ	**tàaŋ tàaŋ**	**daŋ**	**maa**	**krathóphŭu**
sound	various	loud	come	hit ear

Various loud sounds came and struck the ears.

c. กลิ่น โชย มา
klîn chooy maa
odor blow gently come
An odor came blowing gently.

d. แสง ไฟ กระจาย ลง สู่ สระ
sěɛŋ fay kracaay loŋ sùu sà?
light lamp spread descend get to pool
The lamp's light spread down toward the pool.

e. เงา ไม้ ทอด ทาบ พื้น น้ำ
ŋaw máy thɔ̂ɔt thâap phúunnám
shadow tree extend cover surface water
The tree's shadow extended and covered the surface of the water.



There are two semantic roles included in the thematic emanation event ICM:

1. A mover that undergoes a change of position relative to an absolute.
2. A absolute that serves as a reference point with respect to which a mover moves.

A mover spontaneously moves in relation to an absolute in a thematic emanation event. Thematic emanation events normally include an absolute as a reference point. An absolute may be located at the source, or the goal, or some intermediate point of an emanation path along which a mover proceeds.

3.1.1.2. Agentive Emanation Event

In an agentive emanation event, an agent moves a mover with respect to an absolute, as illustrated in (23).

(23) a. ทับทิม ถอน สายตา จาก นาย เจิม
thápthim thɔ̌ɔn săay taa càak naay cəəm
Thapthim withdraw line of vision from Mr. Cerm
Thapthim pulled her line of vision away from Mr. Cerm.

(Thapthim stopped looking at Mr. Cerm.)

b. เขา สะบัด เสียง ใส่ หล่อน
kháw sabàt sĭaŋ sày lɔ̀ɔn
PRONOUN whip sound put in PRONOUN

He roared at her.

c. ดอกไม้ กำจาย กลิ่น หอม
dɔ̀ɔk máy kamcaay klîn hɔ̌ɔm
flower spread odor fragrant

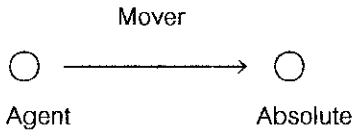
The flower spread a fragrant odor.

d. ไฟ ส่อง แสง ตรง ลง มา
fay sɔ̀ɔŋ sɛ̌ɛŋ troŋ loŋ maa
lamp shine light go straight descend come

The lamp shed light straight downward.

e. ต้นไม้ ทอด เงา ลง บน พื้น
tôn máy thɔ̂ɔt ŋaw loŋ bon phúum
tree stretch shadow descend on surface
น้ำ
nám
water

The tree stretched its shadow on the surface of the water.



There are three semantic roles included in agentive emanation event ICM:

1. An agent that moves a mover.

2. A mover that is moved by an agent and undergoes a change of position relative to an absolute.

3. An absolute that serves as a reference point with respect to which a mover moves.

A mover is moved by an agent in an agentive emanation event. Some agentive emanation events, however, may not include any absolute, that is, the path of emanation may not be specified.

Note that a mover is the most central participant in an emanation event whether the event is of the thematic type or of the agentive type. This is the obligatory participant of emanation event ICM. That is, in all emanation events the presence of a mover is presupposed. Even though in some emanation expressions (e.g. เขามองไปยังดอกไม้ **kháw mɔɔŋ pay yaŋ dɔ̀ɔk máay** 'S/he looked toward the flower') a nominal mover may be unnamed, the direction of its motion must be represented by a motion verb or a preposition.

What fundamentally distinguishes the two types is their difference in degree of conceptual complexity. Conceptually, the thematic expression is less complex and the agentive type is more complex. In this regard, Langacker (1991a: 245; 1991b: 286-291) states that a thematic participant and the change it undergoes or the state it exhibits provide the minimum semantic content required for a processual predication, and thus constitute its irreducible conceptual core. This means that a thematic participant's change or state (i.e. thematic relationship) has conceptual autonomy, functioning as the bottom layer of the organization of a more complex event conception. This opinion is relevant to Talmy's (1976, 1988) argument that non-agentive expressions are more basic than expressions containing an agent since the inclusion of an agent in an expression involves an additional semantic complex.

3.1.2. Specific Semantic Types

In this section I discuss a variety of specific semantic types of Thai emanation events. Thai emanation events can be categorized into four types according to the kinds of imagined mover: perception, radiation, shadow and orientation types. The list below indicates the kinds of an intangible mover and tangible entities associated with events that together participate in an emanation event of each specific type.

1. Perception emanation events are categorized into four further subtypes:
   1.1. Visual emanation events
   Mover: a line of vision
   Associated entities: a visual perceiver, a seen entity, and other reference entities

1.2. Auditory emanation events

Mover: a sound

Associated entities: an aural perceiver, a sound producer, and other reference entities

1.3. Olfactory emanation events

Mover: an odor

Associated entities: an olfactory perceiver, an odor producer, and other reference entities

1.4. Tactile emanation events

Mover: an air in motion

Associated entities: a tactile perceiver and other reference entities

2. Radiation emanation events

Mover: a light

Associated entities: an illuminated entity, a light radiator or reflector, and other reference entities

3. Shadow emanation events

Mover: a shadow

Associated entities: a shaded entity and a shadow producer

4. Orientation emanation events

Mover: the focus of an observer's attention

Associated entities: an orientated entity and a reference entity

These specific types of emanation events, except for the orientation type, may be either thematic or agentive. In other words, they may or may not include an agent that moves a mover. However, there are no tactile emanation expressions of the agentive type in my data. It is probably because Thai speakers usually take no notice of the producer of a stream of air (agent in tactile emanation event) and so agentive tactile emanations are scarcely expressed. There are no orientation emanation events of the agentive type (for the details, see the discussion in Section 3.1.3.4).

Below I describe each of the above specific semantic types of Thai emanation events. In each section, I first give a definition of that type of emanation event and show

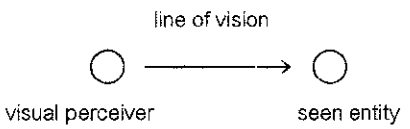
examples of linguistic realizations of it which are derived from my data. Then I identify the mover and list up possibly associated entities. The nature of the mover is also discussed.

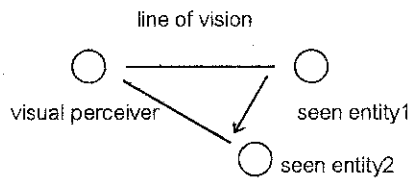
3.1.2.1. Perception Emanation Event

The first specific type of emanation events is perception emanation events, which consist of four subtypes: visual, auditory, olfactory, and tactile emanation events.

3.1.2.1.1. Visual Emanation Event

A "visual emanation event" is defined as an imagined event in which an intangible straight line of vision emanates from a visual perceiver's eyes and the head of the line moves relative to a seen entity. As the head of a line of vision changes its position, the length and orientation of the line as a whole also changes. Therefore, I take a moving line of vision as a whole, rather than as its head alone, as a mover in a visual emanation event. It should be noted that a line of vision is imagined to move both axially and laterally. That is, it first extends from a visual perceiver's eyes to a seen entity (axial visual emanation), as in (24a), and then its head may further move over that seen entity or away from it toward another entity (lateral visual emanation), as in (24b) to (24d).





Axial visual emanation (extending ahead)

Lateral visual emanation (changing the direction)

(24)	a.	เขา	เอน	ตัว	พิง	พนัก
		kháw	ʔeen	tua	phiŋ	phanák
		PRONOUN	recline	body	lean against	backrest

ตา	มอง	ไป	สู่	ฟาก	ฟ้า	สี	มืด
taa	mɔɔŋ	pay	sùu	fâak	fáa	sǐi	mûut
eye	look	go	get to	side	sky	color	dark

S/he reclined against the backrest and her/his eyes looked (stretched) toward the dark sky.

b.

สายตา	ตวัด	ไป	ทาง	กำแพง	ฝั่ง
săay taa	tawàt	pay	thaaŋ	kamphɛɛŋ	fàŋ
line of vision	whip	go	way	wall	bank

ตรงกันข้าม
troŋ kan khâam
opposite

(Her/His) line of vision moved to the wall on the opposite bank.

c.

ผม	กวาด	สายตา	ดู	แต่ละ	คน	จน
phŏm	kwàat	săay taa	duu	tèɛ lá?	khon	con
PRONOUN	sweep	line of vision	see	every	person	until

ทั่ว
thûa
throughout

I directed my line of vision around to see every person throughout.

(I looked around to see every person.)

d.

อุบล	ละ	สายตา	จาก	เขา
?ubon	lá?	săay taa	càak	kháw
Ubon	abandon	line of vision	leave	PRONOUN

Ubon moved her line of vision from him. (Udon stopped looking at him.)

In a thematic visual emanation event, as (24a) and (24b), a line of vision emanates from a visual perceiver's eyes and proceeds along a linear path toward a seen entity and furthermore its head may shift in direction. In an agentive visual emanation event, as in (24c) and (24d), a visual perceiver extends the line of vision out of the eyes and controls the line moving in relation to a seen entity.

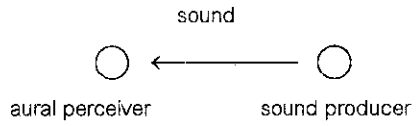
The mover in a visual emanation event is the line of vision. Other entities are also possibly involved in a visual emanation event: (1) the visual perceiver, (2) the eyes, (3)

the seen entity, and (4) other entities that function as reference entities with respect to which a line of vision moves (e.g. eyeglasses, a glass wall, a window, a lattice fence, and darkness, through which a line of vision passes; a desk, a fence, a pool, a river, a field, and someone's head or shoulder, over which it passes; and so on).

A line of vision is an imaginary mover. Thai speakers use the compound noun สายตา săay taa 'string + eye' for referring to a line of vision. My data include another compound noun for representing the concept of a line of vision, namely กระแสตา krasɛ̆ɛ taa 'current + eye.' But Thai speakers do not commonly utter this compound noun. It is likely that they conceptualize the configuration of a line of vision as solid (beam-like) rather than liquid/gaseous (current-like).

3.1.2.1.2. Auditory Emanation Event

An "auditory emanation event" is defined as an imagined event in which a sound emanates from a sound producer and moves in relation to an aural perceiver.



(25) a.

เพลง	ฝรั่ง		จาก	แผ่นเสียง	ล่องลอย	มา
phleeŋ	faràŋ		càak	phèɛn sĭaŋ	lɔ̂ŋ lɔ̄ɔy	maa
music	Western		leave	record	float	come
จน	ถึง	สนาม				
con	thŭŋ	sanăam				
until	reach	field				

Western music from a record floated to the field.

b.

คำ	ที่		ไม่	สุภาพ	หลุด
kham	thîi		mây	sùphâap	lùt
word	RELATIVE PRONOUN		NEGATIVE	polite	slip off
ออก	ไป				
ʔɔ̀ɔk	pay				

exit go

An impolite word slipped (out of one's mouth).

c. ทุก คำ ผ่าน หู ไป เหมือน สายลม

thúk kham phàan hŭu pay mŭan săay lom

every word pass ear go like wind

Every word passed through her/his ears away like the wind.

(The person did not listen to the words.)

d. เรา สอง คน ส่ง เสียง ทักทาย

raw sɔ̌ɔŋ khon sòŋ sĭaŋ thákthaay

PRONOUN two CLASSIFIER send sound greet

จาก ข้างๆ อ่างเลี้ยงปลา ใบ ใหญ่

càak khâŋ khâŋ ʔàaŋ líaŋ plaa bay yày

leave side fish farming pool CLASSIFIER big

We two sent greetings from the side of pool of the big fish farm.

e. สามี ตวัด เสียง ใส่ ภรรยา

săamii tawàt sĭaŋ sày phanrayaa

husband whip sound put in wife

The husband roared at his wife.

In a thematic auditory emanation event, as in (25a) to (25c), a sound emits from a sound producer and moves in relation to an aural perceiver. In an agentive auditory emanation event, as in (25d) and (25e), a sound producer emits a sound and the sound moves in relation to an aural perceiver; or, a message sender produces a message and the message moves (from/through the mouth or the lips of the message sender) to (the ear or the auditory nerves of) a message receiver. Communication emanation events are a major subtype of auditory emanation events. A moving entity in a communication emanation event is a verbal message (i.e. a piece of spoken information) which is a particular kind of sound, that is, a meaningful sound.

The mover in an auditory emanation event is a sound (including a message). There are other entities possibly involved in auditory emanation events: (1) the sound producer (including message sender), (2) the mouth and lips, (3) the aural perceiver (including message receiver), (4) the ears and auditory nerves, and (5) other reference

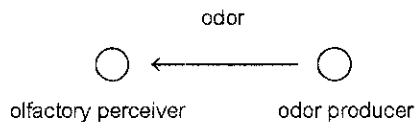
entities (e.g. an enclosed place (like a room) from which or to which a sound travels; a way (like an intercom) or an opening (like a door) through which it travels; a space (like a field) in which it disperses; a stream of wind along which it travels; and so on).

Though a sound is an intangible mover, we experience the presence of intangible sound waves by virtue of the organ of hearing (i.e. ears and auditory nerves). Unlike the mover in visual emanation events (i.e. a line of vision proceeding straight to a seen entity), the mover in auditory emanation events (i.e. a sound) may proceed along a linear path or diffuse in all directions. It depends on whether the destination of the auditory emanation in question is specific or not. For example, usually a bark of a dog in a house is conceived to advance toward some target, whereas a song of a bird in a forest is conceived to spread all around without any target. A verbal message (i.e. a meaningful sound) largely arrives at a message perceiver. However, it is possible that a message sender has little intention to convey a message to a message receiver, such as just muttering to herself or letting her tongue slip, so that the message does not reach any specific destination.

While a visual perceiver is an agent who controls the motion of a line of vision, an aural perceiver is not an agent who controls the motion of a sound. Since a line of vision emanates from a visual perceiver, a visual perceiver is always located at the definite starting point of a visual emanation. On the other hand, an aural perceiver is located at a mere prospective endpoint of an auditory emanation.

3.1.2.1.3. Olfactory Emanation Event

An "olfactory emanation event" is defined as an imagined event in which an odor emanates from an odor producer and moves relative to an olfactory perceiver.



(26)	a.	กลิ่น	แผ่	กระจาย	ไป	รอบ	บ้าน
		klìn	phèɛ	kracaay	pay	rɔ̂ɔp	bâan

odor spread out spread go around house

The odor spread out around the house.

b. กลิ่น ลอย ตาม ลม มา กระทบ จมูก

klîn lɔɔy taam lom maa krathóp camùuk

odor float follow wind come hit nose

An odor came along in the wind and struck the nose.

c. เตา ย่าง เนื้อ ส่ง กลิ่น กำจาย

taw yâaŋ núa sòŋ klîn kamcaay

oven roast meat send odor spread

The oven sent an odor about.

d. ดอกไม้ ส่ง กลิ่น หอม เย็น กระจาย ไป ทั่ว บริเวณ

dɔ̀ɔk máy sòŋ klîn hɔ̌ɔm yen kracaay pay thûa bɔɔriween

flower send odor fragrant cool spread go all over region

The flower sent a cool fragrance diffused all over the region.

In a thematic olfactory emanation event, as in (26a) and (26b), an odor emits from an odor producer and moves with respect to an olfactory perceiver. In an agentive olfactory emanation event, as in (26c) and (26d), an odor producer emits an odor and the odor moves with respect to an olfactory perceiver.

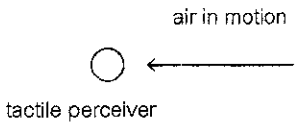
The mover in an olfactory emanation event is an odor. Other entities that are possibly involved in olfactory emanation events are: (1) the odor producer, (2) the olfactory perceiver, (3) the nose and olfactory nerves, and (4) other reference entities (e.g. a space like a room where an odor producer is located and an odor diffuses about; a breeze along which an odor flows). Compared with visual and auditory emanations, the kinds of reference entities for olfactory emanations are limited to quite a small number. Intermediate points (except the medium such as an air stream) and endpoints (other than olfactory perceivers) are hardly referred to in olfactory emanation expressions, probably because it is difficult for us to identify the accurate route of an olfactory emanation.

An odor is an intangible mover, but we become aware of its presence because of our olfactory perception by means of the organ of smell (i.e. nose and olfactory nerves). English has a number of nouns denoting abstract entities sensed by the organ of smell, such as aroma, fragrance, scent, stench, smell, and odor. Out of these nouns, 'smell' seems to be most frequently used in daily life, but sometimes it has a biased connotation, namely a horrid one. Therefore, in my study I employ the most neutral word 'odor' as the term for representing an entity raising the sense of smell. The Thai counterpart กลิ่น klìn 'odor, smell' also sometimes connotes a bad odor, but it can be modified by หอม hɔ̌ɔm 'fragrant, scented, aromatic,' เหม็น měn 'give off a bad odor, smell,' ฉุน chǔn 'acrid,' and other words for odor quality.

The description of configurations of olfactory emanations is less various than that of visual and auditory emanations. This presumably reflects difference in the degree of conceptualized solidness between the former and the latter: we conceptualize emanations of odors as being less solid (more diffuse) than emanations of lines of vision or sounds. Such different degrees of conceptualized solidness of emanations bear on the different degrees of the intention of agents to direct the emanations to certain destinations. Generally, the agents of olfactory emanations have a lower degree of intention to emit movers than the agents of visual and auditory emanations. That is, an odor producer normally does not have any intention to send the product --- an odor --- to a particular target.

3.1.2.1.4. Tactile Emanation Event

A "tactile emanation event" is defined as an imagined event in which a current of air occurs and moves with respect to a tactile perceiver. Usually a tactile emanation event does not encompass an agent (producer of air in motion), that is, it is thematic, as in (27). Agentive tactile emanation expressions are not included in my data. Thai speakers normally do not speak of a particular agent of a tactile emanation.



(27) a.

ลม	เย็น	ผ่าน	เข้า	มา	ใน	รถ
lom	yen	phàan	khâw	maa	nay	rót
wind	cool	pass	enter	come	in	car

A cool wind came into the car.

b.

ลม	หนาว	พุ่ง	ปะทะ	ใบหน้า	และ	ลำแขน
lom	nǎaw	phûŋ	pathá?	bay nâa	lé?	lam khɛ̌ɛn
wind	cold	dart	crash	face	and	arm

A cold wind blasted into the face and arms.

The mover in a tactile emanation event is air in motion. There are other entities possibly involved in a tactile emanation event: (1) the tactile perceiver and (2) other reference entities (e.g. a discrete space (like a car, a room) to which a stream of air proceeds; a surface (like the surface of the water) over which it passes; an opening (like a door, a window) through which it passes; and so forth).

Air in motion is an intangible mover. Although air in motion itself is intangible, its effects are sensible tactilly and/or visually and/or aurally: we become aware of the presence of air when we are exposed to it and sense its pressure, temperature and humidity, and/or when we see something moving as a result of being hit by it, and/or when we hear a noise from something moving as a result of being hit by it. But I take only tactilly sensed cool or hot air in motion as tactile emanation.

Since a current of air serves as the medium of transmission of a sound or an odor, some tactile emanation expressions conflate auditory or olfactory emanation with tactile emanation. (28) is an example of an olfactory-tactile emanation expression.

(28)

ลม	เย็น	มา	วูบหนึ่ง	หวน	เอา	กลิ่น	หอม
lom	yen	maa	wûup nùŋ	hǔan	ʔaw	klîn	hɔ̌ɔm
air in motion	cool	come	suddenly	return	take	smell	fragrant

มา	แตะ	ประสาท	รับ	กลิ่น
maa	tɛ̀ʔ	prasàat	ráp	klîn
come	touch	nerve	receive	smell

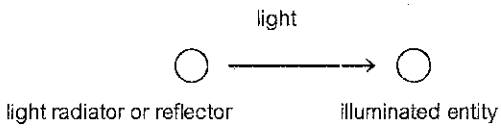
A cool current of air suddenly came bringing a sweet smell which struck the

olfactory nerves (stimulated the sensation of smell).

The English language categorizes air in motion into at least three classes according to its source: (a) one originating from natural forces (wind, breezes, blasts, gusts, drafts, whirlwinds, etc.); (b) one originating from artificial processes such as the working of an electric fan (current); (c) one originating from breathing (breath). But the Thai language has only one noun for the concept of air in motion, namely ลม lom 'air in motion,' which can be modified variously (e.g. ลมอ่อน lom ʔɔ̀ɔn 'breeze,' ลมมรสุม lom mɔɔrasŭm 'monsoon,' ลมงวง lom ŋuaŋ 'tornado,' ลมหวน lom hŭan 'whirlwind' ลมหายใจ lom hăay cay 'breath,' etc.). However, the nouns ไอ ʔay 'vapor' and คลื่น khlûun 'wave' can also be used to represent air in motion (e.g. ไอพ่น ʔay phôn 'vapor (=air in motion) + exhole; jet,' คลื่นความร้อน khlûun khwaam rɔ́ɔn 'wave (= air in motion) + heat; hot air'). In addition, though the flow of air is an indiscrete part of the atmosphere, sometimes it is described as being linear, either less solid current-like (กระแสลม krasɛ̆ɛ lom 'current of air') or more solid string-like (สายลม săay lom 'string of air').

3.1.2.2. Radiation Emanation Event

Radiation emanation events are the second specific type of Thai emanation events. A "radiation emanation event" is defined as an imagined event in which a light emerges from a light radiator, or reflects from a light reflector, and moves away from it to an illuminated entity.



(29) a.

แสง	สลัวราง	สาด	ผ่าน	กระจก	ฝ้า	เข้า	มา
sɛ̆ɛŋ	salŭa raaŋ	sàat	phàan	kracòk	fâa	khâw	maa
light	dim	splash	pass	glass	frosted	enter	come

A dim light came in through the frosted glass.

b.

ลำ	แสง	เล็กๆ	พุ่ง	ลง	จับ	ที่	นาฬิกา
lam	sɛ̆ɛŋ	lék lék	phûŋ	loŋ	càp	thîi	naalikaa

beam	light	small	dart	descend	hold	at	clock

A little beam of light hurled down and rested on the clock.

c.

องค์พระ	เปล่ง	รัศมี	ออก	มา	รอบ	กาย
ʔɔŋ phráʔ	plèŋ	rátsàmĭi	ʔɔ̀ɔk	maa	rɔ̂ɔp	kaay
Buddha image	emit	light	exit	come	around	body

The Buddha image emitted rays of light around its body.

d.

ดวงตะวัน	ทอ	แสง	สี	ทอง	ลง	บน
duaŋ tawan	thɔɔ	sěɛŋ	sĭi	thɔɔŋ	loŋ	bon
sun	weave	light	color	gold	descend	on

พื้น น้ำ	สี	เนื้อ	ใส	จาง	
phúumnám	sĭi	nɯ́a	sǎy	caaŋ	
surface water	color	substance	transparent	pale	

The sun shed golden light on the surface of the clear water.

In a thematic radiation emanation event, as in (29a) and (29b), light moves away from a light radiator or reflector to an illuminated entity. In an agentive radiation emanation event, as in (29c) and (29d), a light radiator or reflector sheds light upon an illuminated entity.

The mover in a radiation emanation event is light. Radiation emanation events may involve other entities: (1) the light radiator or reflector, (2) the illuminated entity, and (3) other reference entities (e.g. a glass, a chink, a hole among leaves, a hole in the ozone layer, and so forth).

Light is an intangible, though visible, mover. We categorize comparative bright electromagnetic waves as light, and comparative dark ones as shadow or shade (see Section 3.1.2.3 below). Sometimes light or brightness is associated with warmth that is sensed by the tactile organ.

As I mentioned earlier, the concepts 'sound,' 'odor' and 'air in motion' are denoted by a single plain noun in Thai (i.e. เสียง sĭaŋ 'sound,' กลิ่น klìn 'odor' and ลม lom 'air in motion,' respectively), while they are denoted by a number of nouns with a variety of connotations in English (e.g. sounds, voice, noises, etc.; smells, aromas, fragrances, scents, stenches, etc.; currents, wind, breezes, blasts, etc.). However, the concept 'light' is denoted by a number of Thai nouns (e.g. แสง sěɛŋ 'light (brightness),' รัศมี

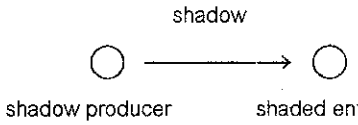
rátsàmĭi 'light spreading out like radii,' ประกาย prakaay 'spark (tiny glowing bit thrown off from a burning entity),' แวว wɛɛw 'light on a membrane-like cover or surface of something (such as light in the eyes and light from a diamond),' เงา ŋaw 'gleam,' แดด dɛ̀ɛt 'sunlight'), though still fewer than English nouns for light (e.g. light, glow, shine, flash, shimmer, glimmer, gleam, twinkle, luster, spark, glitter, glint, glare, etc.). Thai speakers linguistically do not classify intangible entities without a particular shape (like sound, odor, and air in motion), but do classify intangible entities if they have a particular shape (like light) (cf. Placzek 1978: 82-83).

English speakers may use nouns for solid linear entities (beams, threads) or for more abstract linear entities (rays) for characterizing light as extending from a radiator (a beam/thread/ray of light; rays of light). Likewise, to express the conceptualized schematic shapes of light, Thai speakers use classifiers such as ลำ lam (hull) for long slender tapering objects (e.g. ลำแสง lam sɛ̌ɛŋ 'classifier (hull) + light') and ดวง duaŋ (circle) for round objects (e.g. ดวงไฟ duaŋ fay, ดวงดาว duaŋ daaw, ดวงจันทร์ duaŋ can, ดวงประทีป duaŋ prathîip 'classifier (circle) + fire/star/moon/candle').

Actually, we cannot always tell whether a shining entity in question is a radiator or a reflector. To take a simple example: we, except for those who have a good knowledge of astronomy, do not know if a twinkling star in the sky radiates its own light or reflects light from the sun. Yet we take it for granted naively that stars shine by themselves. The boundary between the categories of a light reflector and an illuminated entity is vague. They are by no means two discrete categories. A roof bathed in a sunlight, for example, can be taken either as a light reflector if the sunlight is strong, or as an illuminated entity if the sunlight is soft. We also know from everyday outdoor experiences that the more white-like color a roof has, the more light the roof reflects, in other words, the more reflector-like the roof is.

3.1.2.3. Shadow Emanation Event

Shadow emanation events are the third specific type of Thai emanation events. A "shadow emanation event" is defined as an imagined event in which a shadow emerges from a shaded entity.



(30) a.

เงา	ของ	บ้าน	หลาย	หลัง	ทอด	ยาว
ŋaw	khɔ̌ɔŋ	bâan	lăay	lăŋ	thɔ̂ɔt	yaaw
shadow	of	house	many	CLASSIFIER	stretch	long

ลง	บน	กอ	สาระ
loŋ	bon	kɔɔ	sawàʔ
descend	on	clump	Java weed

The shadows of many houses stretched down over a clump of Java weed.

b.

เงา	ของ	ต้นไม้	ตก	ทอด	บน	พื้นดิน
ŋaw	khɔ̌ɔŋ	tônmáy	tòk	thɔ̂ɔt	bon	phɯ́ɯn din
shadow	of	tree	fall	stretch	on	the ground

The tree's shadow fell on the ground.

c.

ยอด	ปราสาท	ทอด	เงา	ลง	มา
yɔ̂ɔt	praasàat	thɔ̂ɔt	ŋaw	loŋ	maa
top	tower	stretch	shadow	descend	come

เป็น	ทาง	ยาว
pen	thaaŋ	yaaw
COPULA	path	long

The tower's top shed its shadow as a long path.

d.

มะม่วง	ขยับ	เงา	ยาว	จาก	โคน	ต้น
mamûaŋ	khayàp	ŋaw	yaaw	càak	khoon	tôn
mango	budge	shadow	long	leave	trunk	tree

ทอด	ยืด	ไป	ตาม	พื้น
thɔ̂ɔt	yɯ̂ɯt	pay	taam	phɯ́ɯn
stretch	lengthen	go	follow	the ground

The mango tree extended its shadow long from its trunk along the ground.

In a thematic shadow emanation event, as in (30a) and (30b), a shadow emerges from a shadow producer and moves as out as or over a shaded entity. In an agentive shadow emanation event, as in (30c) and (30d), a shadow producer brings about a shadow and casts it onto an entity.

The mover in a shadow emanation event is a shadow. A shadow emanation event may involve other entities: (1) the shadow producer and (2) the entity shaded.

A shadow is an intangible mover. Usually Thai shadow emanation events do not include an absolute other than a shadow producer (source entity) and an entity that is shaded (goal entity). This is presumably because Thai speakers normally do not conceptualize a shadow emanation as going through some intermediate reference point.

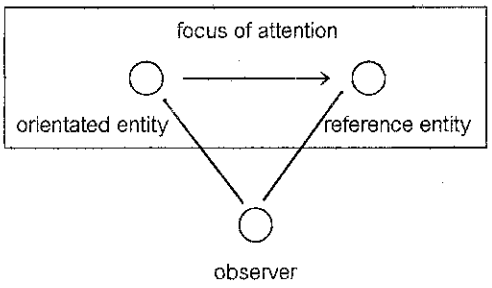
English speakers metaphorically conceptualize shadows as concrete entities having weight (such as a heavy or light shadow). The darker a shadow is, the heavier it is conceived to be. But Thai speakers do not characterize shadows as being heavy or light (* เงาหนัก ŋaw nàk 'shadow + heavy,' * เงาเบา ŋaw baw 'shadow + light'). However, the use of the verb ตก tòk 'fall,' as in (30b), suggests that Thai speakers also conceptualize shadows as having weight.

Areal (two-dimensional) darkness is named เงา ŋaw 'shadow, luster, image' (or เงามืด ŋaw mûut 'shadow + dark') in Thai. But เงา ŋaw represents not only a shadow (areal darkness) but also a gleam or an image reflected on a mirror-like surface. In short, entities denoted by เงา ŋaw 'shadow, luster, image' are not necessarily dark.

3.1.2.4. Orientation Emanation Event

Thai emanation events of the fourth and last specific type are orientation emanation events. An "orientation emanation event" is defined as an imagined event in which an orientated entity turns (or is turned by an orientation-setter) to a reference entity and the focus of an observer's attention shifts from the orientated entity to the reference entity. Thus, orientation emanations are a depiction of the orientation of entities in terms of a linear path connecting the entity with a certain remarkable reference entity, along which an observer's focus of attention shifts. However, neither observers nor their focus of attention are explicitly named in orientation emanation

expressions, but motion verbs and prepositions used in the expressions allude to the moving focus of attention of observers.



(31) a.

กระท่อม	หัน	ไป	สู่	ทะเล
krathɔ̂ɯm	hăn	pay	sùu	thalee
cabin	turn	go	get to	sea

The cabin turned toward the sea. (The cabin looks toward the sea.)

b.

ด้าน	หน้า	พระราชวัง	หัน	เข้า	หา	ตัวเมือง
dâan	nâa	phrá?râatchawaŋ	hăn	khâw	hăa	tua muaŋ
side	face	palace	turn	enter	seek	downtown

The front side of the palace turned toward the downtown.

(The front side of the palace faces toward the downtown.)

c.

หล่อน	ชี้	มือ	ข้าม	รั้ว	ไป	ยัง	บ้าน
lɔ̀ɔn	chíi	mɯɯ	khâam	rúa	pay	yaŋ	bâan
PRONOUN	point	hand	cross	fence	go	toward	house

ของ	เขา
khɔ̌ɔŋ	kháw
of	PRONOUN

She pointed her hand to his house over the fence.

d.

ทุก	แปลง	หัน	ด้านข้าง	เข้า	ทะเล
thúk	plɛɛŋ	hăn	dâan khâŋ	khâw	thalee
every	plot	turn	side	enter	sea

Every plot turned the side toward the sea.

(Every plot's side faces toward the sea.)

The mover in an orientation emanation event is the observer's focus of attention. Other entities possibly involved in orientation emanation events are: (1) the orientation-setter, (2) the orientated entity, and (3) the reference entity. An intermediate reference entity for an orientation emanation is rarely expressed. My data include only one orientation emanation expression in which an intermediate reference entity is mentioned, i.e., (31c) (the intermediate reference entity is ร้ัว rúa 'fence').

Orientation emanation events entail no agent. Even though an orientation emanation event can be encoded by a transitive clause, as in (31c) and (31d), it is not an agentive type because its subject represents an orientation-setter that does not move a mover (observer's focus of attention) along the path starting from an orientated entity and terminating at a reference entity. An orientation-setter is just an indirect initiator of an orientation emanation event. The observer, who may cause and control the mover, is not an agent, either, but the external conceptualizer (see the discussion below). Therefore, (31a) to (31d) all express thematic orientation emanation events (after an orientated entity actually/fictively turns/points to a reference entity) where an unnamed observer's focus of attention moves from the first orientated entity to the second reference entity. Whether an orientation-setter is identical to an orientated entity, as in (31a) and (31b), or not, as in (31c) and (31d), is a trivial matter for an orientation emanation (i.e. shift of an observer's focus of attention).

The observer (involved in an orientation emanation event) is different from a visual perceiver (involved in a visual emanation event) in terms of the situated positions: an observer is situated outside, while a visual perceiver is situated inside the objective scene of the emanation event. Recall Langacker's event model, especially the stage model. Observers or conceptualizers are excluded from the objective scene or setting in which the emanation event unfolds, but they view the event from the outside and their focus of attention moves from the orientated entity to the reference entity. The focus of attention of an observer is subjectively involved, while the line of vision of a visual perceiver is objectively involved in an emanation event. In other words, an observer of an orientation emanation event is the external (or subjective) conceptualizer, whereas a visual perceiver of a visual emanation event is the internal (or objective) participant even though sometimes a visual perceiver is not profiled and is not overtly mentioned.

3.1.2.5. Summary of Specific Semantic Types

Properties of each specific semantic type of Thai emanation event are summarized in Chart 1 below. Chapter 1 shows what participants are involved in each specific type and which participant may possibly be assigned a certain semantic role (MOVER or *AGENT* or ABSOLUTE).

1.1. Visual	1.2. Auditory	1.3. Olfactory	1.4. Tactile
line of vision MOVER	~~light~~ *sound* MOVER	~~shadow~~ *odor* MOVER	Stream of air MOVER
visual perceiver *AGENT* or ABSOLUTE	sound producer *AGENT* or ABSOLUTE	odor producer *AGENT* or ABSOLUTE	
seen entity ABSOLUTE	aural perceiver ABSOLUTE	olfactory perceiver ABSOLUTE	Tactile perceiver ABSOLUTE
other reference entity ABSOLUTE	other reference entity ABSOLUTE	other reference entity ABSOLUTE	other reference entity ABSOLUTE

	2. Radiation	3. Shadow	4. Orientation
	light MOVER	shadow MOVER	focus of attention MOVER
	light radiator/reflector *AGENT* or ABSOLUTE	shadow producer *AGENT* or ABSOLUTE	(orientation-setter) (INDIRECT INITIATOR)
	illuminated entity ABSOLUTE	shaded entity ABSOLUTE	orientated entity ABSOLUTE
	other reference entity ABSOLUTE		other reference entity ABSOLUTE

Chart 1: Participants in Specific Types of Thai Emanation Event

From Chart 1 above, we see the following points. First, tactile and orientation emanation events (expressed in my data) do not include agents. That is, there are no agentive orientation emanation events, while it is possible to imagine an agentive tactile emanation event, as in (32), though this is very rarely the case.

(32) เครื่องแอร์ ขนาด ใหญ่ ส่ง ลม เย็น มา กระทบ
khrûaŋ ʔɛɛ khanàat̂yày sòŋ lom yen maa krathóp
air-conditioner size big send air in motion cold come hit
ผิวหนัง
phĭw năŋ
skin
The big air-conditioner sent a cool flow of air which struck her/his skin.

Second, shadow emanation events (expressed in my data) do not include absolutes other than a shadow producer (source) and a shaded entity (goal). Thai speakers normally do not conceptualize any intermediate reference entity in a shadow emanation event.

3.1.3. Summary

To summarize, Thai emanation events are categorized into two basic types according to the number of the participants included:

1. Thematic types involving two participants (mover and absolute):
   A mover moves related to an absolute
2. Agentive types involving three participants (mover, absolute and agent):
   An agent moves a mover related to an absolute

Thai emanation events are also categorized into four specific types according to the kind of mover:

1. Perception emanation events, including
   1.1. Visual emanation events (fictive motion of a line of vision)
   1.2. Auditory emanation events (fictive motion of a sound)
   1.3. Olfactory emanation events (fictive motion of an odor)
   1.4. Tactile emanation events (fictive motion of a current of air)
2. Radiation emanation events (fictive motion of light)

3. Shadow emanation events (fictive motion of a shadow)

4. Orientation emanation events (fictive motion of the focus of an observer's attention)

The degree of agentivity of an agent in a visual emanation event (visual perceiver) is relatively high, because it controls motion of a mover (line of vision) all the time. In contrast, an agent in an emanation event of other types (such as sound producer, odor producer, light radiator, and shadow producer) does not execute full agentivity. That is, although the agent brings forth a mover and directs it to some direction, it does not have control over motion of the mover afterward.

3.2. Comparison of Emanation Subtypes

This section consists of three subsections. Section 3.2.1 examines differences among the specific types of Thai emanation event. Section 3.2.2 examines different degrees of conceptual solidity of the perception types. By 'conceptual solidity,' I mean phenomenological substantiality of emanation that is linguistically expressed. And Section 3.2.3 discusses the distinction between the active-determinative nature of a source entity in Thai emanation event and the agentive nature of a source entity in English emanation event.

3.2.1. Differences among Emanation Subtypes

Generally, Thai emanation events are classified force-dynamically into two main types: thematic and agentive types. The choice of clause subject (non-agent subject vs. agent subject) effects the force-dynamic classification. Furthermore, they are also modified in the spatial and temporal dimensions by using various kinds of verbs and prepositions.

In the following subsections, I examine characteristics of each specific type of Thai emanation event in three dimensions, namely, in force-dynamic, spatial and temporal dimensions. I first explain the points examined in each dimension below.

In the dimension of force-dynamics, I examine two points: (1) the number of the role archetypes of participants (two or three), and (2) the relation between the mover and the absolute (the mover is stronger than the absolute and vise versa). The first point indicates whether or not an agent is included. If there are only two role archetypes, the agent is not included (mover and absolute); if there are three role archetypes, the agent is included (mover, absolute and agent). Inclusion of an agent leads to some energy transmission between the agent and the mover, that is, the agent moves the mover. The second point indicates whether or not the mover interacts force-dynamically with the absolute. It is possible that the mover is stronger or weaker than the absolute and so some force interaction between them may happen. If the mover is stronger than the absolute, the mover thrusts its way through the absolute; if the mover is weaker than the absolute, the mover rebounds when meeting the absolute.

In the dimension of space, I examine three points: (1) orientation of path of emanation, (2) directionality, and (3) highlighted portion of path of emanation. The first point indicates what schematic configuration the path of emanation has (line or surface or space). A mover may move along a line (axially) or move on a surface (laterally) or move in space (moving about). The second point indicates in what direction the mover proceeds. The mover may move in an "intrinsic" or "absolute" or "relative" direction (cf. Levinson 1996). Intrinsic directions are directions that are determined by some intrinsic feature of the participant such as the front and the back (forward/backward); absolute directions are the fixed directions provided by gravity (upward/downward); and, relative directions are directions that are determined relative to the position of some viewpoint or absolute (inward/outward, hither/thither, opposite directions). The third point indicates what portion of the path of emanation is possibly highlighted. There are four schematic configuration types of a highlighted portion of the path of emanation: point (starting point, intermediate point, endpoint, stationary point), line (path followed), surface (upper surface, middle surface), and space (surrounding space, pervasive space, inner/outer space, upper space, middle space, side space, space above, way).

In the dimension of time, I examine three points: (1) aspect of emanation, (2) velocity of emanation, and (3) duration of emanation. The first point indicates whether emanation is perfective (involving some change) or imperfective (involving no change). The mover may start moving or stop moving. It also may keep moving or stay at rest. The second point indicates how the speed of emanation is specified. The mover may move fast or slow. The third point indicates whether or not emanation is specifically characterized as durative. Sometime auditory emanations are described as moving for a long time.

Specific values in each dimension are summarized below.

1. Force-dynamic dimension:

    1.1. The number of the role archetypes of participants (emanation type):

        two, i.e., mover and absolute (thematic type)

        three, i.e., mover, absolute and agent (agentive type)

    1.2. Relation between mover and absolute:

mover is stronger than absolute

absolute is stronger than mover

2. Spatial dimension:

2.1. Orientation of path of emanation:

moving axially (along a line)

moving laterally (on a surface)

diffusing or moving about (in space)

2.2. Directionality of emanation:

intrinsic direction: forward/backward

absolute direction: upward/downward

relative direction: inward/outward, hither/thither, opposite

2.3. Highlighted portion of path of emanation:

point: starting point, intermediate point, endpoint, stationary point

line: path followed

surface: upper surface, middle surface

space: surrounding space, pervasive space, inner/outer space, upper space, middle space, side space, space above, way

3. Temporal dimension:

3.1. Aspect of emanation:

perfective: to change into motion / to change to a state of rest

imperfective: to keep moving / to stay at rest

3.2. Velocity of emanation:

fast/slow

3.3. Duration of emanation:

a long period of time

Below I examine force-dynamic, spatial and temporal characteristics of each emanation subtype.

3.2.1.1. Perception Emanation

Perception emanation consists of four subtypes: visual, auditory, olfactory and tactile emanations.

3.2.1.1.1. Visual Emanation

A straight line of vision emerges from a visual perceiver's eyes and moves relative to a seen entity or other reference entity. This is the basic scenario of a visual emanation event. But specific characteristics of visual emanations are various, as is shown below.

1. Force-dynamic:

1.1. Emanation type:

thematic emanation	the clausal subject is a mover (line of vision), as in (33a)
agentive emanation	the clausal subject is an agent (visual perceiver), as in (33b)

(33) a.

สายตา	กวาด	ไป	ทั่ว	ห้อง
săaytaa	kwàat	pay	thûa	hôŋ
line of vision	sweep	go	all over	room

Her/His line of vision moved around the room.

b.

เขา	กวาด	สายตา	มอง	ทุก	คน
kháw	kwàat	săay taa	mɔɔŋ	thúk	khon
PRONOUN	sweep	line of vision	look	every	CLASSIFIER

S/he moved her line of vision to look at everybody.

1.2. Relation between mover and absolute:

implication of a stronger mover	ฝ่า fàa '(a mover) goes against (an absolute)'

2. Spatial:

2.1. Orientation of path of emanation:

axial	ตรง troŋ 'go straight,' ทอด thɔ̂ɔt 'stretch,' ถอน thɔ̌ɔn 'withdraw,'

พุ่ง phûŋ 'throw, dart'

lateral — กวาด kwàat 'sweep,' กราด kràat 'rake,' ปราย praay 'cast about,' ตวัด tawàt 'whip,' ลด lót 'lower,' เบน been 'veer,' เปลี่ยน plìan 'change,' ละ lá? 'detach,' ไล่ lây 'chase,' สอดส่าย sɔ̀ɔtsàay 'insert and sway,' วนเวียน wonwian 'circle,' โลมไล้ loomláy 'rub,' ตาม taam 'follow'

2.2. Directionality of emanation:

forward/ backward — ทอด thɔ̂ɔt 'stretch'/ ถอน thɔ̌ɔn 'withdraw'

upward/ downward — ขึ้น khûn 'ascend'/ ลง loŋ 'descend'

inward/ outward — เข้า khâw 'enter,' สอด sɔ̀ɔt 'insert'/ ออก ʔɔ̀ɔk 'exit'

hither/ thither — มา maa 'come'/ ไป pay 'go'

2.3. Highlighted portion of path of emanation:

starting point — แต่ tὲɛ 'from,' ตั้งแต่ tâŋ tὲɛ 'from,' จาก càak 'leave, depart'

intermediate point — ผ่าน phàan 'pass,' ข้าม kâam 'cross,' เลย ləəy 'pass, overstep,' ลอด lɔ̂ɔt 'go through,' ทะลุ thalú? 'go through,' ฝ่า fàa 'go against'

endpoint — จรด caròt, จด còt 'touch,' ถึง thŭŋ 'reach,' สู่ sùu 'get to,' หา hăa 'seek,' ตรง troŋ 'go straight,' ยัง yaŋ 'toward,' ที่ thîi 'at (point),' ใน nay 'in (inner),' นอก nɔ̂ɔk 'out (outer),' บน bon 'on (upper)'

stationary point — กับ kàp 'at (with),' ที่ thîi 'at (point)'

path followed — ตาม taam 'follow,' ไล่ lây 'chase'

upper surface — บน bon 'on (upper)'

middle surface — กลาง klaaŋ 'in the middle of (middle)'

surrounding space — รอบ rɔ̂ɔp 'around (surrounding)'

pervasive space — ทั่ว thûa 'all over (everywhere)'

inner/outer space — ใน nay 'in (inner)'/ นอก nɔ̂ɔk 'out (outer)'

side space — ภาย phaay 'in the space of (side),'
ข้าง khâaŋ 'in the direction of (side)'

way ทาง thaaŋ, เบื้อง bɯ̂aŋ 'in the direction of (way)'

3. Temporal:

3.1. Aspect of emanation:

to change into motion ลด lót 'lower,' ละ lá? 'leave, detach,' เบน been 'veer,' เปลี่ยน plìan 'change,' ปราย praay 'cast about,' ตวัด tawàt 'whip,' พุ่ง phûŋ 'throw, dart,' ทอด thɔ̂ɔt 'stretch,' ส่ง sòŋ 'send,' ถอน thɔ̌ɔn 'withdraw,' สอด sɔ̀ɔt 'insert,' กวาด kwàat 'sweep,' กราด kràat 'rake,' เหลือบ lɯ̀ap 'glance upward or sidewise,' ชำเลือง chamlɯaŋ 'glance upward or sidewise,' ค้อน khɔ́ɔn 'look askance'

to change to a state of rest หยุด yùt 'stop,' จับ càp 'hold, catch,' พบ phóp 'meet, touch,' กระทบ krathóp 'collide against, hit,' ปะทะ pathá? 'crash'

to keep moving วนเวียน wonwian 'circle,' โลมไล้ loomláy 'rub,' ตาม taam 'follow,' ตามติด taam tìt 'follow,' ไล่ lây 'chase,' เลื่อนลอย lɯ̂an lɔ̄ɔy 'drift,' ฝ่า fàa 'go against,' อยู่ yùu 'stay,' แล lɛɛ 'turn and look'

to stay at rest แขวน khwĕɛn 'hang,' ค้าง kháaŋ 'remain, stick to,' จับ càp 'hold, catch,' อยู่ yùu 'stay'

3.2. Velocity of emanation:

fast พุ่ง phûŋ 'throw, dart,' ตวัด tawàt 'whip,' เฉียด chĭat 'pass near, graze'

slow เลื่อนลอย lɯ̂an lɔ̄ɔy 'drift'

With respect to (1.2), normally we do not imagine a force interaction (other than touching) between a line of vision (mover) and a seen entity or a reference entity (absolute) in a visual emanation event, but there is a verb that implies a slight force interaction between the two, namely ฝ่า fàa 'go against,' as in (34).

(34) สายตา ของ หล่อน มอง ฝ่า ความมืด

sǎay taa	khɔ̌ɔŋ	lɔ̀ɔn	mɔɔŋ	fàa	khwaam mûuut
line of vision	of	PRONOUN	look	go against	darkness

ไป	ยัง	เงา	รางๆ
pay	yaŋ	ŋaw	raaŋ raaŋ
go	toward	shadow	dim

Her line of vision looked and went against the darkness toward a dim shadow.

But ฝ่า fàa 'go against' never implies the transmission of energy between a line of vision and a seen entity. A certain energy transmission may be brought in to focus in terms of how a person's mental state may be affected, as in (35).

(35) b.

เขา	ถาก	ด้วย	ตา
kháw	thàak	dûay	taa
PRONOUN	cut	by means of	eye

S/he cut (something) by means of the eye.

i.e. S/he glared fiercely at something.

c.

เขา	กรีด	สายตา
kháw	krìit	sǎay taa
PRONOUN	slit	line of vision

S/he slit (something) with her/his line of vision.

i.e. S/he looked sharply along something.

However, the semantic domain of such expressions here shifts from a spatial domain into a mental one. In this study, I do not analyze expressions in non-spatial domains.

With respect to (2.1), it is impossible for a line of vision to move along an axially nonstraight path (e.g. to proceed along a zigzag or crooked path). The contour of a line of vision between a perceiver's eyes and a seen entity must not be complex but ideally straight and direct.

3.2.1.1.2. Auditory Emanation

The basic scenario of an auditory emanation event is where a sound emerges from a sound producer and moves relative to an aural perceiver. But

there are two different configurations of auditory emanation which are as follows. (1) a sound emerges from a sound producer and proceeds along a linear path; (2) a sound emerges from a sound producer and diffuses in space. Each of the two types of auditory emanation can be further modified. A modification of an auditory emanation is made by adding specific values for the force-dynamic, spatial, and temporal components. Below, I first show all grammatical and lexical elements that represent those specific values, and then compare those of auditory emanations to those of visual emanations.

1. Force-dynamic:

1.1. Emanation type:

thematic type	the clausal subject is a mover (sound), as in (36a), or an absolute (aural perceiver), as in (36b)
agentive type	the clausal subject is an agent (sound producer), as in (36c)

(36) a.

เสียง	ตะโกน	ออก	มา	จาก	ห้องน้ำ
sĭaŋ	takoon	ʔɔ̀ɔk	maa	càak	hɔ̂ŋ nám
sound	shout	exit	come	leave	bathroom

A shout came out of the bathroom.

b.

ข้า	ได้ยิน	เสียง	ตาม	หลัง	มา
khâa	dâyyin	sĭaŋ	taam	lăŋ	maa
PRONOUN	hear	sound	follow	back	come

I heard a sound coming after me.

c.

เขา	ตะโกน	ข้าม	ห้อง
kháw	takoon	khâam	hɔ̂ŋ
PRONOUN	shout	cross	room

S/he shouted (and the shout went) across the room.

1.2. Relation between mover and absolute:

implication of a stronger mover	ฝ่า fàa '(a mover) goes against (an absolute)'
implication of a stronger absolute	สะท้อน sathɔ́ɔn, กระท้อน krathɔ́ɔn '(a

mover) bounces back on (an absolute)'

2. Spatial:

2.1. Orientation of path of emanation:

moving along a line	สะท้อน sathɔ́ɔn, กระท้อน krathɔ́ɔn 'reflect, rebound,' กลับ klàp 'turn back,' ย้อน yɔ́ɔn 'retrace,' ลอย lɔɔy 'float,' ล่อง ลอย lɔ̂ŋ lɔɔy 'drift,' หลั่งไหล làŋlǎy, ไหล lǎy 'flow'
moving in space	แผด phèɛt 'emit,' หวน hŭan 'return,' กระจาย kracaay 'spread'

2.2. Directionality of emanation:

upward	ขึ้น khûn 'ascend'
downward	ลง loŋ 'descend,' ร่วง rûaŋ 'drop off, fall'
inward	เข้า khâw 'enter,' แทรก sêɛk 'insert'
outward	ออก ʔɔ̀ɔk 'exit,' เล็ดลอด lét lɔ̀ɔt 'sneak,' หลุด lùt 'slip off'
hither	มา maa 'come,' กล้ำกราย klâmkraay 'come near,' ใกล้ klây 'near'
thither	ไป pay 'go,' ห่าง hàaŋ 'remote'
opposite directions	สวน sŭan 'pass in opposite directions'

2.3. Highlighted portion of path of emanation:

starting point	แต่ tèɛ 'from,' จาก càak 'leave'
intermediate point	ผ่าน phàan 'pass,' ข้าม khâam 'cross,' ลอด lɔ̂ɔt 'go through,' ทะลุ thalú? 'go through,' ฝ่า fàa 'go against,' ตัด tàt 'cut,' แทรก sêɛk 'insert, penetrate'
endpoint	ถึง thŭŋ 'reach,' ใส่ sày 'put in,' ต่อ tɔ̀ɔ 'joint,' กับ kàp 'with,' แก่ kèɛ 'for'
path followed	ตาม taam 'follow,' ไล่ lây, กวดไล่ kùat lây 'chase'
pervasive space	ทั่ว thûa 'all over (everywhere)'
inner/outer space	ใน nay 'in (inner)'/ นอก nɔ̂ɔk 'out (outer)'
side space	ข้าง khâaŋ 'in the direction of (side)'
way	ทาง thaaŋ 'in the direction of (way)'

3. Temporal:

3.1. Aspect of emanation:

to change into motion	ส่ง sòŋ 'send,' ทิ้ง thíŋ 'throw away,' ยิง yiŋ 'shoot,' กระแทก krathêɛk 'bang,' สะบัด sabàt 'fling,' ตวัด tawàt 'throw, whip,' ยื่น yûun 'protrude,' เล็ดลอด lét lɔ̂ɔt 'sneak,' แทรก sêɛk 'insert, penetrate,' กระจาย kracaay 'spread,' หยอด yɔ̀ɔt 'drop,' หลุด lùt 'slip off,' ร่วง rûaŋ 'drop off, fall,' ลาก lâak 'tug,' ทอด thɔ̂ɔt 'stretch,' แผด phèɛt, เปล่ง plèŋ 'emit,' ออก ʔɔ̀ɔk 'exit, put forth (emit),' ลง loŋ 'descend, put down (emit)' and all auditory activity verbs
to change to a state of rest	กระทบ krathóp 'collide against, hit'
to keep moving	ลอย lɔɔy 'float,' ล่องลอย lôŋ lɔɔy 'drift,' ตาม taam 'follow,' หลั่งไหล làŋlăy, ไหล lăy 'flow,' เดิน deen 'walk,' วิ่ง wîŋ 'run,' ไล่ lây, กวดไล่ kùat lây 'chase,' อยู่ yùu 'stay'

3.2. Velocity of emanation:

fast	ตะวัด tawàt 'throw, whip'
slow	ลอย lɔɔy 'float'

3.3. Duration of emanation:

a long period of time	ลาก lâak 'tug,' ทอด thɔ̂ɔt 'stretch'

The characteristics of auditory emanations and visual emanations are different from each other on the grounds that they take different values of the incorporated semantic components, except for (1.1) and (3.2).

(1.2) tells that if a sound confronts a stronger absolute, it can do nothing but bounce back from it (สะท้อน sathɔ́ɔn, กระท้อน krathɔ́ɔn 'reflect'). After being launched by a sound producer, a sound should keep moving onward, never pausing, except after reaching a goal such as the ears (กระทบหู krathóp hŭu 'hit the ears').

With respect to (2.1), visual emanations extend along a single axial or lateral direction, while auditory emanations may extend along a single axial direction (ล่องลอย

lɔ̂ŋ lɔɔy 'drift') or in multiple directions (แผด phèɛt 'emit,' กระจาย kracaay 'spread'); they may bounce back after hitting a landmark (สะท้อน sathɔ́ɔn, กระท้อน krathɔ́ɔn 'reflect'); and, they may turn back to the original place (กลับ klàp 'turn back,' หวน hŭan 'return'). Unlike visual emanations, auditory emanations are not a solid line and therefore they cannot move laterally, such as by turning the head horizontally and vertically.

Several differences between auditory and visual emanations are found in (2.2). First, auditory emanations should move 'forward.' Once auditory emanations depart from sound producers, they continue advancing. Sound producers cannot make a sound retreat after releasing it. For visual emanations, on the other hand, it is possible to move backward, that is, a visual perceiver can withdraw a line of vision from an enclosed space (ถอน thɔ̆ɔn 'withdraw'). Second, besides directional verbs, there are only two motion verbs used for expressing the directionality of visual emanations, namely สอด sɔ̀ɔt 'insert' for an inward path and ถอน thɔ̆ɔn 'withdraw' for an outward path. On the other hand, there are several motion verbs used for expressing the directionality of auditory emanations, such as ร่วง rûaŋ 'drop off, fall' for a downward path, แทรก sêɛk 'insert, penetrate' for an inward path, เล็ดลอด lét lɔ̂ɔt 'sneak,' หลุด lùt 'slip off' for an outward path, and กล้ำกราย klâmkraay 'come near' for a near or approaching path. Third, auditory emanations approaching, or moving away from, aural perceivers are expressed by using not only verbs of motion (ไป pay 'go,' มา maa 'come,' กล้ำกราย klâmkraay 'come near') but also verbs of distance (ใกล้ klây 'near,' ห่าง hàaŋ 'remote'). But verbs of distance are not used for the description of visual emanations. Fourth, there is a unique direction which auditory emanations can be imagined to take, namely, two strings of sound may pass in opposite directions (สวน sŭan 'pass in opposite directions'). More specifically, one person may speak to another person and the latter person may simultaneously speak back to the former person. In contrast, two visual emanations are not imagined to pass in opposite directions, though they may be imagined to meet.

Visual and aural emanations differ in regard to (2.3) as well. First, in some communication emanation expressions, the verb ใส่ sày 'put in' and the noun phrase naming someone's face (หน้า nâa 'face'), viz., ใส่หน้า sày nâa 'put in the face' are placed in the final position of the clause. In such expressions, "face" metonymically represents its possessor, namely a message receiver who may be mentally affected by the

message. A face is a very prominent body-part of an animate being where the eyes, the nose and the mouth are located. Therefore we take the face as the most salient, and therefore representative part of its possessor. We know that the most effective way of mentally affecting a person is to hit her/his face. As such, a message sender may throw a violent message against the face of a message receiver whom s/he wants to verbally attack.

Second, in visual emanation expressions a moving reference entity which the mover follows is encoded by ตาม taam 'follow' alone, but in auditory emanation expressions it may be encoded by not only ตาม taam 'follow' but also ไล่ lây 'chase' which has a slight force-dynamic connotation. This fact suggests the somewhat forcefulness of the mover of auditory emanations (i.e. sound).

Third, goals of auditory emanations, unlike goals of visual emanations, are not encoded by such lexical items as ตรง troŋ 'at (go straight),' ที่ thîi 'at (place, point),' ใน nay 'in (inner)' and นอก nɔ̂ɔk 'out (outer)' that designate a specific endpoint. This reflects our conceptualization with respect to configurations of auditory emanations that they do not have a pointed head.

Fourth, since auditory emanations do not move laterally, prepositions indicating starting points and endpoints of lateral motions (i.e. those headed by ตั้งแต่ tâŋtɛ̀ɛ 'from' and จรด caròt, จด còt 'touch,' respectively) do not appear.

A significant difference between auditory and visual emanations in (3.1) is that auditory emanations, unlike visual emanations, always exhibit the progressive aspect. Namely, auditory emanations are never imagined to cease to rest. Our world knowledge tells us that a sound keeps changing its location.

(3.3) concerns only auditory emanations. Some auditory emanations involve duration and pitch. For example:

(37) a. ลาก เสียง
lâak sĭaŋ
tug sound
to prolong the voice

b. ทอด เสียง

thɔ̂ɔt sĭaŋ
stretch sound
to prolong the voice

c. ตวัด เสียง
tawàt sĭaŋ
whip sound
to change into a high pitch

(37a) and (37b) represent prolonging the voice; (37c) represents changing into a high pitch. Note that the verb ทอด thɔ̂ɔt 'stretch' expresses two related meanings: it expresses the temporal length of a sound (long duration of uttering) when used in auditory emanation expressions, whereas it expresses the spatial length of a line of vision (long distance between a visual perceiver and a seen entity) when used in visual emanation expressions.

3.2.1.1.3. Olfactory Emanation

The semantic elements that characterize olfactory emanations are categorized into the force-dynamic, spatial and temporal ones. Below, I list all grammatical and lexical elements indicating their specific values, and then compare them with those of visual and auditory emanations.

1. Force-dynamic:

1.1. Emanation type:

thematic type	the clausal subject is a mover (odor), as in (38a) or an absolute (olfactory perceiver), as in (38b)
agentive type	the clausal subject is an agent (odor producer), as in (38c)

(38) a. กลิ่น คาว คลุ้ง มา แต่ ไกล
klîn khaaw khlúŋ maa tɛ̀ɛ klay
odor stinking spread come from far
A stinking odor came spreading from afar.

b.

ได้	กลิ่น	สบู่	อ่อนๆ	ระเหย	ออก	มา
dây	klîn	sabùu	ʔɔ̀ɔn ʔɔ̀ɔn	rahɔ̌ɔy	ʔɔ̀ɔk	maa
get	odor	soap	soft	evaporate	exit	come

จาก	ดวงหน้า	นั้น
càak	duaŋ nâa	nán
leave	face	that

(S/he) sensed a soft odor of soap evaporating from that face.

c.

ดอกไม้	ส่ง	กลิ่น	หอม
dɔ̀ɔkmáy	sòŋ	klîn	mɛ̌n
flower	send	odor	fragrant

The flower sent out fragrance.

2. Spatial:

2.1. Orientation of path of emanation:

moving along a line	โชย chooy 'blow gently'
moving in space	แผ่ phèɛ 'spread out,' ขจร khacɔɔn, กำจาย kamcaay, กระจาย kracaay 'spread,' ซ่าน sâan 'diffuse,' ระเหย rahɔ̌ɔy 'evaporate,' คลุ้ง khrúŋ, คละคลุ้ง khlá?khlúŋ 'spread, smell strong, reek,' ฟุ้ง fúŋ 'spread, fill the air, reek,' อวลอบ ʔuan?ɔ̀p, อบอวล ʔɔ̀p?uan 'pervading'

2.2. Directionality of emanation:

upward	ขึ้น khûn 'ascend'
inward/ outward	เข้า khâw 'enter'/ ออก ʔɔ̀ɔk 'exit'
hither/ thither	มา maa 'come'/ ไป pay 'go'

2.3. Highlighted portion of path of emanation:

starting point	แต่ tèɛ 'from,' จาก càak 'leave'
endpoint	ถึง thŭŋ 'reach'
path followed	ตาม taam 'follow'
pervasive space	ทั่ว thûa 'all over (everywhere)'
inner space	ใน nay 'in (inner)'

3. Temporal:

3.1. Aspect of emanation:

to change into motion	ส่ง sòŋ 'send'
to change to a state of rest	กระทบ krathóp 'collide against, hit,' ปะทะ pathá? 'crash'
to keep moving	โชย chooy 'blow gently,' ตาม taam 'follow,' ระเหย rahěəy 'evaporate,' ลอย lɔɔy 'float,' อยู่ yùu 'stay'

3.2. Velocity of emanation:

slow	โชย chooy 'blow gently,' ลอย lɔɔy 'float,' แผ่ phèɛ 'spread out'

It is obvious that the number of the semantic components incorporated in the meanings of olfactory emanation expressions is much smaller than those of visual and auditory emanation expressions. The specific values for olfactory emanations are also less various than those for visual and auditory emanations. Only (1.1) shows no differences from visual and auditory emanation expressions.

Any olfactory emanation expressions do not imply an asymmetrical relationship between the mover and the absolute, nor an affected one (e.g. a line of vision goes against a reference entity; a sound bounces back on a reference entity). No force interaction is seen in olfactory emanation events.

As in (2.1), olfactory emanations axially proceed along a path or diffuse in space. And the lexical items listed in (2.1) all represent motion with no specific orientation. Configurations of olfactory emanations are thus fuzzy.

As in (2.2), olfactory emanations, like auditory emanations, always move 'forward.' They are never imagined to move backward or retreat. It is imagined that the mover of auditory and olfactory emanations (sound, odor) is free from control of the causer and therefore moves according to natural law. In addition to moving forward, olfactory emanations are described as moving into or out of something as well as moving nearer or away from something. But they are not commonly described as moving upward or downward. The reason may be that the configuration of olfactory emanations is largely multi-directional and does not form a vertical gradient. Note that ขึ้น khûn 'ascend' in sentences like (39) functions as an inchoative aspect marker:

(39) มัน ส่ง กลิ่น ขึ้น มา

man	sòŋ	klîn	khûn	maa
PRONOUN	send	odor	INCHOATIVE	come

It has begun to send an odor.

The sources, goals and mediums of olfactory emanations are profiled by a few lexical items, as in (2.3), and normally intermediate points are not profiled. This suggests fuzziness of the path of olfactory emanations. Generally we do not speak of particular intermediate points or endpoints of olfactory emanations, except for the nose.

There are a few topological characterizations for reference entities of olfactory emanations. These are represented by ทั่ว thûa 'all over' and ใน nay 'in,' as indicated in, e.g., ทั่วบึง thûa bueŋ 'all over the marsh' or ในห้อง nay hɔ̂ŋ 'in the room.'

With respect to (3.1), olfactory emanations are similar to auditory emanations: (3.1) lacks the value of 'to keep at rest.' Odors and sounds are commonly imagined to keep moving until they lose the substantiality in the course of time or they terminate at someone's nose or ears. That is, olfactory and auditory emanations are always progressive.

A few lexical items represent the slowness of olfactory emanations, as in (3.2). Unlike visual and auditory emanations, olfactory emanations are not described by พุ่ง phûŋ 'throw, dart' or ตวัด tawàt 'throw, whip' implying a high velocity. It is likely that odors are conceived to move slowly. Practically, we might argue that the nose is not capable of recognizing an odor at high speed. The nose may be considered dull in comparison with the ears.

3.2.1.1.4. Tactile Emanation

Tactile emanations are characterized by specific values of the force-dynamic, spatial and temporal components shown below.

1. Force-dynamic:

1.1. Emanation type:

thematic type — the clausal subject is a mover (air in motion), as in (40)

(40)

ลม	เย็น	โกรก	เข้า	มา
lom	yen	kròok	khâw	maa
air in motion	cool	blow strongly	enter	come

Cool air blew in.

2. Spatial:

2.1. Orientation of path of emanation:

moving along a line — โชย chooy 'blow gently,' ไหล lăy 'flow,' พุ่ง phûŋ 'throw, dart,' กรู kruu, กรูเกรียว kruu kriaw 'throng, crowd,' โกรก kròok 'leach, blow strongly,' กระโชก krachôok 'come suddenly upon, blow strongly'

2.2. Directionality of emanation:

inward/ outward — เข้า khâw 'enter' / ทะลัก thalák 'leak out'

hither/ thither — มา maa 'come'/ ไป pay 'go'

2.3. Highlighted portion of path of emanation:

starting point — จาก càak 'leave'

intermediate point — ลอด lɔ̂ɔt 'go through,' ผ่าน phàan 'pass'

endpoint — ถึง thŭŋ 'reach'

path followed — ตาม taam 'follow'

surrounding space — รอบ rɔ̂ɔp 'around (surrounding)'

inner space — ใน nay 'in (inner)'

upper space — บน bon 'on, over (upper)'

way — ทาง thaaŋ 'in the direction of (way)'

3. Temporal:

3.1. Aspect of emanation:

to change into motion — พุ่ง phûŋ 'throw, dart,' ทะลัก thalák 'leak out,' กระโชก krachôok 'come suddenly upon, blow strongly,' โกรก kròok 'leach, blow strongly,' โชย chooy 'blow gently,' ไหล lăy 'flow,' กรู kruu, กรูเกรียว kruu kriaw 'throng, crowd,' เป่า pàw 'blow,' พัด phát 'fan,' กระพือ kraphuu 'fan, flap'

to change to a state of rest	ปกคลุม pòk khlum 'cover,' ปะทะ pathá? 'crash,' กระทบ krathóp 'collide against, hit,' ถูก thùuk 'touch'
to keep moving	โกรก kròok 'leach, blow strongly,' โชย chooy 'blow gently,' ไหล lăy 'flow,' กรู kruu, กรูเกรียว kruu kriaw 'throng, crowd,' ไล้ láy 'smear,' รวยริน ruay rin 'pour slowly,' อยู่ yùu 'stay'

3.2. Velocity of emanation:

fast	พุ่ง phûŋ 'throw, dart,' โกรก kròok 'leach, blow strongly,' กระโชก krachôok 'come suddenly upon, blow strongly'
slow	โชย chooy 'blow gently,' รวยริน ruay rin 'pour slowly'

One of the most salient characteristics of tactile emanations is their spontaneity. As indicated in (1.1), tactile emanation events do not entail an agent. That is, tactile emanations are imagined to move about freely from any arbitrary control but just abiding by natural law.

The configuration of tactile emanations is very simple, as in (2.1). Tactile emanations proceed along a path. That is all.

Regarding (2.2), tactile emanations do not have a default value, while auditory and olfactory emanations have a default value, namely moving 'forward.' Since tactile emanations have no causers (agents), it is impossible to identify the 'forward' direction for tactile emanations. Furthermore, it is rare that tactile emanations are described as moving upward, downward or outward. In my data, for example, there are no tactile expressions including the directional verbs ขึ้น khûn 'ascend,' ลง loŋ 'descend' and ออก ?ɔ̀ɔk 'exit.' This may be ascribed to the nature of air in motion itself as well as our common experiences about air in motion. First, we usually experience a current of air passing horizontally past us but not blowing up or down onto us. Second, we sense air in motion when we expose ourselves to it outdoors; otherwise, when we stay inside a building and it comes in, rather than going out, passing past us.

As shown in (2.3), the starting and terminating points and intermediate points or paths of tactile emanations can all be profiled, though the number of lexical items used

for profiling them is relatively small. Note that they are not 'points' in a strict sense. Rather, they are 'spaces' or 'directions' in relation to which a current of air moves.

Using the lexical items indicated in (2.3), the region of a reference entity for a tactile emanation can be characterized as directed path, surrounding space, enclosed space, or space above.

From (3.1) and (3.2) we see that tactile emanations are conceived to continue moving and never stop and that they may be conceived to move at a slow speed or a fast speed.

3.2.1.2. Radiation Emanation

The gist of a radiation emanation event is that a light radiates from a radiator and advances until meeting an illuminated entity. It can be further specifically characterized in the force-dynamic, spatial, and temporal dimensions as shown below.

1. Force-dynamic:

1.1. Emanation type:

thematic emanation	the clausal subject is a mover (light), as in (41a)
	or an absolute (illuminated entity), as in (41b)
agentive emanation	the clausal subject is an agent (radiator), as in (41c)

(41) a.

แสง	ส่อง	สะท้อน	จาก	น้ำ
sɛ̌ɛŋ	sɔ̀ɔŋ	sathɔ́ɔn	càak	nám
light	shine	reflect	leave	water

Shining light reflected from the water.

b.

กระจก	กระทบ	แสงแดด	แวววาว
kracòk	krathópsɛ̌ɛŋ	dɛ̀ɛt	wɛɛw waaw
mirror	hit	sunlight	brilliant

A mirror was hit by the brilliant sunlight.

c.

มัน	เปล่ง	แสง	ออก	มา	จาก	ดวงตา
man	plèŋ	sɛ̌ɛŋ	ʔɔ̀ɔk	maa	càak	duaŋ taa
PRONOUN	emit	light	exit	come	leave	eye

It (a robot) emitted light out of its eyes.

1.2. Relation between mover and absolute:

implication of a stronger absolute	สะท้อน sathɔ́ɔn '(a mover) bounces back on (an absolute)'

2. Spatial:

2.1. Orientation of path of emanation:

moving along a line	ตรง troŋ 'go straight,' พุ่ง phûŋ 'throw, dart,' พวยพุ่ง phuayphûŋ 'stream out,' ทอด thɔ̂ɔt 'stretch,' แล่น lɛ̂n 'run,' ตก tòk 'fall, drop,' ไพล่ phlây 'deviate,' เบี่ยงเบน bìaŋ been 'deviate,' สะท้อน sathɔ́ɔn 'reflect, rebound,' กลับ klàp 'turn back,' ฉาย chăay 'project, emit'
moving on a surface	ไล้ láy 'rub,' ลูบไล้ lûup láy 'caress,' ทา thaa 'smear,' กราด kràat 'rake,' ทอ thɔɔ 'weave'
moving in space	กระจาย kracaay 'spread,' แผ่ phèɛ 'spread out,' ซ่าน sâan 'diffuse,' กระเด็น kraden 'spurt,' สาด sàat 'splash,' ปราย praay 'cast about'

2.2. Directionality of emanation:

downward	ลง loŋ 'descend,' ตก tòk 'fall, drop'
inward/ outward	เข้า khâw 'enter'/ ออก ʔɔ̀ɔk 'exit,' เล็ดลอด lét lɔ̂ɔt 'sneak'
hither/ thither	มา maa 'come'/ ไป pay 'go'

2.3. Highlighted portion of path of emanation:

starting point	จาก càak 'leave'
intermediate point	ผ่าน phàan 'pass,' ลอด lɔ̂ɔt 'go through' ทะลุ thalú? 'go through'
endpoint	ถึง thŭŋ 'reach,' สู่ sùu 'get to,' ตรง troŋ 'go straight,' ยัง yaŋ 'toward,' ที่ thîi 'at (point),' ใน nay 'in (inner),' บน bon 'on (upper),' กับ kàp 'with'
stationary point	ตรง troŋ 'at (go straight),' ที่ thîi 'at (point)'
upper surface	บน bon 'on (upper)'
middle surface	กลาง klaaŋ 'in the middle of (middle),'

surrounding space	รอบ rɔ̂ɔp 'around (surrounding)'
pervasive space	ทั่ว thûa 'all over (everywhere)'
inner space	ใน nay 'in (inner)'
middle space	ระหว่าง rawàaŋ, หว่าง wàaŋ 'among'
above space	เหนือ nɯ̌a 'above'
way	ทาง thaaŋ 'in the direction of (way)'

3. Temporal:

3.1. Aspect of emanation:

to change into motion	พุ่ง phûŋ 'throw, dart,' พวยพุ่ง phuayphûŋ 'stream out,' แล่น lɛ̂n 'run,' ตก tòk 'fall, drop,' ทอด thɔ̂ɔt 'stretch,' ซ่าน sâan 'diffuse,' กระเด็น kraden 'spurt,' สาด sàat 'splash,' ปราย praay 'cast about,' กระจาย kracaay 'spread,' แผ่ phèɛ 'spread out,' ส่ง sòŋ 'send,' ผลิ phlĭʔ 'bud,' ทอ thɔɔ 'weave,' เปล่ง plèŋ 'emit,' ฉาย chăay 'project, emit'
to change to a state of rest	กระทบ krathóp 'collide against, hit,' โดน doon 'hit, collide,' ต้อง tɔ̂ŋ 'meet, touch,' ถูก thùuk 'touch,' จับ càp 'hold, catch,' ติด tìt 'stick,' ตก tòk 'fall, drop'
to keep moving	ไล้ láy 'rub,' ลูบไล้ lûup láy 'caress,' กราด kràat 'rake,' ทา thaa 'smear,' อยู่ yùu 'stay'
to stay at rest	อาบ ʔàap 'bathe,' ฉาบ chàap 'coat,' ทาบ thâap 'cover, lay flat against,' พาด phâat 'lean, put across,' หุ้มห่อ hûm hɔ̀ɔ 'wrap up, cover,' ทอด thɔ̂ɔt 'stretch,' อยู่ yùu 'stay'

3.2. Velocity of emanation:

fast	พุ่ง phûŋ 'throw, dart,' พวยพุ่ง phuayphûŋ 'stream out,' แล่น lɛ̂n 'run'
slow	แผ่ phèɛ 'spread out'

Above, we see the following characteristics of radiation emanations. First, as indicated in (2.1), a radiation emanation may extend along a linear path (move axially)

and then it may shift the direction of its head on a surface (move laterally), or it may diffuse in all directions. When it moves axially, the axial linear path may be straight or bent at a point due to an obstacle or spontaneously (สะท้อน **sathɔ́ɔn** 'reflect,' ไพล่ **phlây** 'deviate,' เบี่ยงเบน **bìaŋ been** 'deviate'). If the angle of reflection is around 180 degrees, we may say (42).

(42) แสง สะท้อน กลับ
sɛ̌ɛŋ **sathɔ́ɔn** **klàp**
light reflect return
The light reflected back.

When a radiation emanation diffuses in space, it never returns to where it started along a curved path. Therefore (43) is not acceptable, though (44), which expresses an auditory emanation along a curved path, is OK.

(43) * แสง หวน กลับ มา
sɛ̌ɛŋ **hǔan** **klàp** **maa**
light return turn back come
(intended meaning) The light returned back.

(44) เสียง หวน กลับ มา
sǐaŋ **hǔan** **klàp** **maa**
sound return turn back come
The sound returned (echoed) back.

Second, a light may be rendered as a substance with a considerable weight. There are a few pieces of evidence in support of this idea. In the first place, a radiation emanation can be conceived to fall onto something by the force of gravity, as illustrated in (45).

(45) แสงไฟ ตก ลง มา ตรง สัน จมูก
sɛ̌ɛŋ fay **tòk** **loŋ** **maa** **troŋ** **săn** **camùuk**
light fall descend come at ridge nose

Light fell down on the ridge of her nose.

In the second place, some radiation emanations are understood as analogous to watercourses, as follows. For one thing, แสง sɛ̌ɛŋ 'light' can be modified by the classifier ลำ lam (for long slender bodies, approximately cylindrical in form, such as hulls, trunks and stems, as well as watercourses or songs) and this classifier is presumably derived from the nominal concept 'hull' --- a mover along a watercourse (cf. Bradley 1873: 616; Placzek 1992: 160). What is more, as shown in (2.1) and (3.1), radiation emanations can be represented by verbs for motion of liquid entities: พวยพุ่ง phuayphûŋ 'stream out,' สาด sàat 'splash,' อาบ ʔàap 'bathe,' ฉาบ chàap 'coat,' ทา thaa 'smear' (and กระเด็น kraden 'spurt,' cf. Bradley 1873: 47).

Third, a radiation emanation is often described as resting on an illuminated entity, as if light has covered or stuck on an illuminated entity. As indicated in (3.1), there are a number of motion verbs used for expressing such radiation emanations at rest: จับ càp 'hold, catch,' ทอด thɔ̂ɔt 'stretch,' อาบ ʔàap 'bathe,' ฉาบ chàap 'coat,' ไล้ láy 'rub,' ทา thaa 'smear,' ทาบ thâap 'cover, lay flat against,' พาด phâat 'lean, put across,' หุ้มห่อ hûm hɔ̀ɔ 'wrap up, cover,' and ติด tìt 'stick.' Out of these verbs, จับ càp 'hold, catch' encodes the resulting phase of both visual and radiation emanations; ทอด thɔ̂ɔt 'stretch' encodes not only the resulting phase of radiation and shadow emanations but also the initial and progressive phases of visual, auditory, radiation and shadow emanations.

The illuminated form may be a relatively wide surface (ทอด thɔ̂ɔt 'stretch,' อาบ ʔàap 'bathe,' ฉาบ chàap 'coat,' ไล้ láy 'rub,' ทา thaa 'smear,' ทาบ thâap 'cover, lay flat against,' พาด phâat 'lean, put across,' หุ้มห่อ hûm hɔ̀ɔ 'wrap up, cover') or a relatively narrow spot (จับ càp 'hold, catch,' ติด tìt 'stick').

3.2.1.3. Shadow Emanation

Shadow emanations are deduced from visible areal shadows. That is, a shadow on a surface is imagined to have such a history that it has fallen onto that surface and changed into an areal figure, or it has stretched its shape over that surface. In this regard, shadow emanations can be regarded as a subtype of what Talmy (1996)

calls 'advent paths' (e.g. The palm trees clustered together around the oasis; This rock formation occurs near volcanoes). Shadow emanations are characterized in the force-dynamic, spatial and temporal dimensions, as follows:

1. Force-dynamic:

1.1. Emanation type:

thematic emanation	the clausal subject is a mover (shadow), as in (45a)
agentive emanation	the clausal subject is an agent (shadow producer), as in (45b)

(45) a.

เงา	ตัวเอง	พาด	ไป	บน	ต้น	หญ้า
ŋaw	tua ʔeeŋ	phâat	pay	bon	tôn	yâa
shadow	oneself	lean	go	on	tree	grass

My shadow was leaning on the trees and grass.

b.

ต้นไม้	ทอด	เงา	ลง	มา
tônmáy	thɔ̂ɔt	ŋaw	loŋ	maa
tree	stretch	shadow	descend	come

The tree stretched its shadow down.

2. Spatial:

2.1. Orientation of path of emanation:

moving along a line	ทอด thɔ̂ɔt 'stretch,' ตก tòk 'fall, drop'
moving on a surface	ทอด thɔ̂ɔt 'stretch,' ขยับ khayàp 'budge,' ยืด yûut 'lengthen'

2.2. Directionality of emanation:

downward	ลง loŋ 'descend,' ตก tòk 'fall, drop'
hither/ thither	มา maa 'come'/ ไป pay 'go'

2.3. Highlighted portion of path of emanation:

starting point	จาก càak 'leave'
path followed	ตาม taam 'follow'
upper surface	บน bon 'on (upper)'

3. Temporal:

3.1. Aspect of emanation:

to change into motion	ตก tòk 'fall, drop,' ทอด thɔ̂ɔt 'stretch,' พาด phâat 'lean, put across,' ขยับ khayàp 'budge,' ทิ้ง thíŋ 'throw away'
to change to a state of rest	กระทบ krathóp 'collide against, hit,' ทาบ thâap 'cover, lay flat against,' ปกคลุม pòk khlum 'cover'
to stay at rest	ทอด thɔ̂ɔt 'stretch,' ทาบ thâap 'cover, lay flat against'

Force-dynamically, shadow emanations do not differ from radiation emanations, as shown in (1.1) and (1.2). However, the number of lexical items used for characterizing shadow emanations is much smaller than radiation emanations. This means that conceptualizations of shadow emanations are less various.

As in (2.1), the path of shadow emanations may extend axially (e.g. ตก tòk 'fall, drop') or laterally (e.g. ขยับ khayàp 'budge').

As in (2.2), the directionality of shadow emanations is relatively limited. First, shadow emanations never retreat. Once they leave the shadow producers, they must advance to shaded entities. Second, shadow emanations are not modified by the directional verbs เข้า khâw 'enter' and ออก ʔɔ̀ɔk 'exit,' since normally they are not imagined to pass through an intermediate reference entity. Third, they are seldom modified by the directional verb ขึ้น khûn 'ascend,' either, since usually the direction of rays of light is down toward the surface below. The common spatial relationship between a shadow and its producer is that a shadow is under its producer. That is, a shadow emanation goes down.

3.2.1.4. Orientation Emanation

Orientation emanations (motion of the observer's focus of attention) are highly abstract and subjective phenomena. It is nonsense to ask whether an orientation emanation is thematic or agentive in terms of the physical force-dynamics, or whether it

is perfective or imperfective in terms of aspect. Orientation emanations can be modified by the following spatial dimensions only.

2. Directionality of emanation:

downward	ลง loŋ 'descend'
inward/ outward	เข้า khâw 'enter'/ ออก ʔɔ̀ɔk 'exit'
hither/ thither	มา maa 'come'/ ไป pay 'go'

3. Highlighted portion of path of emanation:

starting point	จาก càak 'leave'
intermediate point	ข้าม khâam 'cross'
endpoint	สู่ sùu 'get to,' หา hăa 'seek,' ใส่ sày 'put in,' ยัง yaŋ 'toward ,' ที่ thîi 'at (point)'
way	ทาง thaaŋ 'in the direction of (way)'

Orientation emanations have the following two salient characteristics. First, an orientation emanation always shifts laterally. The focus of attention (connected, by means of the line of sight, with the observer's vantage point outside the setting) proceeds along a linear path from an orientated entity to a reference entity, and the path is straight. The axial motion (i.e. extension from the observer's vantage point) has nothing to do with the designation of orientation in the setting. Second, there are no intrinsic directions of an orientation emanation (such as forward or backward), because its producer which functions the determinant for its intrinsic directions does not exist in the setting.

3.2.2. Conceptual Solidity of Perception Emanation

Talmy (1996: 248) states that "the manner in which the various (sensory) modalities behave with respective to the (palpability-related) parameters --- in possibly different ways --- remains at issue." Here I examine the degree of conceptual solidity of different perception emanations pertaining to the following sensory modalities: (1) the visual modality (the sense of sight), (2) the auditory modality (the sense of hearing), (3)

the olfactory modality (the sense of smell), and (4) the tactile modality (the sense of touch).

I adopt the notion "conceptual solidity" as a cognitive-functioning parameter for evaluating the abstractness of perception emanations. This parameter is a simplified and reduced version of Talmy's palpability-related parameters that I mentioned in Section 2.1.1. It specializes in spelling out values at the semiabstract level, ranging from the less abstract (solider) to the more abstract (less solid). The degree of conceptual solidity is inversely proportional to the degree of abstractness. Since emanation is semiabstract in nature, it need not cover the concrete level and the extreme abstract level. I assume that the degree of conceptual solidity of perception emanations of each type is determined by the following two points: (1) whether or not they are manipulated for some purpose; (2) how their goal entities are characterized.

1. Controllability

Whether each type of perception emanation can or cannot be described as being launched and controlled by a person for a certain purpose (i.e. whether it can be of agentive type) is recapitulated below.

(1) visual emanation	may include an agent
	and may be launched and controlled by an agent
(2) auditory emanation	may include an agent
	and may be launched by an agent
(3) olfactory emanation	may include an agent
	and may be launched by an agent
(4) tactile emanation	usually does not include an agent
	and is not launched by an agent

The controllability of an emanation is relevant to the solidity of an emanation. An emanation is seldom imagined to be controllable unless it is conceptualized to being solid. Therefore visual and auditory emanations are conceptually more solid (less abstract) than olfactory and tactile emanations.

2. Region of Goal

Possible imagined schematic regions of goals of perception emanations of each type are recapitulated below.

(1) visual emanation	point, upper surface, middle surface, surrounding space, pervasive space, side space, inner/outer space, way
(2) auditory emanation	pervasive space, side space, inner/outer space, way
(3) olfactory emanation	pervasive space, inner space
(4) tactile emanation	surrounding space, inner space, upper space, way

Among the schematic regions emanations are described as reaching, regions indicated by ทั่ว thûa 'everywhere' are less specific and regions indicated by ที่ thîi 'point' are most specific. Specificity of the goal of emanation correlates to solidness (abstractness) of emanation in such a way that an emanation diffusing 'everywhere' is less solid (more abstract) than an emanation ending up at a 'point.' Furthermore, the less various the endpoint of an emanation is, the less solid (more abstract) the emanation is. Hence, olfactory emanations are least solid (most abstract), tactile emanations are less solid (more abstract), auditory emanations are more solid (less abstract), and visual emanations are most solid (least abstract).

The results of examinations on the two points above are consistent. The degrees of conceptual solidity and abstractness of perception emanations of four types are summarized below.

high <---------- the degree of conceptual solidity ----------> low

(1) visual emanation > (2) auditory emanation >

(4) tactile emanation > (3) olfactory emanation

low <---------- the degree of abstractness ----------> high

(1) visual emanation < (2) auditory emanation <

(4) tactile emanation < (3) olfactory emanation

I have heard that aged carpenters whose senses of sight and hearing have been dulled may still tell the kinds of wood by means of the sense of smell. That is, the olfactory modality of the aged may be more sensitive than the visual and auditory modalities. It can be said that the olfactory modality of human beings in general is relatively weak and so we cannot use it for locating exactly something that smells, but we keep it as long as we live.

3.2.3. Active-Determinative vs. Agentive Source Entities

Endorsing Talmy's "active-determinative principle," I assume that in an emanation event an entity filling the role of the source of emanation is conceived to be active or determinative. However, I hesitate to apply Talmy's "agent-distal object pattern" to all conceptualization patterns of emanation events. The "agentive" is not identical with the "active/determinative." Agentiveness requires volition and intention and is attributed to animate beings, while activeness and determinativeness do not. To be active means to be energetic, and to be determinative means to have the power to direct. Therefore activeness and determinativeness are attributable to inanimate beings such as natural forces as well as to animate beings. I do not agree that all conceptualizations of emanation events are based on the model of our experience of "agency" as discussed by Talmy. That is, an emanation event is best understood as analogous to an agentive event in which an agent who travels, or moves an intermediate object, to a distant object to affect it. Also, I do not believe that the cognitive domain for emanation events will always include an agent participant, and so agentive, rather than thematic, emanation events are basic. Thai emanation expressions suggest that agentless/causerless emanations are no more marked than agentive/causative emanations are. Normally the agent or causer of an emanation is not imagined if it is unknown or irrelevant to the predication of that emanation.

The source objects in emanation events include:

(1.1) a person extending a line of vision in a visual emanation event (i.e. visual perceiver)

(1.2) an object emitting a sound (including a person uttering a message) in an auditory emanation event (i.e. sound producer, message sender)

(1.3) an object emitting an odor in an olfactory emanation event (i.e. odor producer)

(2) an object emitting light in an illumination emanation event (i.e. radiator)

(3) an object casting a shadow in a shadow emanation event (i.e. shadow producer)

(4) an object facing some other distant object in an orientation emanation event (i.e. orientated entity)

The person who is the source in (1.1) extends a detective line of vision to an object to see the object. The person or object in (1.2) emits a stimulative sound that is aurally perceived by a person. The source object in (1.3) emits a stimulative odor that is perceived by a person with the sense of smell. The source object in (2) radiates a visible light. The source object in (3) produces a visible shadow by cutting off the flow of light. These sources are energetic enough to give birth to a moving entity that is intangible but still physically recognizable. A sound, an odor, light and a shadow are recognized directly, while the line of vision is recognized indirectly (inferred from the physical view). The source in (4), namely an orientated entity, produces nothing physically recognizable; it is not a causer (agent) but a reference entity (absolute) for the path of subjective motion of the conceptualizer's focus of attention. Nonetheless orientated entities are still active and determinative in the sense that they (are imagined to) turn to a reference entity and the focus of attention is directed by their (fictive) turning.

3.2.4. Summary

The main points in Section 3.2 are as follows. First, visual, auditory and radiation emanation events are expressed with a relatively large number of different linguistic elements, while tactile and shadow emanation events are expressed with a relatively small number of different linguistic elements. Second, the degree of conceptual solidity of different perception emanations is graded. Visual emanations are most solid (least abstract) and olfactory emanations are least solid (most abstract). Third, source entities in Thai emanation events are imagined to be active and determinative, but not necessarily imagined to have volition or intention.

Chapter 4

The Linguistic Realization of Emanation Events

In this chapter I investigate how emanation events are linguistically realized in the Thai language. According to Langacker (1991b: 294), how a situation is construed determines whether a particular linguistic structure is appropriate to code it, while a linguistic structure embodies conventional imagery and thus imposes a certain construal on the situation it codes. That is, "construal" and "coding" are interdependent. In this chapter, I therefore investigate the interrelation between construals of emanation events Thai speakers express and the linguistic structures activated for that purpose.

I should state at the outset, however, that this study does not deal with such expressions as those encompassing the passive marker (ถูก thùuk, โดน doon) or the causative marker (ทำ tham, ให้ hây). Therefore, only non-passive and non-analytical-causative expressions for emanation events are dealt with. This is to avoid making my syntactic analysis too complicated. I will concentrate on the basic syntactic structures of Thai emanation expressions.

Additionally, I will employ the following working definitions of verb and preposition in this study. If a linguistic element can function as a verb in isolation, then it will be categorized as a verb. If not, it will be categorized as a preposition. According to these working definitions, those lexical items like มา maa 'come (toward some reference entity),' ลง loŋ 'descend (downward),' ตรง troŋ 'go straight (at),' ตาม taam 'follow (along),' ข้าม khâam 'cross (across),' หา hăa 'seek (toward),' สู่ sùu 'get to (toward),' จาก càak 'leave (from),' ถึง thŭŋ 'reach (to),' จด còt 'touch (to)' and so on are taken as verbs, while the lexical item ยัง yaŋ 'toward' (which does not mean 'bring' any more in modern Thai) is taken as a preposition.

This chapter is divided into three sections, as follows. Section 4.1 discusses Thai emanation events with respect to event structures. I classify emanation event structures into two main types, namely simplex and integrated types. This classification is based on the surface forms of predicates for Thai emanation events. The simplex type is realized by a single verb phrase, while the integrated type is realized by serial verb constructions or the combination of one verb phrase and one prepositional phrase.

Section 4.2 discusses the interrelation between the grammatical relations (subject and object) and the role archetypes included in an emanation event ICM (mover, absolute and agent). I try to show how the syntactic structures of emanation expressions are related to the semantic structures of emanation events. Section 4.3 examines clause patterns of Thai emanation events of all subtypes.

4.1. Event Structure Types

Before examining the event structure of Thai emanation events, I outline the concept of "event structure" below.

In analyzing verbal meanings, linguists have presupposed the universal structure of events as presented by the verbs in natural language, namely "event structure" (cf. Van Voorst 1988, Grimshaw 1990, Dowty 1979, among others). Event structure is the causal and aspectual organization that verbal meanings have in human languages. Croft (1998a) calls this conceptualization "the idealized cognitive model for verbal events (event ICM)." The causal chain (or force-dynamic chain) in the event ICM is graphically represented below. All possible causal-aspectual types of verb-meaning are hypothesized to stem from this model.

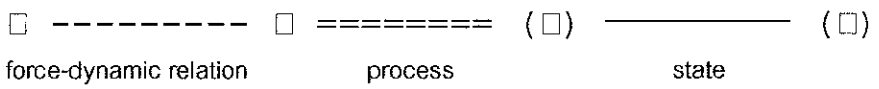


Figure 3: Idealized Cognitive Model for Verbal Events
(adapted from the figure in Croft (1998a: 47))

The event ICM is made up of three sub-events or segments: (a) force-dynamic relationship, (b) process, and (b) state. Each segment is in a causal relation with the ensuing segment. Causal relations between segments are represented by the unidimensional linear sequence of segments. This sequence is called the causal chain. Participants are situated at □ positions---the beginning or endpoint of the segments where they come into the causal chain. If two participants are involved in a segment, their positions are determined by their force-dynamic relationship. It should be noted

that participants do not occupy just a 'point' in the causal chain, but each participant occupies a 'span' of the causal event. For example, in a prototypical transitive event (canonical event) where one participant acts on another participant which then undergoes a resultant change of state, the former initiator participant is engaged all the way through the first segment of the event, and the latter endpoint participant is then involved all the way through to the completion of the resulting state. The same endpoint participant involved throughout the non-force-dynamic sub-events (process and state) is characterized by a parenthesized repetition of the argument constant, e.g. (x). Nonparenthesized identical constants, if any, represent distinct argument positions. They are manifested as reflexives (e.g. 'I served myself some dessert from the kitchen').

It is found that the event structure of Thai emanation events is mostly "integrated," that is, it is composed of more than one verb's event structure integrated into one (i.e. the event structure of a serial verb construction). As a limiting case, an emanation event is represented by only one verb phrase and has a "simplex" event structure (i.e. event structure of a single verb phrase). The integrated event structure is categorized into two types: "simultaneous" and "sequential" types. In the following I account for the all these types of emanation event structure.

4.1.1. Simplex Structure

A simplex emanation event is a simple metaphor ("projection mapping" in Fauconnier's (1997: 9) terminology) where things in the abstract, intangible domain are projected onto the structure of the physical, tangible domain. The intangible entities in (46) are metaphorically construed as tangible entities moving in a physical space.

(46) a. กลิ่น กระจาย
klîn **kracaay**
odor spread
An odor spread.

b. เขา กวาด สายตา
kháw **kwàat** **săay taa**
PRONOUN sweep line of vision

S/he swept her/his line of vision.

(46a) represents a simplex thematic olfactory emanation event, in which กลิ่น klîn 'odor' is taken as a physical mover spontaneously moving. (46b) represents an agentive simplex visual emanation event, in which สายตา săay taa 'line of vision' is taken as a physical mover manipulated by an agent.

However, clauses that consist of a single verb phrase encoding a simplex emanation event like (46) are unacceptable to some native Thai speakers; at least, they are less acceptable than clauses that consist of more than one verb phrase (i.e. serial verb constructions) encoding an integrated emanation event, as I will discuss in the following subsections.

By adopting Croft's (1998a) notation for the event ICM (idealized cognitive model for verbal event), I demonstrate the simplex emanation event structure as below.

(47) a.

กลิ่น	กระจาย
klîn	kracaay
odor (x)	spread

An odor spread.

x ========== (x) mover (x) MOVE (spread)

********** motion **********

Sbj

b.

เขา	กวาด	สายตา
kháw	kwàat	săay taa
s/he (x)	sweep	line of vision (y)

S/he swept her/his line of vision.

x ---------- y ====== (y) agent (x) MOVE (sweep) mover (y)

********* cause-activity *******

Sbj Obj

The simplex structure is represented by a single diagram, as illustrated in (47), while the integrated structure is represented by a set of diagrams, as in (49) and (50) below.

4.1.2. Integrated Structure

Compared to (46) above, clauses in (48) below increase in acceptability due to the added lexical items, that is, the directional verb (ออกไป ʔɔ̀ɔk pay 'exit + go,' มา maa 'come') and the locative preposition (ทั่ว thûa 'all over') which elaborate geometrical concepts such as paths and locations and the verb of vision or olfaction (มองดู mɔɔŋ duu 'look + see,' คลุ้ง khrúŋ 'spread, reek') which designates particular activities or states bearing on emanation events. These added components contribute to the structure of a given emanation event complex in terms of setting, manner or purpose, and thereby helping us more easily understand the global situation where a given emanation event unfolds.

(48) a.

เขา	กวาด	สายตา	ออก	ไป
kháw	kwàat	săay taa	ʔɔ̀ɔk	pay
PRONOUN	sweep	line of vision	exit	go

S/he swept out her/his line of vision. (S/he looked around.)

b.

เขา	กวาด	สายตา	มอง	ดู	สนาม
kháw	kwàat	săay taa	mɔɔŋ	duu	sanăam
PRONOUN	sweep	line of vision	look	see	field

S/he swept her/his line of vision to look at the field.

(S/he looked around the field.)

c.

เขา	มอง	กวาด	สายตา
kháw	mɔɔŋ	kwàat	săay taa
PRONOUN	look	sweep	line of vision

S/he looked and swept her/his line of vision. (S/he looked around.)

d.

กลิ่น	กระจาย	มา
klìn	kracaay	maa
odor	spread	come

The odor came spreading. (The odor spread to her/him.)

e.	กลิ่น	กระจาย	คลุ้ง	ทั่ว	บริเวณ
	klîn	kracaay	khrúŋ	thûa	bɔɔriween
	odor	spread	reek	all over	region

The odor spread reeking all over the region.

The integrated structure subsumes simultaneous and sequential structures, which are further explained below.

4.1.2.1. Simultaneous Structure

The simultaneous type of integrated event structure is composed of more than one event structure, all of which have the same time span. The simultaneous event structure is represented by parallel diagrams, as in (49). (49a) represents a thematic visual emanation event in the simultaneous structure. (49b) and (49c) represent an agentive visual emanation event in the simultaneous structure.

(49)	a.	สายตา	มอง	ขึ้น	ไป
		săay taa	mɔɔŋ	khûn	pay
		line of vision (x)	look	ascend	go

The line of vision looked [stretched] upward.

x ========== (x) mover (x) MOVE (look, stretch)

********** motion **********

Sbj

x ========== (x) mover (x) MOVE (ascend)

********** motion **********

[Sbj]

x ========== (x) mover (x) MOVE (go)

********** motion **********

[Sbj]

b.	เขา	มอง		ขึ้น	ไป
	kháw	mɔɔŋ		khúun	pay
	s/he (x)	look	[line of vision (y)]	ascend	go

S/he looked [and her/his line of vision stretched] upward.

x ========== (x) experiencer (x) ACT (look)

********** activity **********

Sbj

(y) ========== (y) [mover (y)] MOVE (ascend)

********** motion **********

[Sbj]

(y) ========== (y) [mover (y)] MOVE (go)

********** motion **********

[Sbj]

c.	เขา	มอง	กวาด	สายตา
	kháw	mɔɔŋ	kwàat	săay taa
	s/he (x)	look	sweep	line of vision (y)

S/he looked and swept her/his line of vision.

x ========== (x) experiencer (x) ACT (look)

********** activity **********

Sbj

x ---------- y ====== (y) agent (x) MOVE (sweep) mover (y)

******** cause-activity ********

[Sbj] Obj

Each diagram is equated with a "mental space" and each set of parallel diagrams forms a "blend" structure in Fauconnier's terms. In the blending process, structures from two input spaces are projected to a separate space, the blend. The blend inherits partial structure from the input spaces, and has an emerged structure of its own (Fauconneir and Turner 1996). The simultaneous structure in (49) is composed of two or three parallel diagrams, which together represent a coherent mental space blended. In (49a) and (49b), the path of a visual emanation is represented by the second and third diagrams **khŭn pay** ขึ้นไป 'ascend + go.' In (49c), the manner of a visual emanation is represented by the second diagram **kwàat săay taa** กวาดสายตา 'sweep + line of vision.'

Note that the vision verb **mɔɔŋ** มอง 'look' denotes a motion in (49a) while it denotes an activity in (49b) and (49c). These different designations are attributed to difference in the nature of the clausal subject, namely, the former subject is a viewer's line of vision (mover) and the latter subject is a viewer (experiencer).

(49a) and (49b) represent physically the same visual activity event. But they differ in terms of conceptual foregrounding and informational presupposition, as follows. (49b) profiles a person casting her/his eyes as a whole, while (49a) brings into focus the line of vision used for seeing, presupposing the given knowledge of the existence of its possessor.

4.1.2.2. Sequential Structure

The sequential emanation event structure comprises more than one sequential sub-event. In a thematic emanation event in the sequential structure exemplified in (50a), more than one thematic motion sub-event sequentially occur. The last verb in clauses representing sequential thematic emanation events denotes an inchoative motion at the ceasing phase (e.g. stopping, hitting, covering up). In (50a), for example, the last verb **yùt** หยุด 'stop' expresses the termination of the line of vision's motion. An agentive emanation event in a sequential structure is exemplified in (50b). Here, a person carries out an action which results in an intended process or state. In (50b), for example, the first verb **thɔ̂ɔt** ทอด 'stretch' expresses the viewer's action (extending the line of vision) to see something.

(50) a.

สายตา	ไป	หยุด	ที่	เขา
săay taa	pay	yùt	thîi	kháw
line of vision (x)	go	stop	at	her (y)

His line of vision went and rested on her.

x ========== (x) mover (x) MOTION (go)

******* motion ******

Sbj

x ====== (x) ——— (x) mover (x) MOTION (stop)

*** inchoative motion ***

[Sbj]

——— y AT absolute (y)

++ at ++

Oblique

b.

เขา	ทอด	สายตา	มอง
kháw	thɔ̂ɔt	săay taa	mɔɔŋ
s/he (x)	stretch	line of vision (y)	look

S/he stretched his/her line of vision to look out.

x ---------- y ====== (y) agent (x) MOVE (stretch) mover (y)

********* cause-activity ********

Sbj Obj

x ======= (x) experiencer (x) ACT (look)

***** activity *****

[Sbj]

(50) shows concatenated diagrams, which together represent a coherent mental space expanded. In (50a), the first diagram ไป pay 'go' represents the autonomous motion of a person's line of vision. The second diagram หยุด yùt 'stop' represents its

inchoative motion (ceasing motion, in this case), and the third diagram **ที่เขา thîi kháw** 'at her' represents the location of an absolute functioning as the goal. In (50b), the first diagram **ทอดสายตา thɔ̂ɔt săay taa** 'stretch the line of vision' represents a purposeful preliminary action which leads to the inception of the visual activity represented by the second diagram **มอง mɔɔŋ** 'look.'

4.1.3. Event Structures of Each Specific Type of Emanation Event

In what follows I examine event structures of Thai emanation events of each specific type.

4.1.3.1. Perception Emanation Event

Here I examine what kinds of event structure perception emanation events of each subtype may exhibit.

4.1.3.1.1. Visual Emanation Event

A visual emanation event may have a simplex structure, as in (51), or a simultaneous structure, as in (52), or a sequential structure, as in (53). However, expressions of thematic visual emanation events in the simplex structures are not found in my data.

(51)

เขา	กวาด	สายตา
kháw	kwàat	săay taa
PRONOUN	sweep	line of vision

S/he swept her/his the line of vision. (S/he looked around.)

(52) a.

สายตา	ทอด	ไป	สู่	ท้องฟ้า
săay taa	thɔ̂ɔt	pay	sùu	thɔ́ɔŋ fáa
line of vision	stretch	go	get to	sky

Her/His line of vision stretched toward the sky.

b.

เขา	ตวัด	สายตา	ผ่าน	หน้า	น้องสาว
kháw	tawàt	săay taa	phàan	nâa	nɔ́ɔŋ săaw
PRONOUN	whip	line of vision	pass	face	sister

อีกครั้ง

ʔiik khráŋ
again

S/he moved her/his line of vision across her/his sister's face again.

(S/he looked at her/his sister again.)

(53) a.

สายตา	ไป	กระทบ	กับ	ความเคลื่อนไหว
sǎay taa	**pay**	**krathóp**	**kàp**	**khwaam khlɯ̂an wǎy**
line of vision	go	hit	with	motion

บน	ฝา
bon	**fǎa**
on	wall

Her/His line of vision went out and met with some motion on the wall.

b.

เธอ	ตวัด	สายตา	มอง	ดู	ชายกระโปรง
thəə	**tawàt**	**sǎay taa**	**mɔɔŋ**	**duu**	**chaay kraproon**
PRONOUN	whip	line of vision	look	see	skirt

ของ	หญิงสาว
khɔ̌ɔŋ	**yǐŋ sǎaw**
of	girl

S/he moved her/his line of vision to look at the skirt of the girl.

4.1.3.1.2. Auditory Emanation Event

An auditory emanation event may have a simplex structure, as in (54), or a simultaneous structure, as in (55), or a sequential structure, as in (56).

(54) a.

แม้แต่	คำ	เดียว	ก็	ไม่	ร่วง
méɛ tèɛ	**kham**	**diaw**	**kɔ̂**	**mây**	**rûaŋ**
even	word	single	also	NEGATIVE	drop off

Even a single word did not drop off. (S/he did not speak at all.)

b.

เขา	กระแทก	เสียง
kháw	**krathêɛk**	**sǐaŋ**
PRONOUN	bang	sound

S/he burst out her/his voice. (S/he shouted.)

(55) a.

เสียง	ตะโกน	ออก	มา	จาก	ห้องน้ำ
sǐaŋ	**takoon**	**ʔɔ̀ɔk**	**maa**	**càak**	**hɔ̂ŋ nám**

sound shout exit come leave bathroom

A shout came out of the bathroom.

b. ทับทิม ร้อง ไล่ หลัง ไป เมื่อ นาง เสม

thápthim rɔ́ɔŋ lây lăŋ pay mɯ̂a naaŋ sěem

Thapthim cry chase back go when woman Seem

เดิน กลับ ไป ใน ครัว

dəən klàp pay nay khrua

walk turn back go in kitchen

Thapthim cried after Seem's back as Seem returned to the kitchen.

(56) a. เสียง ต่างๆ จาก ห้อง ข้างเคียง ดัง มา

sĭaŋ tàaŋ tàaŋ càak hɔ̂ŋ khâŋ khiaŋ daŋ maa

sound various leave room next loud come

กระทบ หู เสมอ

krathóp hŭu samə̌ə

hit ear often

Loud sounds from the next room came and struck her/his ears often.

b. เขา ส่ง เสียง ถาม จาก ข้างนอก ห้อง

kháw sòŋ sĭaŋ thăam càak khâŋ nɔ̂ɔk hɔ̂ŋ

PRONOUN send sound ask leave outside room

S/he projected her/his voice to ask from the outside the room.

4.1.3.1.3. Olfactory Emanation Event

An olfactory emanation event may have a simplex structure, as in (57), or a simultaneous structure, as in (58), or a sequential structure, as in (59). But I did not find expressions of agentive olfactory emanation events in a sequential structure in my data.

(57) a. กลิ่น กระจาย

klîn kracaay

odor spread

A smell diffused.

b. ดอกไม้ กำจาย กลิ่น

đɔ̀ɔk máy kamcaay klîn

flower spread odor

Flowers spread a fragrance.

(58) a.

กลิ่น	จระเข้	คาว	จัด	ระเหย	ออก
klîn	cɔɔrakhêe	khaaw	càt	rahɔ̌ɔy	ʔɔ̀ɔk
odor	crocodile	stinking	strong	evaporate	exit

มา	จาก	น้ำ	ใน	บ่อ
maa	càak	nám	nay	bɔ̀ɔ
come	leave	water	in	pond

A strongly stinking smell of crocodiles came out of the water in the pond.

b.

ดอก	ขาว	ส่ง	กลิ่น	หอม	เย็น	ไป
dɔ̀ɔk	khăaw	sòŋ	klîn	hɔ̌ɔm	yen	pay
flower	white	send	odor	fragrant	cool	go

ทั่ว	บริเวณ
thûa	bɔɔriween
all over	region

A white flower sent a cool fragrance out all over the region.

(59)

กลิ่น	ไอ	ดิน	โชย	เข้า	จมูก
klîn	ʔay	din	chooy	khâw	camùuk
odor	gas	soil	blow gently	enter	nose

The smell of soil gas blew and entered her/his nose.

4.1.3.1.4. Tactile Emanation Event

My data do not include expressions of simplex tactile emanation events. A tactile emanation event may have a simultaneous structure, as in (60), or a sequential structure, as in (61).

(60)

คลื่น	ความร้อน	ทะลัก	วาบๆ	มา
khlûuun	khwaam rɔ́ɔn	thalák	wâap wâap	maa
wave	heat	leak out	luminous	come

จาก	ด้านใน
càak	dâan nay
leave	inside

Hot waves came suddenly leaking out from inside.

(61)

ลม	หนาว	โกรก	เข้า	มา	กระทบ	ผิวหนัง
lom	nǎaw	kròok	khâw	maa	krathóp	phĭw nǎŋ
wind	cold	blow strongly	enter	come	hit	skin

A cold wind blew in and hit her/his skin.

4.1.3.2. Radiation Emanation Event

A radiation emanation event may have a simplex structure, as in (62), or a simultaneous structure, as in (63), or a sequential structure, as in (64).

(62) a.

แสง	เข้า
sěɛŋ	khâw
light	enter

Light came in.

b.

ตา	ส่ง	ประกาย
taa	sòŋ	prakaay
eye	send	spark

Her/His eyes sent sparks.

(63) a.

แสงไฟ	สาด	จาก	ภายใน	บ้าน	น้อย
sěɛŋ fay	sàat	càak	phaay nay	bâan	nɔ́ɔy
light	splash	leave	inside	house	little

Light splashed out from the inside the house a little.

b.

ดวงจันทร์	ทอ	แสง	สลัวๆ	ลอด	ลานเมฆ
duaŋ can	thɔɔ	sěɛŋ	salŭa salŭa	lɔ̂ɔt	laan mêek
moon	weave	light	indistinct	go through	cloud

สี	ขุ่น
sĭi	khùn
color	murky

The moon shed an indistinct light through murky clouds.

(64) a.

ไฟ	บน	เพดาน	สว่าง	จ้า	ลง
fay	bon	pheedaan	sawàaŋ	câa	loŋ
light	on	ceiling	bright	strong	descend

มา	จับ	ที่	ห้อง	ลูกกรง
maa	càp	thîi	hɔ̂ŋ	lûuk kroŋ

come	hold	at	room	grille	

The light on the ceiling brightly came down and rested at the cell.

b.

พระอาทิตย์	ทอ	แสง	สี	ทอง	ลง	ทาบ
phrá? ʔaathît	thɔɔ	sěɛŋ	loŋ	thɔɔŋ	loŋ	thâap
sun	weave	light	color	gold	descend	cover

กับ	ผิว	น้ำ
kàp	phĭw	nám
with	surface	water

The sun shed a gold light which came down and covered the surface of the water.

4.1.3.3. Shadow Emanation Event

A shadow emanation event may have a simplex structure, as in (65), or a simultaneous structure, as in (66), or a sequential structure, as in (67). Expressions of thematic shadow emanation events in a sequential structure and agentive shadow emanation events in a simplex structure are not found in my data, however.

(65)

เงา	ตะคุ่ม	ของ	ตัว	ทอด	คู่
ŋaw	takhûm	khɔ̌ɔŋ	tua	thɔ̂ɔt	khûu
shadow	indistinct	of	self	stretch	pair

เป็น	เพื่อน
pen	phûan
COPULA	friend

An indistinct shadow of herself/himself stretched out as a companion.

(66) a.

เงา	ไม้	ทอด	ทาบ	พื้น	น้ำ
ŋaw	máy	thɔ̂ɔt	thâap	phúuun	nám
shadow	tree	stretch	cover	surface	water

The shadow of a tree stretched out and covered the surface of the water.

b.

มะม่วง	ขยับ	เงา	ยาว	จาก	โคน	ต้น
mamûaŋ	khayàp	ŋaw	yaaw	càak	khoon	tôn
mango	budge	shadow	long	leave	trunk	tree

ทอด	ยืด	ไป	ตาม	พื้น
thɔ̂ɔt	yûuut	pay	taam	phúuun

stretch lengthen go follow ground

The mango tree stretched its long shadow from its trunk away over the ground.

(67) หลุมพอ ต้น ใหญ่ แผ่ กิ่งก้านสาขา

lŭmphɔɔ tôn yày phèɛ kìŋ kâan săakhăa

Lumpho tree CLASSIFIER big spread out branches

ทอด เงา ไป ยาว ไกล ปกคลุม หาดทราย

thɔ̂ɔt ŋaw pay yaaw klay pòk khlum hàat saay

stretch shadow go long far cover sand beach

The big Lumpho tree branching out stretched its shadow far out and (the shadow) covered the sand beach.

4.1.3.4. Orientation Emanation Event

An orientation emanation event must be thematic and have simultaneous structure, as in (68). Note that the subject of the transitive clause in (68b) is not the agent but the indirect initiator of the described orientation emanation event (i.e. orientation-setter).

(68) a. ห้อง หัน ออก สู่ ทะเล

hôŋ hăn ʔɔ̀ɔk sùu thalee

room turn exit get to sea

The room turned out toward the sea.

(The room looks out toward the sea.)

b. ยาย สอน เบือน หน้า ออก จาก ภาพ นั้น

yaay sɔ̌ɔn bɯan nâa ʔɔ̀ɔk càak phâap nán

old woman Sorn turn face exit leave picture that

Sorn turned her face away from that picture.

4.1.3.5. Summary

The structure types of Thai emanation event are summarized as follows:

1. Simplex structure: encoding a simplex emanation event

2. Integrated structure: encoding an integrated emanation event:

2.1. Simultaneous structure: encoding an emanation event that is modified in more than one perspective

2.2. Sequential structure: encoding an emanation event that consists of more than one sub-event occurring in succession.

This classification is based on the surface forms of predicates representing emanation events. The simplex emanation event is expressed by one verb phrase whereas the integrated emanation event is expressed by a serial verb construction or a verb phrase combined with a prepositional phrase.

Semantic constraints on emanation expressions of these different structure types are as follows. Verbs included in clauses expressing emanation events in the simultaneous structure must denote processes with the same time span. The last verb in clauses expressing thematic emanation events of the sequential type must denote an inchoative motion at the terminal phase such as stopping, hitting and covering. The first verb in clauses expressing agentive emanation events of the sequential type must denote an inchoative motion at the initial phase such as launching or stretching a mover.

Chart 2 below shows what event structure types the each type exhibits. Note that it shows the result of my analysis based on my data of Thai emanation expressions that I have collected for this study. Therefore, the unchecked blanks in the chart might be filled up if more data are provided.

1.1. Visual		1.2. Auditory		1.3. Olfactory		1.4. Tactile	
Thematic		Thematic		Thematic		Thematic	
Simplex		Simplex	✓	Simplex	✓	Simplex	
Simultaneous	✓	Simultaneous	✓	Simultaneous	✓	Simultaneous	✓
Sequential	✓	Sequential	✓	Sequential	✓	Sequential	✓
Agentive		Agentive		Agentive		Agentive	
Simplex	✓	Simplex	✓	Simplex	✓	Simplex	
Simultaneous	✓	Simultaneous	✓	Simultaneous	✓	Simultaneous	
Sequential	✓	Sequential	✓	Sequential		Sequential	

	2. Radiation		3. Shadow		4. Orientation	
	Thematic		Thematic		Thematic	
	Simplex	✓	Simplex	✓	Simplex	
	Simultaneous	✓	Simultaneous	✓	Simultaneous	✓
	Sequential	✓	Sequential		Sequential	
	Agentive		Agentive		Agentive	
	Simplex	✓	Simplex		Simplex	
	Simultaneous	✓	Simultaneous	✓	Simultaneous	
	Sequential	✓	Sequential	✓	Sequential	

Chart 2: Event Structures of Specific Types of Thai Emanation Event

From Chart 2 above, we see the following points. First, all of the specific types can be thematic emanation events in the simultaneous structure. Second, all orientation emanation events are thematic and have the simultaneous structure. Third, all tactile emanation events (expressed in my data) are thematic and have the integrated structure. Fourth, there are no simplex thematic visual and tactile emanation events, sequential agentive olfactory emanation events, and sequential thematic and simplex agentive shadow emanation events (in my data). From these findings we can see the Thai speakers' ways of structuring and understanding emanation events of each type.

4.2. Interrelation between Role Archetypes and Grammatical Relations

In this section, I discuss the relationship between the semantic and syntactic structures of Thai emanation expressions. In particular, I examine which role archetypes participating in emanation event ICM (mover, absolute, agent) are represented by which grammatical relations (subject and object) in clauses for emanation events of each type.

Langacker states that the basic grammatical relations 'subject and direct object' cannot be equated with any single role archetype, since those relations are determined in terms of relative salience. The subject is invariably identified as the participant that lies the farthest upstream of the flow of energy (the head of the profiled action chain), while the direct object is identified as the participant distinct from the participant subject that lies the farthest downstream of the flow of energy (the tail of the profiled action chain). The subject and direct object are selected to lie at opposite extremities of the profiled action chain. Their relationship is, thus, prominence-based by virtue of the inherent salience of the polar opposites, and their association with agent and patient is secondary. Langacker (1998a: 26) characterizes the subject and direct object, respectively, as 'the figure within the profiled relationship (the most prominent clausal element)' and as 'the prominent participant lying downstream from the participant subject in the energy flow (second-most prominent clausal element; the most prominent clausal element within the ground).' In short, subjects specify trajectors of profiled relations (or relational figures), and direct objects specify landmarks of profiled relations (or relational grounds). Subjects and direct objects are the most central (or direct) participants in the process profiled by a finite clause and therefore they are morphologically unmarked. Other, less central (or oblique), participants are marked with oblique case markers or other elements such as adpositions.

Prototypically, a finite transitive clause profiles a process construed as constituting a single canonical event with a canonical agent (the volitional energy source who initiates the activity in the event) and a canonical patient (the energy sink that undergoes a resulting internal change of state), and its subject and direct object code the agent and patient, respectively (though not every clause does so and one that

does may still deviate from the prototype due to selection or other factors). The subject assumes its semantic prototypical value as agent, and the direct object as patient.

Langacker (1987: 234) has noticed that verbs of physical motion/action (e.g. move, approach, run, kick, slap) and verbs/adjectives of perception and mental or emotional attitude (e.g. like, please; think about, preoccupy; see, be visible to) differ in the way of selecting subjects. The former verbs mostly take a mover/actor as subject by virtue of the clear basis they provide for determining the figure-ground organization, that is, normally a physical mover/actor is in primary focus. Consequently, there are relatively few exceptions to the choice of the mover/actor as subject. In contrast, the latter verbs, due to lack of a clear basis for an intrinsic figure-ground asymmetry, can choose a subject more flexibly and the choice depends on the image selected to structure the scene. For example, experiencers and stimuli involved in mental states (e.g. to like, to enjoy, to fear) are both encoded either as subjects or as objects in Japanese, but experiencers are normally subjects and not objects in English (Croft 1998b: 84-85). Thus, the choice of subject relies on our imagery (i.e. the ability to construe a conceived situation in alternate ways) and furthermore it may have become fixed historically.

The results of examination of the relationship between grammatical relations and role archetypes in thematic and agentive emanation expressions in my data are as follows.

The clausal subjects of thematic emanation expressions mostly represent movers, as exemplified in (69).

(69) a.

เสียง	ลอย	ลม	ขึ้น	ไป	ถึง	ข้างบน
sĭaŋ	lɔɔy	lom	khûn	pay	thŭŋ	khâaŋ bon
sound	float	wind	ascend	go	reach	upstairs

A sound floated up along the wind to the upstairs.

b.

แสง	นั้น	ทอ	ลง	สู่	บริเวณ	กว้าง
sĕɛŋ	nán	thɔɔ	loŋ	sùu	bɔɔriween	kwâaŋ
light	that	weave	descend	toward	region	wide

That light shone and came down toward a wide region.

The clausal subject of (69a) represents a sound, which is a mover in an auditory emanation event. The clausal subject of (69b) represents a light, which is a mover in a radiation emanation event.

However, subjects of auditory and olfactory perception verbs used in thematic emanation expressions of the auditory and olfactory types (e.g. **ได้ยิน dâyyin** 'hear' in (70a) and **ได้กลิ่น dây klîn** 'get an odor, smell' in (70b)) and verbs for turning and pointing used in orientation emanation expressions (e.g. **หัน hăn** 'turn' in (70c) and **ชี้ chíi** 'point' in (70d)) must represent an absolute (aural perceiver, olfactory perceiver, orientated entity, indirect initiator).

(70) a.

หู	เขา	ได้ยิน	เสียง	พูด	ใกล้	เข้า	มา
hŭu	khăw	dâyyin	sĭaŋ	phûut	klây	khâw	maa
ear	PRONOUN	hear	sound	speak	near	enter	come

Her/His ears heard sounds of speech approaching.

b.

เขา	ได้	กลิ่น	หอม	อบอวล	ไป
khăw	dây	klîn	hɔ̆ɔm	ʔɔ̀pʔuan	pay
PRONOUN	get	odor	fragrant	pervade	go

ทั่ว
thûa
all over

S/he smelled a fragrance pervading all over.

c.

ห้อง	นี้	หัน	ไป	ทาง	ทิศตะวันออก
hɔ̂ŋ	níi	hăn	pay	thaaŋ	thít tawan ʔɔ̀ɔk
room	this	turn	go	way	the west

This room turned toward the west. (This room faces toward the west.)

d.

นักเรียน	ชี้	ไป	ที่	ป้าย
nák rian	chíi	pay	thîi	pâay
student	point	go	place	signboard

The student pointed at the signboard.

The clausal subject of (70a) represents an aural perceiver's ears, which is a reference entity in an auditory emanation event. The clausal subject of (70b) represents an olfactory perceiver, which is a reference entity in an olfactory emanation event. The clausal subject of (70c) represents an orientated entity, whose orientation is at issue in an orientation event. The clausal subject of (70d) represents an indirect initiator, whose pointing action starts an orientation emanation event (i.e. the focus of attention's shift from her/his finger to a reference entity).

Verbs for hitting and touching used in thematic emanation expressions of the radiation type (e.g. กระทบ krathóp 'hit' in (71a) and ต้อง tôŋ 'meet' in (71b)) also may represent an absolute (illuminated entity).

(71) a.

หลังคา	กระเบื้อง	กระทบ	แสงแดด	ยามเช้า
lăŋkhaa	krabʉ̂aŋ	krathóp	sɛ̌ɛŋ dɛ̀ɛt	yaam cháw
roof	tile	hit	sunlight	morning

The tiled roof was hit by the sunlight in the morning.

b.

เกล็ด	สี	ความ	ของ	มัน	ต้อง	แสง	อาทิตย์
klèt	sǐi	khwaam	khɔ̌ɔŋ	man	tôŋ	sɛ̌ɛŋ	ʔaathít
scale	color	blue	of	PRONOUN	touch	light	sun

แวววาว
wɛɛwwaaw
brilliant

Its blue scales were touched by the sunlight and glowed.

The object of a verb in thematic emanation expressions mostly represents an absolute (reference entity), as in (69a) above and (72) below.

(72)

สายตา	มอง	ไป	ตาม	แม่น้ำ
sǎay taa	mɔɔŋ	pay	taam	mɛ̂ɛ nám
line of vision	look	go	follow	river

Her/His line of vision looked out and followed the river.

The object of the first verb ลอย lɔɔy 'float' in (69a) represents the wind along which the sound floats, which is an absolute in an auditory emanation. The object of the last verb ตาม taam 'follow' in (72) represents a seen entity, which is an absolute in a visual emanation event.

But the object of auditory and olfactory perception verbs in thematic emanation expressions of the auditory and olfactory types must represent a mover (sound, odor), as in (70a) and (70b) above. In addition, verbs for hitting and touching in thematic emanation expressions of the radiation type may represent a mover (light), as in (71a) and (71b) above.

As Langacker argues, the clausal subject is the most salient clausal element which is identified as participant conceptually foregrounded (or relational figure). On this basis, the findings here are interpreted as the following. First, a mover is mostly foregrounded in thematic emanation events. A mover is a possible relational figure in all thematic emanation events, except for the orientation type where the mover is unnamed. Second, an absolute can be foregrounded in thematic emanation events of the auditory, olfactory, radiation and orientation types (as aural perceiver, olfactory perceiver, illuminated entity, orientated entity, and indirect initiator).

Subjects and objects in agentive emanation expressions, on the other hand, always represent agents and a movers/absolutes, respectively, as in (73).

(73)	ดวงจันทร์	ทอ	แสง	ลอด	ลานเมฆ
	duaŋ can	thɔɔ	sɛ̌ɛŋ	lɔ̂ɔt	laan mêek
	moon	weave	light	go through	cloud

The moon shed light through the clouds.

In (73), the clausal subject represents the moon, which is an agent in a radiation emanation event. The object of the first verb ทอ thɔɔ 'weave' represents light, which is a mover. The object of the second verb ลอด lɔ̂ɔt 'go through' represents clouds through which light proceeds, which is an absolute.

Agents are thus in primary focus in agentive emanation events, and movers and absolutes can be designated as relational grounds.

4.3. Clause Patterns for Emanation Events

In this section I discuss clause patterns used for representing emanation events in Thai, which are taken from data I gathered for this study. This section is divided into two subsections. Section 4.3.1 presents clause patterns for thematic emanation events and Section 4.3.2 presents those for agentive emanation events.

I show clause patterns of emanation events by means of Phrase Structure Rules (PS rules). In principle, there are two kinds of information indicated by PS rules, namely, syntactic categories and the linear order of syntactic categories. Below is an example of the formulation of clause patterns for simultaneous thematic emanation events of the radiation type by means of PS rules.

Tier 1:	NP	VP * (2-4) (PP)
Tier 2:	MOVER	|
Tier 3:	Light	motion/illumination/emission/length

This formulation has three tiers. The first tier consists of syntactic categories at the phrasal level: NP (noun phrase), VP (verb phrase) and PP (prepositional phrase). The VP can be realized as a verb if it is intransitive or a verb followed by a noun phrase if it is transitive. The asterisk * used here indicates the number of VP's. The number of the VP with asterisk must be at least two. For the VP's with the asterisk, I further specify the minimum and maximum numbers of VP's in each pattern. In the example above, the maximum and minimum number of the VP's are two and four, respectively. The syntactic categories inside parentheses are optional. The PP in the example above is optional.

The second tier consists of the role archetype of the grammatical relations (especially, the subject), MOVER, ABSOLUTE and AGENT, or the peripheral semantic role, INDIRECT INITIATOR (orientation-setter in orientation emanation event). In the example above, the role archetype of the subject is MOVER.

The third tier, which is semantic in nature, consists of the semantic category of the subject referent (e.g. light, illuminated entity, radiator) and the semantic type of verb in the VP (i.e. motion, action, vision, audition, olfaction, illumination, emission, distance,

length). In the example above, the subject referent is light, and verbs for motion, illumination, emission and length may be used in the clause pattern.

4.3.1. Clause Patterns for Thematic Emanation Events

In the following, Sections 4.3.1.1, 4.3.1.2 and 4.3.1.3 respectively show clause patterns for thematic emanation events in the simplex, simultaneous and sequential structures.

4.3.1.1. Clause Patterns for Simplex Thematic Emanation Events

The clause pattern for simplex thematic emanation events is composed of a subject NP and a single VP. The verb must specify the path of motion (e.g. มา maa 'come') or the manner of motion (e.g. กระทบ krathóp 'hit'). The verb in the auditory, olfactory and tactile types is intransitive, while the verb in the radiation and shadow types is either intransitive or transitive. The subject NP and object NP represent the MOVER (sound, odor, stream of air, light, shadow) and the ABSOLUTE (illuminated entity, shaded entity), respectively. But roles in the radiation type event can be switched, that is, the subject NP may represent the ABSOLUTE (illuminated entity) and the object NP may represent the MOVER (light) (i.e. Pattern 2). There are no expressions of simplex thematic emanation events of the visual, tactile and orientation types in my data.

Below I present the formulations of clause patterns for simplex thematic emanation events of the auditory, olfactory, radiation and shadow types with examples.

Auditory	NP	VP
	MOVER	|
	Sound	motion

(74) เสียง มา
sĭaŋ maa
sound come
A sound came.

Olfactory NP VP

MOVER |

Odor motion

(75) กลิ่น กระจาย

klîn kracaay

odor spread

An odor spread.

Radiation

Pattern 1: NP VP

MOVER |

Light motion

Condition: If the verb is transitive, its object represents an illuminated entity (ABSOLUTE).

(76) a. แสง เข้า

sɛ̌ɛŋ khâw

light enter

Light came in.

b. แสง ทอ ตา

sɛ̌ɛŋ thɔɔ taa

light weave eye

Light shone her/his eyes.

Pattern 2: NP VP

ABSOLUTE |

Illuminated entity motion

Condition: The verb must be transitive, and its object represents light (MOVER).

(77) กระจก กระทบ แสงแดด

kracòk krathóp sɛ̌ɛŋ dɛ̀ɛt

glass hit sunlight

The glass was hit by the sunlight.

Shadow	NP	VP
	MOVER	|
	Shadow	motion

Condition: If the verb is transitive, its object represents a shaded entity (ABSOLUTE).

(78) a. เงา ของ ตัว ทอด

ŋaw khɔ̌ɔŋ tua thɔ̂ɔt

shadow of body stretch

My shadow extended.

b. เงา ของ ดวงจันทร์ กระทบ ผิว โลก

ŋaw khɔ̌ɔŋ duaŋ can krathóp phǐw lôok

shadow of moon hit surface earth

The shadow of the moon hit the surface of the earth.

4.3.1.2. Clause Patterns for Simultaneous Thematic Emanation Events

The clause patterns for simultaneous thematic emanation events are composed of a subject NP and five VP's at most. One PP or two PP's may be included. A predicate for the visual, radiation and orientation types may be a combination of a single motion VP and a single PP (i.e. Pattern 1), while a predicate for the other types must consist of at least two VP's.

The clausal subject of the visual, tactile and shadow types represents a MOVER (line of vision, stream of air, shadow). The clausal subject of the auditory, olfactory and radiation types represents either a MOVER (sound, odor, light) (i.e. Pattern 1) or an ABSOLUTE (aural perceiver, olfactory perceiver, illuminated entity) (i.e. Pattern 2). On

the other hand, the clausal subject of the orientation type represents an ABSOLUTE (orientated entity, indirect initiator).

Below I present the formulations of clause patterns for simultaneous thematic emanation events of all the specific types with examples.

Visual

Pattern 1:	NP	VP	PP
	MOVER	|	ABSOLUTE
	Line of vision	motion	Seen entity

Condition: The PP must indicate a seen entity (ABSOLUTE).

(79)	สายตา	ปะทะ	กับ	สิ่ง	ที่	ผิดปกติ
	sǎay taa	pathá?	kàp	sìŋ	thîi	phìt pàkatì?
	line of vision	crash	with	thing	RELATIVE PRONOUN	unusual

Her/His line of vision collided with an unusual thing.

Pattern 2:	NP	VP * (2-4)	(PP)
	MOVER	|	
	Line of vision	motion/vision	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is four.
2. Two kinds of verbs may be used: motion and vision verbs. They are intransitive or transitive. The object NP of a motion verb represents an ABSOLUTE (seen entity, other reference entity) and the object NP of a vision verb also represents an ABSOLUTE (seen entity).
3. There must be one motion verb in the verb string. If it consists of more than two VP's, the last verb must be a motion verb.
4. If there are two VP's, at least one verb must be a motion verb as stated above. Thus, the possibilities for the semantic types of verbs are as follows.

i. The two verbs are motion verbs, as in (80a).

ii. One is a motion verb and the other is a vision verb. Each type can be in any position, as in (80b) and (80c). Note that strings in which both verbs are vision verbs are not allowed.

(80) a.

สายตา	กราด	ไป	ทั่ว	ดวงหน้า
săay taa	**kràat**	**pay**	**thûa**	**duaŋ nâa**
line of vision	rake	go	all over	face

His line of vision swept all over her face.

b.

สายตา	ปราย	ดู	หล่อน
săay taa	**praay**	**duu**	**lɔ̀ɔn**
line of vision	cast about	look	PRONOUN

His line of vision moved and looked at her.

c.

สายตา	ท่าน	มอง	ผ่าน	หล่อน	ไป
săay taa	**thân**	**mɔɔŋ**	**phàan**	**lɔ̀ɔn**	**pay**
line of vision	PRONOUN	look	pass	PRONOUN	go

His line of vision looked and passed from her.

5. If there are three VP's, at least one verb must be a motion verb (the same condition as Condition 3). The possibilities for the semantic types of verbs are as follows.

i. The three verbs are all motion verbs, as in (81a).

ii. One verb can be different, namely, a vision verb, which can be in the first or the second position, as in (81b) and (81c).

(81) a.

พระเนตร	ทอด	ตาม	มา	โดยตลอด
phráʔnêet	**thɔ̂ɔt**	**taam**	**maa**	**dooy talɔ̀ɔt**
eye	stretch	follow	come	throughout

His eyes (line of vision) stretched following (me) the whole time.

b.

สายตา	เพ่ง	ตรง	ไป	ที่	จุด	นั้น
săay taa	**phêŋ**	**troŋ**	**pay**	**thîi**	**cùt**	**nán**
line of vision	stare	go straight	go	at	point	that

Her/His line of vision concentrated and proceeded straight at that point.

c.	สายตา	จับ	จ้อง	อยู่	ที่	ปาก	แก้ว
	săay taa	càp	cɔ̂ɔŋ	yùu	thîi	pàak	kɛ̂ɛw
	line of vision	hold	stare	stay	at	mouth	glass

Her/His line of vision held steady on (stared at) the lip of the glass.

6. If there are four VP's, the first verb is a vision verb and the other verbs are motion verbs, as in (82).

(82)

สายตา	ของ	ผู้	อยู่	ภายใน	ห้อง	มอง	ผ่าน
săay taa	khŏɔŋ	phûu	yùu	phaay nay	hɔ̂ŋ	mɔɔŋ	phàan
line of vision	of	people	stay	inside	room	look	pass

ออก	ไป	ภายนอก	ห้อง
ʔɔ̀ɔk	pay	phaay nɔ̂ɔk	hɔ̂ŋ
exit	go	outside	room

The lines of visions of those inside the room looked out and beamed to the outside of the room.

Auditory

Pattern 1:	NP	VP * (2-5)	(PP)
	MOVER	|	
	Sound	motion/audition/emission/distance	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five.

2. Four kinds of verbs may be included: motion, audition, emission and distance verbs. The motion verbs are intransitive or transitive, while the audition, emission and distance verbs are intransitive. The object NP of a motion verb represents an ABSOLUTE (aural perceiver, sound producer, other reference entity).

3. There must be at least one motion verb in the string. If it consists of more than three VP's, the last two verbs must be motion verbs.

4. If there are two VP's, one verb must be a motion verb. The possibilities for the semantic types of verbs are as follows.

i. Both verbs are motion verbs, as in (83a).

ii. One is a motion verb, the other is an audition verb. No restriction on their order, as in (83b) and (83c).

(83) a.

ทุก	คำ	ผ่าน	หู	ไป	เหมือน	สายลม
thúk	**kham**	**phàan**	**hǔu**	**pay**	**mŭan**	**săay lom**
every	word	pass	ear	go	like	wind

Every word passed away from the ears like the wind.

b.

เสียง	ประชาชน	โห่ร้อง	ด้วย	ความยินดี	ดัง
sĭaŋ	**prachaachon**	**hòo rɔ́ɔŋ**	**dûay**	**khwaam yindii**	**daŋ**
sound	people	cry	with	joy	loud

มา
maa
come

The joyful cry of people's came loudly.

c.

เสียง	ธนียา	ฝ่า	ความมืด	กังวาน
sĭaŋ	**thaniiyaa**	**fàa**	**khwaam mûut**	**kaŋwaan**
sound	Thaniya	go against	darkness	resound

ใส	อย่าง	เบิกบาน
săy	**yàaŋ**	**bə̀ək baan**
clear	mannerbe	in high spirits

Thaniya's voice moved out against the darkness resounding clearly.

5. If there are three VP's, one verb must be a motion verb. The possibilities for the semantic types of verbs are as follows.

i. All three verbs are motion verbs, as in (84a).

ii. Two are motion verbs; one is an audition verb. The audition verb must be in the first or the third position, as in (84b) and (84c).

iii. Two are motion verbs; one is an emission verb. The emission verb must be in the first position, as in (84d).

iv. Two are motion verbs; one is a distance verb. The distance verb must be in the first position, as in (84e).

(84) a. เสียง ลอด ออก ไป นอก ห้อง
sĭaŋ lɔ̂ɔt ʔɔ̀ɔk pay nɔ̂ɔk hɔ̂ŋ
sound go through exit go outside room
The sound went out of the room.

b. เสียง แหว ดัง ออก มา
sĭaŋ wĕɛ daŋ ʔɔ̀ɔk maa
sound shout loud exit come
A shout came out loudly.

c. ถ้อยคำ ของ เธอ ผ่าน หู เด็กสาว ไป
thɔ̂y kham khɔ̆ɔŋ thəə phàan hŭu dèk săaw pay
word of PRONOUN pass ear girl go
แว่วๆ เหมือน ลม พัด
wêɛw wêɛw mŭan lom phát
indistinct like wind blow
Her/His words passed away through the ears of the girl indistinctly like the wind blowing.

d. เสียง หัวเราะ เปล่ง ออก มา นิดหนึ่ง
sĭaŋ hŭarɔ́ʔ plèŋ ʔɔ̀ɔk maa nít nùŋ
sound laugh emit exit come a little
A laughing sound came out a little.

e. เสียง หัวเราะ ต่อ กระซิก ใกล้ เข้า มา
sĭaŋ hŭarɔ́ʔ tɔ̀ɔ krasík klây khâw maa
sound laugh join sob near enter come
A laugh and a sob came closer.

6. If there are four VP's, at least two of them must be motion verbs. The possibilities for the semantic types of verbs are as follows.

i. All four verbs are motion verbs, as in (85a).

ii. Three are motion verbs; one is an audition verb. The audition verb must be in the first or the second position, as in (85b) and (85c).

iii. Three are motion verbs; one is a distance verb. The distance verb must be in the second position, as in (85d).

iv. Two are motion verbs; two are audition verbs. The audition verbs must be in the first and the second positions, as in (85e).

v. Two are motion verbs; one is an audition verb; one is a distance verb. The audition verb must be in the first position and the distance verb must be in the second position, as in (85f).

(85) a.

เสียง	คราง	หนักๆ	หลุด	ออก	มา	จาก
sĭaŋ	khraaŋ	nàk nàk	lùt	ʔɔ̀ɔk	maa	càak
sound	groan	heavy	drop off	exit	come	leave

ปาก	แห้งระแหง
pàak	hêɛŋ rahĕɛŋ
mouth	dry

A heavy groan dropped out of the parched mouth.

b.

เสียง	พูดคุย	เสียง	สรวลเสเฮฮา	ดัง	ลอด
sĭaŋ	phûut khui	sĭaŋ	sŭan sĕe heehaa	daŋ	lɔ̂ɔt
sound	speak	sound	joyful	loud	go through

ออก	มา	ไม่	ขาด	สาย
ʔɔ̀ɔk	maa	mây	khàat	săay
exit	come	NEGATIVE	be torn line	

Joyfully talking voices loudly came out continuously.

c.

คำ	พูด	ซ้ำๆ	ของ	เซนเซ	นั้น
kham	phûut	sám sám	khɔ̌ɔŋ	seensee	nán
word	speak	repeat	of	Sensei (teacher)	that

สะท้อน	ก้อง	กลับ	มา
sathɔ́ɔn	kɔ̂ŋ	klàp	maa
reflect	resound	turn back	come

Those repeated words of the teacher returned back resounding.

d.

เสียง	รถ	คัน	หนึ่ง	วิ่ง	ใกล้	เข้า	มา
sĭaŋ	rót	khan	nɯ̀ŋ	wîŋ	klây	khâw	maa
sound	car	CLASSIFIER	one	run	near	enter	come

A car's sound came running nearer.

e.

เสียง	แม่บ้าน	มี	กังวาน	ดุ	ออก	มา
sĭaŋ	mêɛ bâan	mii	kaŋwaan	dù?	ʔɔ̀ɔk	maa

sound housewife Mee resound scold exit come

The housewife Mee's voice came out resounding fiercely.

f. เสียง บึบบับ ดัง ใกล้ เข้า มา

sĭaŋ bùŋpbàp daŋ klây khâw maa

sound massive loud near enter come

A loud sound neared.

7. If there are five VP's, the first verb must be an audition verb and the others must be motion verbs, as in (86).

(86) เสียง ดัง ลอด ออก มา จาก ริมฝีปาก

sĭaŋ daŋ lɔ̂ɔt ʔɔ̀ɔk maa càak rim fii pàak

sound loud go through exit come leave lip

A loud sound came out through her/his lips.

Pattern 2: NP VP * (2-5) (PP)

ABSOLUTE |

Aural perceiver motion/audition/distance

Conditions:

1. The minimum number of VP's is two and maximum number of VP's is five.

2. Three kinds of verbs may be included: motion, audition and distance verbs. The motion verbs and aural perception verbs are either intransitive or transitive. The object NP of a motion verb represents an ABSOLUTE (sound producer, other reference entity). The object NP of an aural perception verb represents a MOVER (sound).

3. There must be an audition (specifically, aural perception) verb in the first position and a motion verb in the last position.

4. If there are two VP's, the audition verb must precede the motion verb, as in (87).

(87) ได้ยิน เสียง จาก ที่ไหนสักแห่ง

dâyyin sĭaŋ càak thîi nǎy sàk hèɛŋ

hear sound leave somewhere

S/he heard a sound from somewhere.

5. If there are three VP's, the first verb must be an audition verb; the last verb must be a motion verb (the same as Condition 3). But the second verb may be a motion verb or an audition verb. The possibilities of the semantic types of verbs are as follows.

i. One verb is an audition verb which is in the first position and two verbs are motion verbs which are in the second and the third positions, as in (88a).

ii. Two verbs are audition verbs which are in the first and second positions and one verb is a motion verb which is in the third position, as in (88b).

(88) a.

ทับทิม	ฟัง	ผ่าน	หู	ไป	เฉยๆ	
thápthim	faŋ	phàan	hŭu	pay	chŏəy	chŏəy
Thapthim	hear	pass	ear	go	keep silent	

Thapthim heard (a sound) through her ears going away silently.

b.

ได้ยิน	เสียง	รถไฟ	วิ่ง	ดัง	มา	แต่	ไกล
dâyyin	sĭaŋ	rot fay	wîŋ	daŋ	maa	tèɛ	klay
hear	sound	train	run	loud	come	from	far

S/he heard the sound of a train running loudly coming from afar.

6. If there are four VP's, the first verb must be an audition verb and the last two verbs must be motion verbs. The second verb may be a motion verb or an audition verb. The possibilities of the semantic types of verbs are as follows.

i. The first verb is an audition verb and the other verbs are motion verbs, as in (89a).

ii. The first and the second verbs are audition verbs and the third and the fourth verbs are motion verbs, as in (89b).

(89) a.

ข้า	ได้ยิน	เสียง	ตาม	หลัง	มา
khâa	dâyyin	sĭaŋ	taam	lăŋ	maa
PRONOUN	hear	sound	follow	back	come

I heard a sound following from behind.

b.

ได้ยิน	เสียง	หัวเราะ	คุณหนู	แว่ว		เข้า	หู

dâyyin	sĭaŋ	hŭarɔ́?	khun nŭu	wêɛw	khâw	hŭu
hear	sound	laugh	PRONOUN	indistinct	enter	ear

He heard her laugh indistinctly entering his ears.

7. If there are five VP's, the first verb must be an audition verb and the other verbs must be motion verbs, as in (90).

(90)

ได้ยิน	เสียง	คุณหญิง	ลอด	แทรก	บาน	ประตู
dâyyin	sĭaŋ	khun yĭŋ	lɔ̂ɔt	sɛɛk	baan	pratuu
hear	sound	PRONOUN	go through	insert	frame	door

เข้า	มา
khâw	maa
enter	come

He heard her voice coming in through the door.

Olfactory

Pattern 1:

NP	VP * (2-4)	(PP)
Mover	|	
Odor	motion/olfaction	

Conditions:

1. The minimum number of the VP's is two and the maximum number of VP's is four.
2. Two kinds of verbs may be included: motion and olfaction verbs. The motion verbs may be either intransitive or transitive. The object NP of a motion verb represents an ABSOLUTE (olfactory perceiver, odor producer, other reference entity). The olfactory verbs must be intransitive.
3. There must be two motion verbs in the last two positions.
4. If there are two VP's, the two verbs must be motion verbs, as in (91).

(91)

กลิ่น	ชะอม	ทอด	โชย	มา
klì̂n	cha?ɔm	thɔ̂ɔt	chooy	maa
odor	acacia	fry	blow gently	come

The odor of fried acacia came blowing gently in.

5. If there are three VP's, the last two verbs must be motion verbs (the same as Condition 3) and the first verb may be a motion verb or an olfaction verb, as in (92a) and (92b).

(92) a.

กลิ่น	ฉุน	ปน	หอม	หวาน	ซ่าน	กระจายไป
klîn	chǔn	pon	hɔ̌ɔm	wăan	sâan	kracaaypay
odor	acrid	mix	fragrant	sweet	diffuse	spread go

ทั่ว	ห้อง
thûa	hɔ̂ŋ
all over	room

An acrid and sweet smell diffused all over the room.

b.

กลิ่น	เหงื่อ	อวลๆ	โชย	มา	บางเบา
klîn	ŋùa	ʔuan ʔuan	chooy	maa	baaŋ baw
odor	sweat	pervading	blow gently	come	lightly

The pervading smell of sweat came blowing in lightly.

6. If there are four VP's, all verbs must be motion verbs, as in (93).

(93)

กลิ่น	เหล้า	ที่		ดื่ม	เข้า	ไป	ตั้งแต่	ตอนบ่าย
klîn	lâw	thîi		dùùm	khâw	pay	tâŋtɛ̀ɛ	tɔɔn bàay
odor	liquor	RELATIVE PRONOUN		drink	enter	go	from	afternoon

โชย	คลุ้ง	ออก	มา
chooy	khlúŋ	ʔɔ̀ɔk	maa
blow gently	reek	exit	come

The smell of liquor which s/he drank from the afternoon on came out reeking.

Pattern 2:

NP	VP * (3-5)	(PP)
ABSOLUTE	|	
Olfactory perceiver	motion/olfaction	

Conditions:

1. The minimum number of VP's is three and the maximum number of VP's is five (but my data do not include a pattern consisting of four VP's).

2. Two kinds of verbs must be included: motion and olfaction verbs. An olfaction (specifically, olfactory perception) verb must occur in the first position in the string. The object NP of an olfaction verb represents a MOVER (odor).

3. There must be an olfaction verb in the first position and two motion verbs in the last two positions.

4. If there are three VP's, the first verb must be an olfaction verb and the others must be motion verbs, as in (94).

(94)

ถวิกา		ได้	กลิ่น	หอม		อบอวล	ไป	ทั่ว
thawíkaa		**dây**	**klîn**	**hɔ̌ɔm**		**ʔɔ̀pʔuan**	**pay**	**thûa**
Thawikaa		get	odor	fragrant		pervade	go	all over
ทั้ง	ตัว	รถ	และ	ตัว	เขา			
tháŋ	**tua**	**rót**	**lɛ́ʔ**	**tua**	**kháw**			
both	body	car	and	body	PRONOUN			

Thawikaa smelled a fragrance pervading all over the car and his body.

5. If there are five VP's, the first verb must be an olfaction verb and the others must be motion verbs, as in (95).

(95)

ได้	กลิ่น	สบู่	อ่อนๆ		ระเหย	ออก	มา	จาก
dây	**klîn**	**sabùu**	**ʔɔ̀ɔn ʔɔ̀ɔn**		**rahɔ̌ɔy**	**ʔɔ̀ɔk**	**maa**	**càak**
get	odor	soap	soft		evaporate	exit	come	leave
ดวงหน้า		นั้น						
duaŋ nâa		**nán**						
face		that						

S/he received a soft smell of soap evaporating from that face.

Tactile	NP	VP * (2-5)	(PP)
	MOVER	|	

Air in motion motion/illumination

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five.

2. Two kinds of verbs may be included: motion and illumination verbs. The motion verbs are either intransitive or transitive, while the illumination verbs are intransitive. The object NP of a motion verb represents an ABSOLUTE (tactile perceiver, producer, other reference entity).

3. There must be at least one motion verb in the string.

4. If there are two VP's, the second verb must be a motion verb. The possibilities of the semantic types of verbs are as follows.

i. Both are motion verbs, as in (96a).

ii. The first verb is an illumination verb and the second verb is a motion verb, as in (96b).

(96) a.

กระแส	ลม	กรู	มา	อีกหน
krasɛ̌ɛ	lom	kruu	maa	ʔìik hŏn
current air in motion		throng	come	once again

A current of air came pressing in again.

b.

ไอ	ร้อน	วาบ	ผ่าน	ลำ	เรือ
ʔay	rɔ́ɔn	waap	phàan	lam	rɯa
vapor	hot	flash	pass	hull	ship

Hot flashing vapor passed the ship's hull.

5. If there are three VP's, all three verbs must be motion verbs, as in (97).

(97)

ลม	โกรก	เข้า	มา
lom	kròok	khâw	maa
air in motion	blow strongly	enter	come

The wind came in blowing strongly.

6. If there are four VP's, the first, second and fourth verbs must be motion verbs. The

third verb may be a motion verb or an illumination verb. Thus, the possibilities of the semantic types of verbs are as follows.

i. All four verbs are motion verbs, as in (98a).

ii. The third verb is an illumination verb and the others are motion verbs, as in (98b).

(98) a.

ลม	เย็น	พัด	โชย	เข้า	มา
lom	yen	phát	chooy	khâw	maa
air in motion	cold	fan	blow gently	enter	come

A cold wind came in blowing gently.

b.

คลื่น	ความร้อน	ทะลัก	วาบๆ	มา
khlʉ̂ʉn	khwaam rɔ́ɔn	thalák	wâap wâap	maa
wave	heat	leak out	luminous	come

จาก	ด้านใน
càak	dâan nay
leave	inside

The glowing heat leaked out from the inside.

7. If there are five verbs, the third verb must be an illumination verb and the others must be motion verbs, as in (99).

(99)

ลม	จาก	ลำคลอง	ผ่าน	วาบ	ไป	มา
lom	càak	lam khlɔɔŋ	phàan	wâap	pay	maa
air in motion	leave	canal	pass	luminous	go	come

The wind from the canal passed shining to and fro.

Radiation

Pattern 1:

NP	VP	PP
MOVER	|	ABSOLUTE
Light	motion	Illuminated entity

Condition: The PP must indicate an illuminated entity (ABSOLUTE).

(100) แสง กระทบ ยัง วัตถุ
sɛ̌ɛŋ krathópyaŋ wátthùʔ
light hit toward object
The light hit at the object.

Pattern 2: NP VP * (2-5) (PP)
MOVER |
Light motion/illumination/emission/length

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five.

2. Four kinds of verbs may be included: motion, illumination, emission, and length verbs. The motion and illumination verbs are either intransitive or transitive, but the emission and length verbs are intransitive. The object NP of a motion verb represents an ABSOLUTE (illuminated entity, radiator, other reference entity), and the object NP of an illumination verb also represents an ABSOLUTE (illuminated entity).

3. There must be at least one motion verb in the string.

4. If there are two VP's, one verb must be a motion verb, and the other may be a motion verb or an illumination verb. The possibilities of the semantic types of verbs are as follows.

i. Both verbs are motion verbs, as in (101a).

ii. One is a motion verb and the other is an illumination verb. The illumination verb must be in the first or the second position, as in (101b) and (101c).

(101) a. ยามเช้า แสงแดด อาบ ลง ทั่ว คลอง
yaam cháw sɛ̌ɛŋ dɛ̀ɛt ʔàap loŋ thûa khlɔɔŋ
morning sunlight bathe descend all over canal
In the morning the sunlight came down covering the whole canal.

b. แสง ส่อง ไป ที่ แผ่น โลหะ นี้
sɛ̌ɛŋ sɔ̀ɔŋ pay thîi phèɛn loohàʔ níi
light shine go at plate metal this

Light shone on this metal plate.

c. แสง สี ขาว สาด สว่าง อย่างฉับพลัน
sɛ̌ɛŋ sǐi khǎaw sàat sawàaŋ yàaŋ chàp phlan
light color white splash bright instantly
While light splashed instantly bright.

5. If there are three VP's, the last verb must be a motion verb. The possibilities of the semantic types of verbs are as follows.

i. All three verbs are motion verbs, as in (102a).

ii. The first verb is an illumination verb and the others are motion verbs, as in (102b).

iii. The third verb is a length verb and the others are motion verbs, as in (102c).

(102) a. แสง จางๆ ผ่าน เข้า มา ใน ห้อง
sɛ̌ɛŋ caaŋ caaŋ phàan khâw maa nay hɔ̂ŋ
light pale pass enter come in room
Pale light came through into the room.

b. แสง ส่อง สะท้อน กลับ
sɛ̌ɛŋ sɔ̀ɔŋ sathɔ́ɔn klàp
light shine reflect turn back
The light shone reflecting back.

c. แสง ของ ยามเย็น ทอด ยาว อยู่
sɛ̌ɛŋ khɔ̌ɔŋ yaam yen thɔ̂ɔt yaaw yùu
light of evening stretch long stay
บน พื้น เรือน พัก
bon phúuunrɯan phák
on flour house lodge
The evening light stretched out along the flour of the house.

6. If there are four VP's, three verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. All four verbs are motion verbs, as in (103a).

ii. Three verbs are motion verbs and one verb is an illumination verb. The illumination verb must be in the first or the second or the last position, as in (103b) to (103d).

iii. Three verbs are motion verbs and one verb is an emission verb. The emission verb must be in the first position, as in (103e).

iv. Three verbs are motion verbs and one verb is a length verb. The length verb must be in the second position, as in (103f).

(103) a.

แสง	จันทร์	ม้วๆ	ส่อง	ลอด	เข้า	มา
sɛ̌ɛŋ	can	mua mua	sɔ̀ɔŋ	lɔ̂ɔt	khâw	maa
light	moon	dim	shine	go through	enter	come

The dim moonlight came shining through.

b.

แสง	ไฟ	ส่อง	ลอด	บังตา	ออก	มา
sɛ̌ɛŋ	fay	sɔ̀ɔŋ	lɔ̂ɔt	baŋtaa	ʔɔ̀ɔk	maa
light	lamp	shine	go through	blind	exit	come

A lamp's light came shining out through the blind.

c.

แสง	สาด	ส่อง	เข้า	มา
sɛ̌ɛŋ	sàat	sɔ̀ɔŋ	khâw	maa
light	splash	shine	enter	come

Light came shining in.

d.

ประกายไฟ	กระเด็น	ออก	อยู่	วาบๆ
prakaay fay	kraden	ʔɔ̀ɔk	yùu	wâap wâap
sparkle	spurt	exit	stay	luminous

Sparkles spurted out shining.

e.

แวว	ฉาย	ออก	มา	จาก	หน่วยตา
wɛɛw	chăay	ʔɔ̀ɔk	maa	càak	mùay taa
gleam	emit	exit	come	leave	eye

A gleam emitted from her/his eyes.

f.

แสง	ทอด	ยาว	เข้า	มา
sɛ̌ɛŋ	thɔ̂ɔt	yaaw	khâw	maa
light	stretch	long	enter	come

Light came extending in.

7. If there are five VP's, at least three verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. Four are motion verbs; one is an illumination verb. The illumination verb must be in the first or the second position, as in (104a) and (104b).

ii. Three are motion verbs; two are illumination verbs. The illumination verbs must be in the first and the second positions, as in (104c).

(104) a.

แสง	ส่อง	ทะลุ	ผ่าน	ออก	ไป
sɛ̌ɛŋ	sɔ̀ɔŋ	thalú?	phàan	ʔɔ̀ɔk	pay
light	shine	go through	pass	exit	go

Light went shining through.

b.

ลำ	แสง	สาด	ส่อง	ทะลุ	พื้น	น้ำ
lam	sɛ̌ɛŋ	sàat	sɔ̀ɔŋ	thalú?	phúuun	nám
beam	light	splash	shine	go through	surface	water

สี	คราม	ลง	มา	อย่าง	แผ่ว	เบา
sǐi	khraam	loŋ	maa	yàaŋ	phɛ̀ɛw	baw
color	blue	descend	come	manner	soft	light

A beam of light came shining down through the surface of the blue water.

c.

แสงไฟ	ส่อง	สว่าง	ลง	มา	สู่	โต๊ะ	อาหาร
sɛ̌ɛŋ fay	sɔ̀ɔŋ	sawàaŋ	loŋ	maa	sùu	tó?	ʔaahǎan
light	shine	bright	descend	come	get to	table	meal

Light came shining down to the dining table.

Shadow	NP	VP * (2-3)	(PP)
	MOVER	|	
	Shadow	motion	

Conditions:

1. The minimum number of VP's is two, as in (105), and the maximum number of VP's is three, as in (106).

2. Only one kind of verb is included: motion verbs. They are either intransitive or transitive. The object NP of a motion verb represents an ABSOLUTE (shaded entity).

(105) เงา ของ ต้น หลิว

ŋaw khɔ̌ɔŋ tôn lǐw

shadow of tree Salicaceae (a species of Chinese tree)

ได้ ทอด ลง บน ผิว น้ำ ของ บึง

dây thɔ̂ɔt loŋ bon phǐw nám khɔ̌ɔŋ bɯŋ

PERFECTIVE stretch descend on surface water of marsh

The shadow of the Liw tree stretched over the surface of the marsh.

(106) เงา ทอด ลง มา

ŋaw thɔ̂ɔt loŋ maa

shadow stretch descend come

The shadow stretched down.

Orientation

Pattern 1:	NP	VP	PP
	ABSOLUTE	|	ABSOLUTE
	Orientated entity	motion	Reference entity

Condition: The PP must indicate a reference entity (ABSOLUTE).

(107) ยาย ชี้ ยัง ของ ที่ เลือก ไว้

yaay chîi yaŋ khɔ̌ɔŋ thîi lɯ̂ak wáy

old woman point toward thing RELATIVE PRONOUN select keep

She pointed at the thing that (she) had selected.

Pattern 2:	NP	VP * (2-3)	(PP)
	INDIRECT INITIATOR	|	
	Orientation-setter	motion	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is three.
2. Only one kind of verb is included: motion verbs. They are intransitive or transitive. The

object NP of a motion verb represents an ABSOLUTE (orientated entity, reference entity). The object NP of the first motion verb represents an orientated entity, while the object NP's of motion verbs in other positions represent reference entities.

(108)	เขา	ชี้	นิ้ว	ไป	ที่	พระพุทธรูป
	kháw	chíi	níw	pay	thîi	phrá?phútharûup
	PRONOUN	point	finger	go	at	Buddhist image
	องค์	จิ๋ว				
	ʔɔŋ	čĭw				
	CLASSIFIER	small				

S/he pointed her/his finger at the small Buddhist image.

(109)	ห้อง	หัน	ออก	สู่	ทะเล
	hɔ̂ŋ	hăn	ʔɔ̀ɔk	sùu	thalee
	room	turn	exit	get to	sea

The room turned out toward the sea. (The room faces toward the sea.)

4.3.1.3. Clause Patterns for Sequential Thematic Emanation Events

The clause patterns for sequential thematic emanation events are composed of a subject NP and two VP's at least or six VP's at most. One PP may be included. The clausal subject of the auditory type represents either a MOVER (sound) (i.e. Pattern 1) or an ABSOLUTE (aural perceiver) (i.e. Pattern 2), but the clausal subject of the visual, olfactory, tactile and radiation types must represent a MOVER (line of vision, odor, air in motion, light). There are no sequential thematic emanation events of the shadow and orientation types in my data.

Below I present the formulations of clause patterns for sequential thematic emanation events of the visual, auditory, olfactory, tactile and radiation types with examples.

Visual	NP	VP * (2-5)	(PP)
	MOVER	|	
	Line of vision	motion/vision	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five. (But there are no clause patterns for thematic sequential visual emanation events consisting of four VP's in my data.)

2. Two kinds of motion verbs are included: motion and vision verbs. The motion verbs are either intransitive or transitive, while the vision verbs are intransitive. The object NP of a motion verb represents an ABSOLUTE (seen entity).

3. There must be at least two motion verbs in the verb string.

4. If there are two VP's, the two verbs must be motion verbs, as in (110).

(110)	สายตา	ไป	กระทบ	ความเคลื่อนไหว	บน	ฝา
	săay taa	pay	krathóp	khwaam khlɯ̂anwăy	bon	făa
	line of vision	go	hit	motion	on	wall

Her/His line of vision proceeded and hit upon some motion on the wall.

5. If there are three VP's, the three verbs must be all motion verbs, as in (111).

(111)	พลัน	สายตา	ไป	หยุด	อยู่	ที่	อนงค์
	phlan	săay taa	pay	yùt	yùu	thîi	ʔanoŋ
	suddenly	line of vision	go	stop	stay	at	beautiful woman
	นาง	หนึ่ง					
	naaŋ	nɯ̀ŋ					
	CLASSIFIER	one					

Suddenly his line of vision proceeded and stopped at a beautiful woman.

6. If there are five VP's, all of the five verbs must be motion verbs, as in (112).

(112)	สายตา	หล่อน	ผ่าน	เลย	ไป	พบ	เข้า	กับ
	săay taa	lɔ̀ɔn	phàan	ləəy	pay	phóp	khâw	kàp
	line of vision	PRONOUN	pass	overstep	go	meet	enter	with
	สายตา	คู่	หนึ่ง					
	săay taa	khûu	nɯ̀ŋ					

line of vision pair one

Her line of vision passed and met with a pair of lines of vision.

Auditory

Pattern 1:	NP	VP * (2-5)
	MOVER	|
	Sound	motion/audition

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five.

2. Two kinds of verbs are included: motion and audition verbs. They are either intransitive or transitive. The object NP of a motion verb represents an ABSOLUTE (aural perceiver, other reference entity). The object NP of an audition (specifically, communication) verb represents an ABSOLUTE (the content of speaking).

3. There must be at least one motion verb in the verb string.

4. If there are two VP's, the two verbs must be motion verbs, as in (113).

(113)	ข่าว	นี้	เพิ่ง	มา	กระทบ	หู	คน	ไทย
	khàaw	níi	phôŋ	maa	krathóp	hŭu	khon	thay
	news	this	just now	come	hit	ear	person	Thai
	ไม่		กี่	วัน				
	mây		kìi	wan				
	NEGATIVE		how many	day				

This news has just come and struck the ears of Thai people just a few days ago.

5. If there are three VP's, there must be at least one motion verb (the same as Condition 3). The possibilities of the semantic types of verbs are as follows.

i. All three verbs are motion verbs, as in (114a).

ii. Two are motion verbs; one is an audition verb in the first position, as in (114b).

iii. One is a motion verb; two are audition verbs in the first and the third position, as in (114c).

(114) a. ข่าวคราว ของ เขา ผ่าน มา กระทบ หล่อน

khàaw khraaw khɔ̌ɔŋ kháw phàan maa krathóplɔ̀ɔn

news of PRONOUN pass come hit PRONOUN

The news about him came and hit her.

b. เสียง แว่ว มา ถึง บ้าน นี้

sǐaŋ wêɛw maa thŭŋ bâan níi

sound indistinct come reach house this

An indistinct sound came and reached this house.

c. เสียง ยาย จันทร์ ดัง มา สารภาพ

sǐaŋ yaay can daŋ maa sǎaraphâap

sound old woman Can loud come confess

Can's loud sound came and confessed (something).

6. If there are four VP's, the last two verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. All of the four verbs are motion verbs, as in (115a).

ii. Three are motion verbs; one is an audition verb in the first position, as in (115b), or in the second position, as in (115c).

(115) a. เสียง ลอย ลม ขึ้น ไป ถึง ชั้นบน

sǐaŋ lɔ̀ɔy lom khûn pay thŭŋ chán bon

sound float lom ascend pay reach upstairs

A sound floated along the wind up and reached the upstairs.

b. เสียง เต้น ดัง ออก มา ถึง หู คน ใน

sǐaŋ tên daŋ ʔɔ̀ɔk maa thŭŋ hŭu khon nay

sound dance loud exit come reach ear person in

ห้อง

hɔ̂ŋ

room

The loud sound of dancing came out and reached the ears of people in the room.

c. เสียง ต่างๆ จาก ห้อง ข้างเคียง ดัง มา

sĭaŋ	tàaŋ tàaŋ	càak	hôŋ	khâŋ khiaŋ	daŋ	maa
sound	various	leave	room	next	loud	come

กระทบ	หู	เสมอ
krathóp	hŭu	samə̌ə
hit	ear	often

Various loud sounds from the next room came and struck the ear often.

7. If there are five VP's, there must be four motion verbs and one audition verb.

i. The audition verb is in the second position, as in (116a).

ii. The audition verb is in the fourth position, as in (116b).

(116) a.

เสียง	โวยวาย		จาก	บ้าน	สาคร		ดัง
sĭaŋ	wooywaay		càak	bâan	săakhɔɔn		daŋ
sound	give out a hue and cry		leave	house	Sakorn		loud
แว่ว	ข้าม	คลอง	มา	ถึง	บ้าน	ของ	ทับทิม
wêew	khâam	khlɔɔŋ	maa	thŭŋ	bâan	khɔ̌ɔŋ	thápthim
indistinct	cross	canal	come	reach	house	of	Thapthim

A cry from Sakorn's house came across the canal and reached Thapthim's house.

b.

เสียง	เนิบๆ	ของ	คุณหญิง		ย้อน	กลับ
sĭaŋ	nə̂əp nə̂əp	khɔ̌ɔŋ	khun yĭŋ		yɔ́ɔn	klàp
sound	slow	of	PRONOUN		return	turn back
มา	แว่ว	อยู่	ข้าง	หู	อีกครั้ง	
maa	wêew	yùu	khâaŋ	hŭu	ʔìik khráŋ	
come	indistinct	stay	side	ear	once again	

Her slow voice came back and sounded indistinct beside the ears again.

Pattern 2:

NP	VP * (4)
ABSOLUTE	|
Aural perceiver	motion/audition

Conditions:

1. The number of VP's is four.

2. Two kinds of verbs are always included: motion and audition verbs. They are either intransitive or transitive. However, aural perception verbs must be transitive. The object NP of an aural perception verb represents a MOVER (sound).

3. The first verb must be an audition verb and the last two verbs must be motion verbs. Therefore, the possibilities of the linear order are as follows.

i. Three are motion verbs; one audition verb in the first position, as in (117a).

ii. Two are motion verbs; two are audition verbs in the first and the second positions, as in (117b).

(117) a.

ได้ยิน	เสียง	ลอย	ลม	มา	ถึง	เตาไฟ
dâyyin	sĭaŋ	lɔ̀ɔy	lom	maa	thŭŋ	taw fay
hear	sound	float	wind	come	reach	cooking stove

(S/he) heard a sound coming floating along the wind and reaching the cooking stove.

b.

ได้ยิน	เสียง	ล้อ	ดัง	น่ารำคาญ	ก้อง	มา
dâyyin	sĭaŋ	lɔ́ɔ	daŋ	nâa ramkhaan	kɔ̂ŋ	maa
hear	sound	tease	loud	irritating	resound	come

เข้า	หู
khâw	hŭu
enter	ear

(S/he) heard a loud and irritating sound of teasing came and enter the ears.

Olfactory	NP	VP * (2-4)
	MOVER	|
	Odor	motion/action

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is four.

2. Two kinds of verbs may be included: motion and action verbs. The motion verbs are either intransitive or transitive, while the action verbs are transitive. The object NP of a

motion verb represents an ABSOLUTE (olfactory perceiver, other reference entity). The object NP of an action verb also represents an ABSOLUTE (nose).

3. There must be at least two motion verbs in the verb string.

4. If there are two VP's, the two verbs must be motion verbs, as in (118).

(118)

กลิ่น	คาว	เลือด	และ	สิ่งปฏิกูล	คลุ้ง	ปะทะ	จมูก
klîn	khaaw	lûat	lé?	sìŋ patikuun	khlúŋ	pathá?	camùuk
odor	stinking	blood	and	dirt	spread	crash	nose

A stinking smell of blood and dirt spread and struck her/his nose.

5. If there are three VP's, the first two verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. All of three are motion verbs, as in (119a).

ii. Two are motion verbs and one is an action verb in the third position, as in (119b).

(119) a.

กลิ่น	ควัน	ไฟ	และ	กลิ่น	ข้าว	จาก	ครัว	โชย
klîn	khwan	fay	lé?	klîn	khâaw	càak	khrua	chooy
odor	smoke	fire	and	odor	rice	leave	kitchen	blow gently

มา	ถึง	ใน	ห้อง
maa	thŭŋ	nay	hɔ̂ŋ
come	reach	in	room

A smell of smoke and rice came blowing from the kitchen and reached the inside of the room.

b.

กลิ่น	ปัสสาวะ	ลอย	มา	รบกวน	จมูก
klîn	patsăawá?	lɔ̀ɔy	maa	rópkuan	camùuk
odor	urine	float	come	disturb	nose

The smell of urine came floating and disturbed her/his nose.

6. If there are four VP's, all of the four verbs must be motion verbs, as in (120).

(120)

กลิ่น	ลอย	ตาม	ลม	มา	กระทบ	จมูก

kl̂in	lɔ̀ɔy	taam	lom	maa	krathóp	camùuk
smell	float	follow	wind	come	hit	nose

A smell came floating along the wind and struck her/his nose.

Tactile	NP	VP * (2-4)	(PP)
	MOVER	|	
	Air in motion	motion	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is four.

2. Two kinds of verbs may be used: motion and action verbs. The motion verbs are either intransitive or transitive. The action verbs must be transitive. The object NP of a motion or action verb represents an ABSOLUTE (visual perceiver, other reference entity).

3. The first two verbs in the verb string must be motion verbs.

4. If there are two VP's, the two verbs must be motion verbs, as in (121).

(121)

ไอ	เย็นๆ	มา	กระทบ	ผิวหนัง
?ay	yen yen	maa	krathóp	phĭw năŋ
vapor	cool	come	hit	skin

Cool air came and hit her/his skin.

5. If there are three VP's, the three verbs must be motion verbs, as in (122).

(122)

ลม	พัด	มา	ไล้	ตัว	เฉื่อยๆ
lom	phát	maa	láy	tua	chʉ̀ay chʉ̀ay
wind	fan	come	caress	body	gentle

The wind came and caressed her/his body gently.

6. If there are four VP's, the first three verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. All of the four verbs are motion verbs, as in (123a).

ii. Three are motion verbs; one is an action verb in the fourth position, as in (123b).

(123) a.

ลม	หนาว	โกรก	เข้า	มา	กระทบ	ตัว
lom	năaw	kròok	khâw	maa	krathóp	tua
wind	cold	blow strongly	enter	come	hit	body

Cold wind came in blowing strongly and hit her/his body.

b.

ลม	กรู	เข้า	มา	กลุ้มรุม	เนื้อ หนัง
lom	kruu	khâw	maa	klûmrum	nɯ́a năŋ
wind	throng	enter	come	besiege	tissue

The wind came in and besieged her/his body.

Radiation

NP	VP * (2-6)	(PP)
MOVER	|	
Light	motion/illumination/emission/action	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is six.

2. Four kinds of verbs may be included: motion, illumination, emission and action verbs. The motion verbs are either intransitive or transitive, while the other verbs are intransitive. The object NP of a motion verb represents an ABSOLUTE (illuminated entity, other reference entity).

3. There must be at least one motion verb in the verb string.

4. If there are two VP's, the two verbs must be motion verbs, as in (124).

(124)

แสงไฟ	กระจาย	ทั่ว	ห้อง	กระทบ	กับ	ตู้	กระจก
sěɛŋ fay	kracaay	thûa	hɔ̂ŋ	krathópkàp		tûu	kracòk
light	spread	all over	room	hit	with	cabinet	glass

Light spread all over the room and hit the cabinet.

5. If there are three VP's, there must be one motion verb (as the same Condition 3). The possibilities of the semantic types of verbs are as follows.

i. All of the three verbs are motion verbs, as in (125).

(125)

ลำ	แสง	เล็กๆ	พุ่ง	ลง	จับ	ที่	นาฬิกา
lam	sěɛŋ	lél lék	phûŋ	loŋ	càp	thîi	naalikaa
beam	light	small	dirt	descend	hold	at	clock

A small beam of light moved down and rested on the clock.

ii. Two are motion verbs; one is an illumination verb in the first position, as in (126a), or in the second position, as in (126b).

(126) a.

แสงแดด		อ่อน	ยามเช้าตรู่		ส่อง	ลง
sěɛŋ dèɛt		ʔɔ̀ɔn	yaam cháw trùu		sɔ̀ɔŋ	loŋ
sunlight		soft	early morning		shine	descend
ถูก	แถว	นั้น				
thùuk	thěɛw	nán				
touch	region	that				

The soft sunlight in the early morning moved down shining and touched that region.

b.

ไฟ	สี	เขียว	จางๆ		สาด	ส่อง	กลาง	สนาม
fay	sĭi	khĭaw	caaŋ caaŋ		sàat	sɔ̀ɔŋ	klaaŋ	sanăam
light	color	green	pale		splash	shine	middle	field
หญ้า	กระทบ	น้ำพุ		ใน	อ่าง	หินอ่อน		
yâa	krathópnám phú?			nay	ʔàaŋ	hĭn ʔɔ̀ɔn		
grass	hit	fountain		in	pool	marble		

A pale green light splashed shining in the middle of the field and hit the fountain in the marble pool.

ii. The three verbs are different.

a. An illumination verb is in the first position; a motion verb is in the second position; an action verb is in the third position, as in (127a).

b. An illumination verb is in the first position; an emission verb is in the second position; a motion verb is in the third position, as in (127b).

(127) a.

แสง	ของ	มัน	ส่อง	ลง	ล้อเล่น	กับ
sɛ̌ɛŋ	khɔ̌ɔŋ	man	sɔ̀ɔŋ	loŋ	lɔ́ɔlên	kàp
light	of	PRONOUN	shine	descend	play	with

น้ำ	ใน	คลอง
nám	nay	khlɔɔŋ
water	in	canal

Its shining light moved down and played with the water in the canal.

b.

แสงแดด	ยามบ่าย	ส่อง	ฉาย	หุ้มห่อ
sɛ̌ɛŋ dɛ̀ɛt	yaam bàay	sɔ̀ɔŋ	chăay	hûmhɔ̀ɔ
sunlight	afternoon	shine	emit	cover

เรือนกาย	เขา
ruan kaay	kháw
body	PRONOUN

The sunlight in the afternoon shone and covered her/his body.

6. If there are four VP's, the last three verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. All of the four verbs are motion verbs, as in (128a).

ii. The first verb is an illumination verb and the others are motion verbs, as in (128b).

iii. The first verb is an emission verb and the others are motion verbs, as in (128c).

(128) a.

แสงไฟ	สาด	ลง	มา	จับ	ผิว	สี
sɛ̌ɛŋ fay	sàat	loŋ	maa	càp	phĭw	sĭi
light	splash	descend	come	hold	skin	color

น้ำตาลทรายแดง	ของ	หล่อน
námtaan saay dɛɛŋ	khɔ̌ɔŋ	lɔ̌ɔn
brown sugar	of	PRONOUN

Light came splashing down and held on her brown skin.

b.

แสง	อาทิตย์	ยามบ่าย	ส่อง	ลอด	กิ่ง	ใบ
sɛ̌ɛŋ	ʔaathít	yaam baay	sɔ̀ɔŋ	lɔ̂ɔt	kìŋ	bay

light	sun	afternoon	shine	go through	branch leaf	
ของ	ซุ้ม	ไผ่	มา	ต้อง	ผมหงอก	ขาว
khɔ̌ɔŋ	súm	phày	maa	tɔ̂ŋ	phǒm ŋɔ̀ɔk	khǎaw
of	arch	bamboo	come	touch	gray hair	white

The sunlight in the afternoon came through the leaves and branches of the bamboo arch and touched her/his gray hair.

c.

ลำ	แสง	จ้า	ฉาย	ลง	มา	จับ	ที่
lam	sɛ̌ɛŋ	câa	chàap	loŋ	maa	càp	thîi
beam	light	strong	emit	descend	come	hold	at

ร่าง	เปลือย	บน	รถเข็น
râaŋ	pluuay	bon	rót khěn
body	naked	on	cart

A strong beam of light emitted down and rested at the naked body on the cart.

7. If there are five VP's, the last verb must be an action verb and the others must be motion verbs, as in (129).

(129)

มัน	สะท้อน	กลับ	เข้า	ไป	ล้อเล่น	กับ	ดวงตา
man	sathɔ́ɔn	klàp	khâw	pay	lɔ́ɔlên	kàp	duaŋ taa
PRNOUN	reflect	turn back	enter	go	play	with	eye

แพรวพราย	ของ	เขา
phrɛɛw phraay	khɔ̌ɔŋ	kháw
sparkling	of	PRONOUN

It (the sound) reflected back and played with her/his sparkling eyes.

8. If there are six VP's, there must be five motion verbs in the verb string. The possibilities of the semantic types of verbs are

i. All of the six verbs are motion verbs, as in (130a).

ii. The first verb is illumination verb and the others are motion verbs, as in (130b).

(130) a.

สะท้อน	กลับ	ออก	มา	เข้า	สู่	ตา	ของ
sathɔ́ɔn	klàp	ʔɔ̀ɔk	maa	khâw	sùu	taa	khɔ̌ɔŋ

reflect	turn back	exit	come	enter	get to	eye	of

ผู้มอง

phûu mɔɔŋ

viewer

(The light) reflected back into the viewer's eyes.

b.

แดด	สี	จัด	ส่อง	ลอด		ใบ	มะพร้าว
dɛ̀ɛt	sǐi	càt	sɔ̀ɔŋ	lɔ̂ɔt		bay	maphráaw
sunlight	color	strong	shine	go through		leaf	coconut
ลง	มา	ทาบ	อยู่	น้ำ	ใน	คู	
loŋ	maa	thâap	yùu	nám	nay	khûu	
descend	come	cover	stay	water	in	ditch	

The strong sunlight came down shining through the coconut leaves and covered the water in the ditch.

4.3.2. Clause Patterns for Agentive Emanation Events

This section includes three subsections. Section 4.3.2.1, 4.3.2.2, and 4.3.2.3 respectively describe clause patterns for agentive emanation events in the simplex, simultaneous, and sequential structures.

4.3.2.1. Clause Patterns for Simplex Agentive Emanation Events

The clause pattern for simplex agentive emanation events is composed of a subject NP and a single transitive VP. The verb represents motion caused in a certain manner. The subject NP represents an AGENT (visual perceiver, sound producer, odor producer, radiator) and the object NP represents a MOVER (line of vision, sound, odor, light). There are no examples of simplex agentive emanation events of the tactile, shadow and orientation types in my data.

Below I present the formulations of clause patterns for simplex agentive emanation events of the visual, auditory, olfactory and radiation types with examples.

Visual	NP	VP
	AGENT	|
	Visual perceiver	motion

(131)	เขา	ส่ง	สายตา	เขียว
	kháw	sòŋ	sǎay taa	khǐaw
	PRONOUN	send	line of vision	hard (green)

S/he cast a hard line of vision.

Auditory	NP	VP
	AGENT	|
	Sound producer	motion

(132)	เขา	หยอด	อีก	ประโยค	หนึ่ง
	kháw	yɔ̀ɔt	ʔìik	prayòok	nɯ̀ŋ

PRONOUN drop further sentence one

S/he dropped another sentence.

Olfactory	NP	VP
	AGENT	┆
	Odor producer	motion

(133) โชย กลิ่น คุ้นเคย

chooy klîn khún khəəy

blow gently odor familiar

(It) sent a familiar smell.

Radiation	NP	VP
	AGENT	┆
	Radiator	motion

(134) ตา ส่ง ประกาย

taa sòŋ prakaay

eye send sparks

Her/His eyes sent sparks.

4.3.2.2. Clause Patterns for Simultaneous Agentive Emanation Events

The clause patterns for simultaneous agentive emanation events are composed of a subject NP and seven VP's at most. A PP may be included. The clausal subject represents an AGENT (visual perceiver, sound producer, odor producer, radiator, shadow producer). A predicate of the visual and auditory types may consist of one transitive motion VP and one PP (i.e. Pattern 1), but a predicate of the olfactory, radiation and shadow types must consist of two VP's at least. There are no instances of simultaneous agentive emanation events of the tactile and orientation types in my data.

Below I present the formulations of clause patterns for simultaneous agentive emanation events of the visual, auditory, olfactory, radiation and shadow types with

examples.

Visual

Pattern 1:	NP	VP	PP
	AGENT	|	ABSOLUTE
	Visual perceiver	motion	Seen entity

Conditions:

1. The motion verb must be transitive. The object NP represents a line of vision (MOVER).
2. There must be a PP indicating a seen entity (ABSOLUTE).

(135)	เธอ	กวาด	สายตา	ภายใน	ตู้
	thəə	kwàat	săaytaa	phaay nay	tûu
	PRONOUN	sweep	line of vision	inside	cabinet

She swept the inside of the cabinet with her line of vision.

Pattern 2:	NP	VP * (2-5)	(PP)
	AGENT	|	
	Visual perceiver	motion/vision	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five.
2. Two kinds of verbs may be included: motion and vision verbs. They are either intransitive or transitive. The object NP of a motion verb represents a MOVER (line of vision) or an ABSOLUTE (seen entity, other reference entity). The object NP of a vision verb represents an ABSOLUTE (seen entity).
3. There must be at least one motion verb in the verb string.
4. If there are two VP's, there must be at least one motion verb (the same as Condition 3). Therefore, the possibilities of the semantic types of verbs are as follows.

    i. The two verbs are motion verbs, as in (136a).

ii. The first verb is a motion verb and the second verb is a vision verb, as in (136b).

iii. The first verb is a vision verb and the second verb is a motion verb, as in (136c).

(136) a.

ทอด	สายตา	ข้าม	ฝั่ง	คลอง
thɔ̂ɔt	săay taa	khâam	fàŋ	khlɔɔŋ
stretch	line of vision	cross	bank	canal

(S/he) stretched her/his line of vision across the canal.

b.

นัยน์ตา	จับ	จ้อง	หล่อน	อย่าง	พินิจ
naytaa	càp	cɔ̂ŋ	lɔ̀ɔn	yàaŋ	phinít
eye	hold	stare	PRONOUN	mannerexamine	

(His) eyes fixed a stare and looked her carefully.

c.

มอง	จาก	ที่	สูง
mɔɔŋ	càak	thîi	sŭuŋ
look	leave	place	high

(S/he) looked from a high place.

5. If there are three VP's, there must be at least one motion verb (the same as Condition 3). The possibilities of the semantic types of verbs are as follows.

i. Three are all motion verbs, as in (137a).

ii. Two are motion verbs; one is a vision verb in the first position, as in (137b).

iii. One is a motion verb; two are vision verbs in the first and the second positions, as in (137c).

(137) a.

เบน	สายตา	ออก	ไป	นอก	ร้าน
been	săay taa	ʔɔ̀ɔk	pay	nɔ̂ɔk	ráan
veer	line of vision	exit	go	out	shop

(S/he) moved her/his line of vision out of the shop.

b.

มอง	ข้าม	ไป	อีก	ฝั่ง	หนึ่ง
mɔɔŋ	khâam	pay	ʔìik	fàŋ	nùŋ
look	cross	go	further	bank	one

(S/he) looked across to the other bank.

c.	คุณนาย	จ้อง	มอง	ไป	ยัง	คุณหนู
	khun naay	cɔ̂ŋ	mɔɔŋ	pay	yaŋ	khun nŭu
	PRONOUN	stare	look	go	toward	PRONOUN

He stared at her.

6. If there are four VP's, the last two verbs must be motion verbs. The possibilities of the semantic types of verbs are as follows.

i. The four verbs are all motion verbs, as in (138a).

ii. Three are motion verbs; one is a vision verb in the first position, as in (138b), or in the second position, as in (138c).

iii. Two are motion verbs; two are vision verbs in the first and the second positions, as in (138d).

(138) a.

หล่อน	ส่ง	สายตา	จาก	ที่	นั่น	ไป
lɔ̀ɔn	sòŋ	săay taa	càak	thîi	nân	pay
PRONOUN	send	line of vision	leave	place	that	go

สู่	ฟ้ากฟ้า	เบื้องบน
sùu	fâak fáa	bɯ̂aŋ bon
get to	sky	above

She moved her line of vision from that place to the sky above.

b.	เธอ	มอง	ผ่าน	กระจก	ใส	เข้า	ไป
	thɤɤ	mɔɔŋ	phàan	kracòk	săy	khâw	pay
	PRONOUN	look	pass	glass	transparent	enter	go

S/he looked across the transparent glass into (somewhere).

c.	สิตา	ทอด	มอง	ออก	ไป	ยัง	ท้องฟ้า
	sìtaa	thɔ̂ɔt	mɔɔŋ	ʔɔ̀ɔk	pay	yaŋ	thɔ́ɔŋ fáa
	Sitaa	stretch	look	exit	go	toward	sky

Sitaa stretched (her line of vision) and looked out toward the sky.

d.	ตา	เหลือบ	แล	ขึ้น	ไป	บน	เพดาน
	taa	lɯ̀ap	lɛɛ	khɯ̂n	pay	bon	pheedaan
	eye	glance upward	look	descend	go	on	ceiling

(Her/His) eyes looked up to the ceiling.

7. If there are five VP's, the first verb must be a vision verb and the other verbs must be motion verbs, as in (139).

(139)	เขา	มอง	ไล่	จาก	ใบหน้า	ลง	ไป
	kháw	**mɔɔŋ**	**lây**	**càak**	**bay nâa**	**loŋ**	**pay**
	PRONOUN	look	chase	leave	face	descend	go

He looked (at her) following from her face downward.

Auditory

Pattern 1:	NP	VP	(PP)
	AGENT	|	
	Sound perceiver	motion	

Condition: The VP must be transitive. The object NP represents a sound (MOVER).

(140)	นาง	เสม	ยื่น	คำ	ขาด
	naaŋ	**sěem**	**yûun**	**kham**	**khàat**
	woman	Seem	protrude	word	ultimate

Seem gave the ultimate word.

Pattern 2:	NP	VP * (2-5)	PP
	AGENT	|	ABSOLUTE
	Sound producer	motion/audition/emission/length	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is five.

2. Four kinds of verbs may be included: motion, audition, emission and length verbs. While the length verbs are intransitive, the other verbs are either intransitive or transitive. The object NP of a motion verb represents a MOVER (sound) or an ABSOLUTE (aural perceiver, other reference entity). The object NP of an audition (specifically, verbal

activity) verb represents an ABSOLUTE (the content of speaking). The object NP of an emission verb represents a MOVER (sound).

3. There must be at least one motion verb in the verb string.

4. If there are two VP's, there must be at least one motion verb (the same as Condition 3). The possibilities of the semantic types of verbs are as follows.

i. Both are motion verbs, as in (141a).

ii. One is a motion verb; another is an audition verb in the first position, as in (141b), or in the second position, as in (141c).

iii. One is a motion verb; another is a length verb in the second position, as in (141d)

(141) a.

กระแทก	เสียง	ไล่	หลัง	อย่าง	จงใจ
krathêɛk	**sĭaŋ**	**lây**	**lăŋ**	**yàaŋ**	**coŋcay**
bang	sound	chase	back	mannerdeliberate	

(S/he) threw her/his voice at (someone's) back deliberately.

b.

เค้า	ร้อง	เพลง	ใส่	พราว
kháw	**rɔ́ɔŋ**	**phleeŋ**	**săy**	**phraaw**
PRONOUN	sing	song	put in	Phraaw

S/he sang a song off to Phraaw.

c.

เขา	ส่ง	เสียง	ดัง
kháw	**sòŋ**	**sĭaŋ**	**daŋ**
PRONOUN	send	sound	loud.

S/he sent a loud voice.

d.

หล่อน	ลาก	เสียง	ยาว
lɔ̀ɔn	**lâak**	**sĭaŋ**	**yaaw**
PRONOUN	tug	sound	long

She draw the sound out.

5. If there are three VP's, there must be at least two motion verbs. The possibilities of the semantic types of verbs are as follows.

i. All of the three verbs are motion verbs, as in (142a).

ii. Two are motion verbs; one is an audition verb in the first position, as in (142b),

or in the second position, as in (142c).

iii. Two are motion verbs; one is an emission verb in the first position, as in (142d).

(142) a.

รำนำ	ส่ง	เสียง	ออก	มา	อีก
ramnam	sòŋ	sĭaŋ	ʔɔ̀ɔk	maa	ʔiik
Ramnam	send	sound	exit	come	again

Ramnam sent her voice out (from somewhere) again.

b.

หล่อน	ถาม	ออก	ไป	เพื่อ	ให้
lɔ̀ɔn	thăam	ʔɔ̀ɔk	pay	phɯ̂a	hây
PRONOUN	ask	exit	go	in order to	CAUSATIVE

แน่ใจ
nɛ̂ɛcay
certain

She asked (and her voice moved out from somewhere) to be sure.

c.

ฉัน	ส่ง	เสียง	ถาม	จาก	ข้างนอก	ห้อง
chăn	sòŋ	sĭaŋ	thăam	càak	khâŋ nɔ̂ɔk	hɔ̂ŋ
PRONOUN	send	sound	ask	leave	outside	room

I sent a question from outside the room.

d.

หล่อน	เปล่ง	เสียง	ออก	มา
lɔ̀ɔn	plèŋ	sĭaŋ	ʔɔ̀ɔk	maa
PRONOUN	emit	sound	exit	come

She sent a sound (out of her mouth).

6. If there are four VP's, there must be at least two motion verbs. The possibilities of the semantic types of verbs are as follows.

i. Three are motion verbs; one is an audition verb in the first position, as in (143a).

ii. Two are motion verbs; two are audition verbs in the first two positions, as in (143b).

(143) a.

อ่าน	ออก	เสียง	เข้า	หู	ซ้าย	ทะลุ	หู
ʔàan	ʔɔ̀ɔk	sĭaŋ	khâw	hŭu	sáay	thalú?	hŭu
read	put out	sound	enter	ear	left	go through	ear

ขวา

khwăa

right

(S/he) read out loud, the sound going in the left ear and going through the right ear.

b.

เขา	ร้อง	ด่า	ลง	มา
kháw	**rɔ́ɔŋ**	**dàa**	**loŋ**	**maa**
PRONOUN	cry	abuse	descend	come

S/he cried abuses that came downstairs.

7. If there are five VP's, the first three verbs must be audition verbs and the last two verbs must be motion verbs, as in (144).

(144)

ฉัน	ร้อง	ตะโกน	เสียง	ดัง	ออก	มา
chăn	**rɔ́ɔŋ**	**takoon**	**sĭaŋ**	**daŋ**	**?ɔ̀ɔk**	**maa**
PRONOUN	cry	shout	sound	loud	exit	come

I shouted loudly (and the shout came out of my mouth).

Olfactory	NP	VP * (2-4)	(PP)
	AGENT	|	
	Odor producer	motion/olfaction	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is four.

2. Two kinds of verbs may be included: motion and olfaction verbs. The motion verbs are either intransitive or transitive, while the olfaction (specifically, odor quality) verbs are intransitive. The object NP of a motion verb represents a MOVER (odor).

3. There must be at least one motion verb in the verb string.

4. If there are two VP's, there must be at least one motion verb (the same as Condition 3).

The possibilities of the semantic types of verbs are as follows.

i. Both are motion verbs, as in (145a).

ii. One is a motion verb; another is an olfaction verb in the second position, as in

(145b)

(145) a.

เตา	ย่าง	เนื้อ	ส่ง	กลิ่น	กำจาย
taw	yâaŋ	nɯ́a	sòŋ	klîn	kamcaay
cooking stove	grill	meat	send	odor	spread

The grill sent a smell diffusing.

b.

ใบไม้	เน่า	ส่ง	กลิ่น	เหม็นหืน
bay máy	nâw	sòŋ	klîn	mĕn hɯ̌ɯn
leaf	rotten	send	odor	bad-smelling

The rotten leaves gave off a bad smell.

5. If there are three VP's, the second verb must be an olfaction verb and the others must be motion verbs, as in (146).

(146)

ข้าว	ยัง	เขียว	ชอุ่ม	ส่ง	กลิ่น	หอม	กำจาย
khâaw	yaŋ	khĭaw	chaùm	sòŋ	klîn	hɔ̌ɔm	kamcaay
rice	still	green	fresh	send	odor	fragrant	spread

The fresh rice sent a fragrance about.

6. If there are four VP's, the second verb must be an olfaction verb and the others must be motion verb, as in (147).

(147)

ปลา	ที่		เน่า	ส่ง	กลิ่น	เหม็น	ออก
plaa	thîi		nâw	sòŋ	klîn	mĕn	ʔɔ̀ɔk
fish	RELATIVE PRONOUN		rotten	send	odor	bad-smelling	exit
มา							
maa							
come							

The rotten fish gave off a bad smell.

Radiation	NP	VP * (2-4)	(PP)
	AGENT	|	

Radiator motion/illumination/emission

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is four.

2. Three kinds of verbs may be included: motion, illumination and emission verbs. The motion and illumination verbs are either intransitive or transitive, while the emission verbs are transitive. The object NP of a motion verb represents a MOVER (light) or an ABSOLUTE (illuminated entity). The object NP of an illumination or emission verb represents a MOVER (light).

3. There must be at least one motion verb in the verb string.

4. If there are two VP's, there must be at least one motion verb (the same as Condition 3). The possibilities of the semantic types of verbs are as follows.

i. Both are motion verbs, as in (148a).

ii. One is a motion verb; another is an illumination verb in the first position, as in (148b), or in the second position, as in (148c).

iii. One is a motion verb; another is an emission verb in the first position, as in (148d).

(148) a.

ตะวัน	ทอ	ประกาย		ฉาบ	ฟ้า
tawan	thɔɔ	prakaay		ʔàap	fáa
sun	weave	sparks		cover	sky

The sun wove sparks covering the sky.

b.

ดวงอาทิตย์	ส่อง	ผ่าน	กระจก	บาน		ที่สอง
duaŋ ʔaathít	sɔ̀ɔŋ	phàan	kracòk	baan		thîi sɔ̌ɔŋ
sun	shine	pass	glass	CLASSIFIER		second

The sun shone and (the light) passed through the second glass.

c.

ดาว	ทอ	แสง	ระยิบระยับ	บน	ท้องฟ้า
daaw	thɔɔ	sɛ̌ɛŋ	rayíp rayáp	bon	thɔ́ɔŋ fáa
star	weave	light	bright	on	sky

The star wove bright light on the sky.

d.

แดด	แผด	แสง	แรง	ไป	ทั่ว	ถนน	ใหญ่
dèɛt	phèɛt	sɛ̌ɛŋ	rɛɛŋ	pay	thûa	thanŏn	yày

sun(light) emit light strong go all over road big

The sun emitted strong light all over the wide street.

5. If there are three VP's, there must be at least two motion verbs. The possibilities of the semantic types of verbs are as follows.

i. Three are all motion verbs, as in (149a).

ii. Two are motion verbs; one is an illumination verb in the second position, as in (149b).

iii. Two are motion verbs; one is an emission verb in the first position, as in (149c).

(149) a. แวว ตา ส่ง ประกาย ออก มา

wɛɛw taa sòŋ prakaay ʔɔ̀ɔk maa

gleam eye send sparks exit come

The gleaming eyes gave off sparks.

b. ดวงจันทร์ ทอ แสง สลัวๆ ลอด ลานเมฆ

duaŋ can thɔɔ sěɛŋ salŭa salŭa lɔ̂ɔt laan mêek

moon weave light dim go through cloud

The moon wove a dim light through the clouds.

c. องค์พระ เปล่ง รัศมี ออก มา รอบ

ʔɔŋ phráʔ plèŋ rátsamĭi ʔɔ̀ɔk maa rɔ̂ɔp

Buddhist image emit light exit come around

กาย

kaay

The Buddhist image emitted light around the body.

6. If there are four VP's, the first verb must an illumination verb and the others must be motion verbs, as in (150).

(150) ส่อง แสง ตรง ลง มา

sɔ̀ɔŋ sěɛŋ troŋ loŋ maa

shine light go straight descend come

(It) sent light straight down.

Shadow	NP	VP * (2-7)	(PP)
	AGENT	|	
	Shadow producer	motion/length	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is seven. (But my data do not include clause patterns for simultaneous agentive shadow emanation events that consist of four VP's or five VP's or six VP's.)

2. Two kinds of verbs may be included: motion and length verbs. The motion verbs are either intransitive or transitive, while the length verbs are intransitive. The object NP of a motion verb represents a MOVER (shadow) or an ABSOLUTE (shaded entity, reference entity).

3. There must be at least two motion verbs in the verb string.

4. If there are two VP's, the two verbs must be motion verbs, as in (151).

(151)	ต้นไม้	ทอด	เงา	ลง	บน	พื้นน้ำ
	tôn máy	thɔ̂ɔt	ŋaw	loŋ	bon	phúuunnám
	tree	stretch	shadow	descend	on	surfacewater

The tree stretched its shadow down on the surface of the water.

5. If there are three VP's, all of the three verbs must be motion verbs, as in (152).

(152)	ยอด	ปราสาท	ทอด	เงา	ลง	มา
	yɔ̂ɔt	praasàat	thɔ̂ɔt	ŋaw	loŋ	maa
	top	tower	stretch	shadow	descend	come

The tower's top stretched its shadow down.

6. If there are seven VP's, the second verb must be a length verb and the others must be motion verbs, as in (153).

(153) มะม่วง ขยับ เงา ยาว จาก โคน ต้น ทอด

mamûaŋ khayàp ŋaw yaaw càak khoon tôn thɔ̂ɔt

mango budge shadow long leave trunk tree stretch

ยืด ไป ตาม พื้น

yûut pay taam phúun

lengthen go follow ground

The mango tree moved its shadow in length extending from its trunk along the ground.

4.3.2.3. Clause Patterns for Sequential Agentive Emanation Events

The clause patterns for sequential agentive emanation events are composed of a subject NP and two VP's at least or six VP's at most. A PP may be included. The clausal subject represents an AGENT (visual perceiver, sound producer, radiator, shadow producer). There are no examples of sequential agentive emanation events of the olfactory, tactile and orientation types.

Below I present the formulations of clause patterns for sequential agentive emanation events of the visual, auditory, radiation and shadow types with examples.

Visual	NP	VP * (2-6)	(PP)
	AGENT	┆	
	Visual perceiver	motion/vision	

Conditions:

1. The minimum number of VP's is two and the maximum number of VP's is six.
2. Two kinds of verbs may be included: motion and vision verbs. They are either intransitive or transitive. The object NP of a motion verb represents a MOVER (line of vision) or absolute (seen entity, visual perceiver, other reference entity). The object NP of a vision verb also represents a MOVER (line of vision) or an ABSOLUTE (seen entity).
3. There must be at least one motion verb and one vision verb in the verb string.
4. If there are two VP's, the first verb must be a motion verb and the second verb must

be a vision verb, as in (154).

(154)	ทับทิม	ทอด	สายตา	มอง
	thápthim	**thɔ̂ɔt**	**săay taa**	**mɔɔŋ**
	Thapthim	stretched	line of vision	look

Thapthim stretched her line of vision to look (at something).

5. If there are three VP's, there must be at least one motion verb and one vision verb in the verb string (the same as Condition 3). The possibilities of the semantic types of verbs are as follows.

i. Two are motion verbs; one is a vision verb in the second position, as in (155a), or in the third position, as in (155b).

ii. One is a motion verb; two are vision verbs in the first and second positions, as in (155c), or in the second and the third positions, as in (155d), or in the first and the third positions, as in (155e).

(155) a.

ทอด	สายตา	มอง	ไป	ข้างหน้า
thɔ̂ɔt	**săay taa**	**mɔɔŋ**	**pay**	**khâaŋ nâa**
stretch	line of vision	look	go	ahead

(S/he) stretched her/his line of vision to look forward.

b.

ทับทิม	กวาด	สายตา	ไป	มอง	รอบๆ
thápthim	**kwàat**	**săay taa**	**pay**	**mɔɔŋ**	**rɔ̂ɔp rɔ̂ɔp**
Thapthim	sweep	line of vision	go	look	around

ห้อง
hɔ̂ŋ
room

Thapthim moved her line of vision to look around the room.

c.

ทั้งสอง	ฝ่าย	จับ	จ้อง	มอง	ตา	กัน
tháŋ sɔ̌ɔŋ	**fàay**	**càp**	**cɔ̂ɔŋ**	**mɔɔŋ**	**taa**	**kan**
both	side	hold	stare	look	eye	RECIPROCAL

The both sides held (their lines of vision) and stared into each other's eyes.

d. ตา กวาด มอง ดู เสื้อผ้า อาภรณ์ ของ
taa kwàat mɔɔŋ duu sɯ̂a phâa ʔaaphɔɔn khɔ̌ɔŋ
eye sweep look see clothes jewelry of
lûuk sǎaw
ลูกสาว
daughter
(Her/His) eyes moved to look at (her/his) daughter's dress and jewelry.

e. นาย ผสาน เหลือบ มา เห็น คน
naay phasǎan lɯ̀ap maa hěn khon
man Phasarn glance sidewise come see person
ทั้งสอง
tháŋ sɔ̌ɔŋ
both
Phasarn glanced sidewise to see the both persons.

6. If there are four VP's, there must be at least one motion verb. The possibilities of the semantic types of verbs are as follows.

i. Three are motion verbs; one is a vision verb in the second position, as in (156a), or in the fourth position, as in (156b).

ii. Two are motion verbs; two are vision verbs in the first and the fourth positions, as in (156c), or in the second and the fourth positions, as in (156d), or in the third and the fourth positions, as in (156e).

iii. One is a motion verb in the second position; three are vision verbs, as in (156f).

(156) a. ฉัน กวาด สายตา มอง เข้า ไป ใน
chăn kwàat sǎay taa mɔɔŋ khâw pay nay
PRONOUN sweep line of vision look enter go in
ห้อง เค
hɔ̂ŋ kee
room K
I moved my line of vision to look into K's room.

b. ลด สายตา ลง มา มอง ข้างล่าง

lót	sǎay taa	loŋ	maa	mɔɔŋ	khâŋ lâŋ
lower	line of vision	descend	come	look	downstairs

(S/he) lowered her/his line of vision to look downstairs.

c.

มอง	ลง	มา	เห็น	อ่าว
mɔɔŋ	loŋ	maa	hěn	?àaw
look	descend	come	see	bay

(S/he) looked down and saw the bay.

d.

มอง	ผ่าน	แว่น	มา	มอง	หญิงสาว
mɔɔŋ	phàan	wên	maa	mɔɔŋ	yǐŋ sǎaw
look	pass	eyeglases	come	look	girl

(S/he) peered through the glasses to get to look at the girl.

e.

คุณ	ลาน	ถอน	สายตา	จาก	ลำคลอง
khun	laan	thɔ̌ɔn	sǎay taa	càak	lam khlɔɔŋ
Mr.	Laan	withdraw	line of vision	leave	canal

เหลือบ	มอง	หล่อน
lɯ̀ap	mɔɔŋ	lɔ̀ɔn
glance	look	PRONOUN

Mr. Laan moved his line of vision from the canal to cast a look at her.

f.

ผม	มอง	ผ่าน	แว่น	เพ่ง	อ่าน	เวลา	บน
phǒm	mɔɔŋ	phàan	wên	phêŋ	?àan	weelaa	bon
PRONOUN	look	pass	eyeglasses	stare	read	time	on

ข้อมือ	ตัวเอง
khɔ̂ɔ mɯɯ	tua ?eeŋ
wrist	self

I looked through the glasses to stare at the time on my watch.

7. If there are five VP's, there must be three motion verbs and two vision verbs. The possibilities of the semantic types of verbs are as follows.

i. Two vision verbs are in the second and the fifth positions, as in (157a).

ii. Two vision verbs are in the first and the fifth positions, as in (157b)

(157) a.

เล็ง	แล	เข้า	ไป	เห็น	มัน
leŋ	lɛɛ	khâw	pay	hěn	man

aim look enter go see it

(S/he) directed (her/his line of vision) and looked in to see it.

b. แล เลย ข้าม โขง ไป เห็น แขวง

lɛɛ ləəy khâam khŏoŋ pay hĕn khwĕɛŋ

look overstep cross Khong go see prefecture

คำม่วง

khammûaŋ

Khammuang

(S/he) looked (and her/his line of vision moved out) across the Khong river to see Khammuang prefecture.

8. If there are six VP's, there must be at least three motion verbs. The possibilities of the semantic types of verbs are as follows.

i. Four are motion verbs; two are vision verbs in the last two positions, as in (158a).

ii. Thee are motion verb; three are vision verbs in the first, the fifth, and the sixth positions, as in (158b).

(158) a. ละ สายตา จาก หนังสือ ขึ้น มา มอง ดู

lá? săay taa càak năŋsŭɯ khûn maa mɔɔŋ duu

detach line of vision leave book ascend come look see

ฉัน

chăn

PRONOUN

(S/he) moved her/his line of vision from the book upward to look at me.

b. ถวิกา มอง ออก ไป แล เห็น แขน ขา

thawíkaa mɔɔŋ ʔɔɔk pay lɛɛ hĕn khĕɛn khăa

Thawikaa look exit go look see arm leg

ของ ทั้ง ผู้หญิง ผู้ชาย กวัดไกว

khŏɔŋ tháŋ phûu yĭŋ phûu chaay kwàtkway

of both woman man swing

Thawikaa looked out and saw the swinging arms and legs of the both of a woman and a man.

Auditory	NP	VP * (2-4)
	AGENT	|
	Sound producer	motion/audition

Conditions:

1. The minimum number of VP is two and the maximum number of VP is four.

2. Two kinds of verbs may be included: motion and audition verbs. They are either intransitive or transitive. The object NP of a motion verb represents a MOVER (sound) or an ABSOLUTE (aural perceiver, other reference entity). The object NP of an audition (specifically, verbal activity) verb represents an ABSOLUTE (aural perceiver, the content of speaking).

3. There must be at least one motion verb and one audition verb in the verb string.

4. If there are two VP's, the first verb must be a motion verb and the second verb must be an audition verb, as in (159).

(159) ส่ง เสียง ถาม น้ำพราว
sòŋ sĭaŋ thăam námphraaw
send sound ask Namphraaw
(S/he) sent a question to ask Namphraaw (something).

5. If there are three VP's, there must be at least one motion verb and one audition verb (the same as Condition 3). The possibilities of the semantic types of verbs are as follows.

i. Two are motion verbs; one is an audition verb in the first position, as in (160a), or in the third position, as in (160b).

ii. One is a motion verb; two are audition verbs. The audition verbs may be in the second and third positions, as in (160c), or in the first and the third positions, as in (160d)

(160) a. คุณ ตรัย โทรฯ มา ถึง เธอ
khun tray thoo maa thŭŋ thəə

Mr. Tray telephone come reach PRONOUN

Mr. Tray telephoned to her.

b. ส่ง เสียง ผ่าน อินเตอคอม แนะนำตัว

sòŋ sĭaŋ phàan ʔintəəkhɔɔm néʔnam tua

send sound pass intercom introduce oneself

(S/he) spoke (sent her/his voice) through the intercom to introduce herself/himself.

c. ส่ง เสียง ร้อง เรียก

sòŋ sĭaŋ rɔ́ɔŋ rîak

send sound cry call

(S/he) sent her/his voice calling out crying. (S/he called someone crying.)

d. ฉัน โทรศัพท์ ไป บอก

chán thoorasàp pay bɔ̀ɔk

PRONOUN telephone go tell

I telephoned (and the voice traveled) to tell (something).

6. If there are four VP's, three are motion verbs and one is an audition verb in the first position, as in (161).

(161) นักร้อง สาว ร้อง เจื้อยแจ้ว ลอย มา กระทบ หู

nák rɔ́ɔŋ sǎaw rɔ́ɔŋ cʉ̂ay cêɛw lɔɔy maa krathóphŭu

singer female sing melodious float come hit ear

หนุ่ม สาว ทั้งสอง

nùm sǎaw tháŋ sɔ̌ɔŋ

young man young woman both

The singer sang melodiously and (the song) came floating in and struck the ears of both of the young man and the young woman.

Radiation	NP	VP * (3)	pp
	AGENT	|	ABSOLUTE
	Radiator	motion	Illuminated entity

Conditions:

1. The number of VP's is three.

2. Only motion verbs are included. They are either intransitive or transitive. The object NP of a motion verb represents a MOVER (light).

(162)	พระอาทิตย์	ทอ	แสง	สี	ทอง	ลง	ทาบ	กับ
	phrá? ʔaathít	thɔɔ	sěeŋ	sǐi	thɔɔŋ	loŋ	thâap	kàp
	sun	weave	light	color	gold	descend	cover	with
	ผิว	น้ำ						
	phǐw	nám						
	surface	water						

The sun shed gold light down and (the light) covered the surface of the water.

Shadow	NP	VP * (5)	PP
	AGENT	|	ABSOLUTE
	Shadow producer	motion/length/distance	Shaded entity

Conditions:

1. The number of VP is five.

2. Two kinds of verbs may be included: motion, length and distance verbs. The motion verbs are transitive or intransitive, while the length and distance verbs are intransitive. The object NP of a motion verb represents a MOVER (shadow).

3. The third verb must be a length verb, the fourth verb must be a distance verb, and the others must be motion verbs, as in (163).

(163)	หลุมพอ	ต้น	ใหญ่	ทอด	เงา	ไป	ยาว
	lŭmphɔɔ	tôn	yày	thɔ̂ɔt	ŋaw	pay	yaaw
	Lumpho	CLASSIFIER	big	stretch	shadow	go	long
	ไกล	ปกคลุม	หาดทราย	และ	ลำน้ำ	ช่วง	นั้น
	klay	pòk khlum	hàat saay	lé?	lam nám	chûaŋ	nán
	far	cover	beach	and	watercourse	span	that

The big Lumpho tree stretched its shadow long and far and (the shadow) covered that area on the beach and the watercourse.

4.3.3. Summary

To present all possible clause patterns of Thai emanation expressions would be beyond the scope of this study, for the data used in this study are not exhaustive. Other patterns may be discovered if an increased amount of data is provided. However, the following points are observable from the formulations above. First, simplex emanation events are encoded by a single motion VP, while integrated emanation events are encoded by at least two VP's (serial verb construction) or a combination of a motion VP and a PP. Second, in general, the clause patterns for the visual, auditory and radiation types are relatively more various than those for the other types. This correlates with the findings in Section 3.2. Thai speakers imagine visual, auditory and radiation emanation events more richly than the other types. Third, the clause patterns for thematic emanation events of the visual type are less various than those of the other types. By contrast, those for agentive emanation events of the visual type are more various than those for the other types. This means that a line of vision tends to be imagined to move with a visual perceiver's instigation rather than to move spontaneously. Fourth, the clause patterns for thematic emanation events of the olfactory and tactile types are no less various than those of the other types. On the other hand, those for agentive emanation events of these types are much less various than those of the other types. This can be interpreted to mean that an odor and an air in motion are preferably imagined to move spontaneously in many ways.

Chapter 5

Conclusion

5.1. Findings

An emanation event is imagined when we holistically view physical entities and consider them as being related to each other. In an emanation event, an intangible entity emerges from a source entity and moves in relation to a reference entity. To describe the arbitrarily construed geographic relation among those entities, we use emanation expressions. In this study I have investigated Thai emanation expressions. In Section 1.3, I posited the following two hypotheses of this study: (a) the types of emanation events in Thai are language-specific; (b) the syntactic patterns of emanation event subtypes are different, reflecting different underlying cognitive models. These hypotheses have been verified throughout the course of this study. The main findings of this study are recapitulated below.

First, there are two force-dynamic types of idealized cognitive models (ICM's) for Thai emanation event, neither of which is marked:

(1) thematic ICM involving two role archetypes (mover and absolute)

(2) agentive ICM involving three role archetypes (mover, absolute and agent)

The subject of clauses for thematic emanation events is either a mover or an absolute, while the subject of clauses for agentive emanation events is always an agent. This is because a mover or an absolute is the focal participant in thematic ICM and an agent is the focal participant in agentive ICM.

Second, Thai emanation events can be classified into four specific semantic types according to the nature of the intangible mover:

(1) perception emanation, including

(1.1) visual emanation (fictive motion of a line of vision)

(1.2) auditory emanation (fictive motion of a sound)

(1.3) olfactory emanation (fictive motion of a smell)

(1.4) tactile emanation (fictive motion of a current of air)

(2) radiation emanation (fictive motion of light)

(3) shadow emanation (fictive motion of a shadow)

(4) orientation emanation (fictive motion of the focus of an observer or conceptualizer's attention)

In Thai, visual, auditory and radiation emanations are represented by relatively more differing clause patterns, while shadow and orientation emanations are represented by relatively fewer various clause patterns.

Third, Thai emanation events have the following event structure types.

(1) a simplex type representing a simplex emanation event

(2) an integrated type representing an integrated emanation event, including:

   a. a simultaneous type representing an emanation event that is described in more than one perspective

   b. a sequential type representing an emanation event in which two sub-events occur in succession

This classification is based on the surface forms of predicates for emanation events. The simplex type is expressed by one verb phrase, whereas the integrated type is expressed by a serial verb construction or one verb phrase combined with one prepositional phrase.

There are the following semantic constraints on realization of these emanation event structures. Verbs in simultaneous emanation expressions must denote processes occurring at the same time. The last verb in sequential thematic emanation expressions must denote an inchoative motion at the terminal phase (e.g. a mover's stopping at an absolute; a mover's striking at an absolute; a mover's covering an absolute). The first verb in sequential agentive emanation expressions must denote an inchoative motion at the initial phase (e.g. an agent's launching a mover, an agent's stretching a mover).

These findings of this study on Thai emanation events give us a certain clue to understand how Thai speakers mentally organize the world.

5.2. Discussion

Adopting Langacker's revised notion of "subjectification" (Langacker 1999: 297-302), I identify the degree of subjectivity involved in each type of Thai emanation. Subjectification is a shift from a relatively objective construal of some entity to a more subjective one. In his latest account of subjectification, a revision of the former account (Langacker 1985, 1990), Langacker acknowledges that an offstage conceptualizer is ALWAYS subjectively construed to the extent that it functions as the subject of conception. However, there are at least three stages of subjectification. In the first stage, a conceptualizer mentally scans from one participant to another in an event s/he conceives, and the most focal participant, which functions as an initial point of access in conceiving the profiled relationship among the participants, is determined by the participants' objective asymmetry with regard to activeness. In the intermediate stage, a conceptualizer does the same or a comparable mental scanning as in the first stage, but the objective situation offers less motivation for this. The most focal participant (source entity) is selected by the conceptualizer more or less arbitrarily. And in the final stage, there is no objective basis for the conceptualizer's mental scanning. The basis for it entirely resides in the conceptualizer's activity, that is, the process of conceptualization itself.

I think that Thai emanation events involve the intermediate stage of subjectification. But the degree of subjectification of orientation emanation is slightly higher than in other types of emanation. In conceptualizing perception emanation or radiation emanation or shadow emanation, Thai speakers imagine an intangible mover analogous to a tangible mover. The imagined mover is autonomous and substantial enough to be described as moving in a manner such as rushing, flowing, falling, and so on. In conceptualizing orientation emanation, on the other hand, Thai speakers do not imagine any mover independent of the conceptualizer. What moves along a path connecting participants in an orientation emanation event is the focus of the conceptualizer's attention which is by no means substantial. However, orientation

emanation is not a fully subjective conceptualization since a certain objective motivation is still involved. That is, there must be such an objective situation that an orientated entity either actually or fictively turns or points toward a reference entity prior to the focus of attention's shift from the orientated entity to the reference entity.

Let me conclude this study by comparing Thai emanation events with English emanation events examined by Talmy (1996). Thai way of conceiving emanation reflected in Thai emanation expressions differs from the English way of conceiving emanation reflected in English emanation expressions, although the same human mental operations (such as schematization, landmark-trajector organization, idealized models, force-dynamic construals, conceptual blending, and so on) apply to the both. Differences between them are summarized below.

First, most Thai emanation expressions, unlike English emanation expressions, include the deictic verb มา maa 'come' or ไป pay 'go' which signals the observer or conceptualizer's vantage point independent of event participants. It follows that Thai emanation events tend to be observed from a particular point of view, or in other words, they are largely designated in the "relative frame of reference" (Levinson 1996: 142-145).

Second, stative verbs (like 'face, lie') and dynamic prepositions (like 'toward, away from') may co-occur in English orientation emanation expressions (e.g. The cliff wall faces toward the valley; The snake is lying toward the light), whereas they do not in the Thai counterparts. (164) including the stative verb phrase นอนอยู่ nɔɔn yùu 'be lying' and the dynamic preposition ยัง yaŋ 'toward' is unacceptable.

(164) *	งู	นอน	อยู่	(ไป)	ยัง	ไฟ
	ŋuu	nɔɔn	yùu	(pay)	yaŋ	fay
	snake	lie down	stay	(go)	toward	light

(intended meaning) The snake is lying (facing) toward the light.

Thai orientation emanations always involve the orientated entity's actual or fictive motion in place (turning, pointing). To put it another way, Thai orientation emanations cannot be fully subjective; they need reference to some motion in the physical world.

Third, perception emanation involving no agent (i.e. thematic perception emanation) is scarcely imagined by English speakers, but it is a common conceptualization for Thai speakers.

One construal factor that distinguishes Thai and English emanations is whether or not the speakers put great emphasis on the "agentivity" of event participants. The semantic distinction between an agent that has body parts and volition/intention to act, on the one hand, and a non-agent including a mere mover, on the other hand, is significant in English, while it is not clear in Thai. For example, Thai verbs of bodily motion in place (such as หัน **hăn** 'turn the face or back' and ชี้ **chíi** 'point the finger or hand') are used for describing not only bodily motions of animate beings, as in (165a), but also spatial relationships of inanimate beings, as in (165b).

(165)	a.	เขา	หัน	หน้า	เข้า	หา	กัน
		kháw	**hăn**	**nâa**	**khâw**	**hăa**	**kan**
		PRONOUN	turn	face	enter	seek	RECIPROCAL
		Two persons face toward each other.					
	b.	ป้าย	หัน	หน้า	เข้า	หา	กัน
		pâay	**hăn**	**nâa**	**khâw**	**hăa**	**kan**
		signboard	turn	face	enter	seek	RECIPROCAL
		Two signboards face toward each other.					

This is not a matter of rhetorical personification because there are no other choices to express the oppositional relationship of two objects with a face-like part than by using the verb phrase หันหน้าเข้าหากัน **hăn nâa khâw hăa kan** '(turn + face + enter + seek + RECIPROCAL) face each other' in Thai. It might appear that agentivity or volition does not inhere in the meaning of bodily motion verbs in Thai. The most significant semantic elements that those verbs entail, I think, are schematic shape and the position of human body parts (such as front surface and pointed end) as well as directionality of motion (such as horizontal motion and vertical motion) apart from agentivity or volition.

These considerations invite further empirical investigation regarding human cognition. A full understanding of a variety of emanation phenomena awaits further research on the human mental mechanism.

SOURCES OF DATA

กฤษณา อโศกสิน. 2525a. บันไดเมฆ ๑. กรุงเทพฯ: รวมสาส์น.

กฤษณา อโศกสิน. 2525b. บันไดเมฆ ๒. กรุงเทพฯ: รวมสาส์น.

กฤษณา อโศกสิน. 2534. กระเช้าสีดา. กรุงเทพฯ: รวมสาส์น.

ชาติ กอบจิตติ. 2541. เวลา. กรุงเทพฯ: หอน.

ปรียา อิงคาภิรมย์ โฮริเอะ และกนก ศฤงคารินทร์ (ผู้แปล). 2538. โคะโคะโระ [Mind]. กรุงเทพฯ: ดอกหญ้า.

พงาพันธ์ (ผู้แปล). 2542. เจ้าชายน้อย [Le Petit Prince]. กรุงเทพฯ: ศรีสารา.

พิสิฐ ภูศรี. 2542. คนโซในปราสาท. กรุงเทพฯ: ดอกหญ้า.

ไพฑูรย์ รัญญา. 2541. ก่อกองทราย. กรุงเทพฯ: นาคร.

ว.วินิจฉัยกุล. 2535a. สองฝั่งคลอง ๑. กรุงเทพฯ: วัตสาตรี.

ว.วินิจฉัยกุล. 2535b. สองฝั่งคลอง ๒. กรุงเทพฯ: วัตสาตรี.

วาศนา ชลศักษ์ เคนแมน (บรรณาธิการ). 2538. ผู้หญิงอาเซีย: รวมเรื่องสั้นสะท้อนชีวิตและวัฒนธรรม. กรุงเทพฯ: คบไฟ.

ศิลา โคมฉาย. 2536. ครอบครัวกลางถนน. กรุงเทพฯ: มิ่งมิตร.

สมาคมนักเขียนแห่งประเทศไทย. 2541. เรื่องแสงดาว: รวมเรื่องสั้นเด่นของนักเขียนดังระดับคุณภาพ. กรุงเทพฯ: ชวนพิมพ์.

REFERENCES

Thai

จรัสดาว อินทรทัศน์. 2539. กระบวนการที่คำกริยากลายเป็นคำบุพบทในภาษาไทย. [Grammaticalization of Verbs into Prepositions in Thai]. วิทยานิพนธ์ปริญญาดุษฎีบัณฑิต ภาควิชาภาษาศาสตร์ คณะอักษรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.

ชัชวดี ศรลัมพ์. 2538. การศึกษามโนทัศน์ของคำว่า เข้า [A Conceptual Study of khâw]. วิทยานิพนธ์ปริญญาดุษฎีบัณฑิต ภาควิชาภาษาศาสตร์ คณะอักษรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.

โสภาวรรณ แสงไชย. 2537. กริยารอง ขึ้น และ ลง ในภาษาไทย [Subsidiary Verbs khŭn and loŋ in Thai]. วิทยานิพนธ์ปริญญามหาบัณฑิต ภาควิชาภาษาศาสตร์ คณะอักษรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.

Japanese

Kunihiro, Tetsuya. 1985. Ninchi to gengo-hyoogen [Cognition and Linguistic Expressions]. Gengo Kenkyuu 88: 1-19.

Matsumoto, Yo. 1997a. Kuukan-idoo no gengo-hyoogen to sono kakuchoo [Linguistic Expressions for Spatial Motion and their Extensions] In Nakau, M. (ed.), Kuukan to idoo no hyoogen [Expressions of Space and Motion]. Tokyo: Kenkyuusha, 125-230.

Matsumoto, Yo. 1998b. Nihongo no goiteki hukugoodooshi ni okeru dooshi no kumiawase [The Combinatory Possibilities in Japanese V-V Lexical Compounds]. Gengo kenkyuu 114: 37-83.

Takahashi, Kiyoko. 1998. Taigo no kyokooidoo-kekka-hyoogen to senzaiteki-kyokooidoo-hyoogen no kinoo to imiteki-seiyaku [Functions of Resultative Fictive Motion (Advent Path) Expressions and Potential Fictive Motion (Coverage Path) Expressions in Thai and Semantic Constraints on the Expressions]. Proceedings of the 116th General Meeting of the Linguistic Society of Japan, 136-141.

Teramoto, Hatsumi. 1992. Taigo dooshi nigo renyoobun ni okeru koosatsu [A Study on Thai Sentences Comprising Two Verbs in a Row]. Master's thesis. Osaka University of Foreign Studies.

English

Bisang, Walter. 1996. Areal Typology and Grammaticalization: Processes of Grammaticalization Based on Nouns and Verbs in East and Mainland South East Asian Languages. Studies in Language 20.3: 519-597.

Bradley, Dan Beach. 1873. Dictionary of the Siamese Language. Bangkok: American Missionary Association Press.

Croft, William. 1991. Syntactic Category and Grammatical Relations: The Cognitive Organization of Information. Chicago: University of Chicago Press.

Croft, William. 1993. Case Marking and the Semantics of Mental Verbs. In Pustejovsky, James (ed.), Semantics and the Lexicon. Dordrecht: Kluwer Academic, 55-72.

Croft, William. 1998a. Event Structure in Argument Linking. In Butt, Miriam and Wilhelm Geuder (eds.), The Projection of Arguments: Lexical and Compositional Factors. Stanford: CSLI Publications, 21-63.

Croft, William. 1998b. The Structure of Events and the Structure of Language. In Tomasello, Michael (ed.), The New Psychology of Language: Cognitive and Functional Approaches to Language Structure. Mahwah, New Jersey: Lawrence Erlbaum Associates, 67-92.

Dowty, David R. 1979. Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ. Dordrecht: Reidel.

Fillmore, Charles. 1982. Frame Semantics. In Linguistic Society of Korea (ed.), Linguistics in the Morning Calm. Seoul: Hanshin, 111-138.

Fillmore, Charles. 1985. Frames and the Semantics of Understanding. Quaderni di semantica 6: 222-254.

Fauconnier, Gilles. 1985. Mental Spaces. Cambridge: MIT Press.

Fauconnier, Gilles. 1997. Mappings in Thought and Language. Cambridge: Cambridge University Press.

Fauconnier, Gilles and Mark Turner. 1996. Blending as a Central Process of Grammar. In Goldberg, Adele E. (ed.), Conceptual Structure, Discourse, and Language. Stanford: CSLI publications, 113-130.

Grimshaw, Jane. 1990. Argument Structure. Cambridge: MIT press.

Lakoff, George. 1987. Women, Fire, and Dangerous Things. What Categories Reveal

about the Mind. Chicago: University of Chicago Press.

Lakoff, George and Mark Johnson. 1980. Metaphors We Live By. Chicago: University of Chicago Press.

Lakoff, George and Mark Johnson. 1999. Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought. New York: Basic Books.

Langacker, Ronald W. 1985. Observations and Speculations on Subjectivity. John Haiman (ed.), Iconicity in Syntax. Amsterdam: John Benjamins, 109-150.

Langacker, Ronald. 1986. Abstract Motion. Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society, 455-471.

Langacker, Ronald W. 1987. Foundations of Cognitive Grammer.Vol.1. Theoritical Prerequisites. Stanford: Stanford University Press.

Langacker, Ronald. 1988. A View of Linguistic Semantics. In Rudzka-Ostyn, Brygide (ed.), Topics in Cognitive Linguistics. Amsterdam: John Benjamins.

Langacker, Ronald W. 1990. Subjectification. Cognitive Linguistics 1.1: 5-38.

Langacker, Ronald W. 1991a. Concept, Image, and Symbol. The Cognitive Basis of Grammar. Berlin: Mouton de Gruyter.

Langacker, Ronald W. 1991b. Foundations of Cognitive Grammer. Vol.2. Descriptive Application. Stanford: Stanford University Press.

Langacker, Ronald W. 1998a. Conceptualization, Symbolization, and Grammar. In Tomasello, Michael (ed.), The New Psychology of Language: Cognitive and Functional Approaches to Language Structure. Mahwah, New Jersey: Lawrence Erlbaum Associates, 1-39.

Langacker, Ronald W. 1998b. Virtual Reality. Proceedings of the Conference of the Linguistic Association of Canada and the United States. Claremont Gaduate University, California. July 29, 1998.

Langacker, Ronald W. 1999. Grammar and Conceptualization. Berlin: Mouton de Gruyter.

Levinson, Stephen C. 1996. Frames of References and Molyneux's Question: Crosslinguistic Evidence. In Bloom, P., M.A. Peterson, L. Nadel and M F. Garrett (eds.), Language and Space. Cambridge: MIT Press, 109-169.

Matsumoto, Yo. 1996a. Subjective Change Expressions in Japanese and their Cognitive

and Linguistic Bases. In Fauconnier, Gilles and Eve Sweetser. (eds.), Mental Space, Grammar and Discourse. Chicago: University of Chicago Press.

Matsumoto, Yo. 1996b. How Abstract is Subjective Motion? A Comparison of Coverage Path Expressions and Access Path Expressions. In Goldberg, Adele E. (ed.), Conceptual Structure, Discourse, and Language. Stanford: CSLI publications, 359-373.

Matsumoto, Yo. 1996c. Subjective Motion and English and Japanese Verbs. Cognitive Linguistics 7.2: 183-226.

Matsumoto, Yo. 1997b. Linguistic Evidence for Subjective (Fictive) Motion. In Nakayama, K. and T. Ohori (eds.), The Locus of Meaning. Tokyo: Kuroshio, 209-220.

Matsumoto, Yo. 1998a. Notes on the Constraints on Coverage Path Expressions. Handout distributed in the workshop on "Semantic Extensions of Motion Verbs" in the 1st Cognitive Linguistics Forum, Tokyo, July 1998.

Miller, George A. and Philip N. Johnson-Laird. 1976. Language and Perception. Cambridge: Haverd University Press.

Noss, Richard B. 1964. Thai Reference Grammar. Washington, D.C.: Foreign Service Institute.

Placzek, James Anthony. 1978. Classifiers in Standard Thai. Master's thesis, University of British Columbia.

Placzek, James Anthony. 1992. The Perceptual Foundation of the Thai Classifier System. In Compton, C. J. and J. F. Hartman (eds.), Paper on Tai Languages, Linguistics and Literature. De Kalb: Center for Southeast Asian Studies, Northern Illinois University, 154-167.

Pranee, Kullavanijaya. 1974. Transitive Verbs in Thai. Ph.D. dissertation, University of Hawaii.

Rangkupan, Suda. 1992. Subsidiary Verbs pay1 'go' and maa1 'come' in Thai. Master's thesis. Chulalongkorn University.

Rosch, E., C.B.Mervis, W.D.Gray, D.M.Johnson and P.Boyes-Bream. 1976. Basic Objects in Natural Categories. Cognitive Psychology 7: 573-605.

Scovel, Thomas Scott. 1971. A Look-See at Some Verbs of Perception. Language Learning 21: 75-84.

Talmy, Leonard. 1975. Semantics and Syntax of Motion. In Kimball, J. (ed.), Syntax and Semantics 4. New York: Academic Press.

Talmy, Leonard. 1976. Semantic Causative Types. In Shibatani, Masayoshi (ed.), Syntax and Semantics 6: The Grammar of Causative Constructions. New York: Academic Press, 43-116.

Talmy, Leonard. 1983. How Language Structures Space. In Pick, Jr., H.L. and L.P. Acredolo (eds.), Spatial Orientation: Theory, Research, and Application. New York: Plenum Press, 225-282.

Talmy, Leonald. 1988. Force Dynamics in Language and Cognition. Cognitive Science 12: 49-100.

Talmy, Leonard. 1989. Fictive Motion in Language and Perception. Paper presented at the Conference on Meaning and Perception, May 1989, French Canadian Association for the Advancement of Science, University of Quebec, Montreal.

Talmy, Leonard. 1990. Fictive Motion and Change in Language and Cognition. Paper presented at the Conference of the International Pragmatics Association, July 1990, Barcelona, Spain.

Talmy, Leonard. 1996. Fictive Motion in Language and "Ception." In Bloom, P., M. A. Peterson, L. Nadel, and M.F. Garett (eds.), Language and Space. Cambridge: MIT Press, 211-276.

Takahashi, Kiyoko. in press. Access Path Expressions in Thai. Cienki, A., B. Luka, and M. Smith. (eds.), Conceptual and Discourse Factors in Linguistic Structure. Stanford: CSLI Press.

Ungerer, Friedrich and Hans-Jorg Schmid. 1996. An Introduction to Cognitive Linguistics. London: Longman.

Van Voorst, Jan G. 1988. Event Structure. Amsterdam: John Benjamins.

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