

Transitivity Continuum in Thai

Kingkarn Thepkanjana

Lecturer

Department of Linguistics, Faculty of Arts

Chulalongkorn University, Bangkok 10330

Thailand

1. Introduction

Verbs in any language are traditionally classified into transitive verbs (henceforth TVs) and intransitive verbs (henceforth IVs). The word "transitive" is derived from a Latin verb "transeo", which means "go over or across".¹ The definition of the Latin verb implies a movement from one place to another. A remnant of this meaning is still present in the word "transitive" used as a grammatical term. The definition of the TV offered by classical and contemporary linguists is given in two ways : syntactic and semantic. The TV is syntactically defined as a verb which requires a direct object (henceforth DO) while the IV has no such DO present. (Jespersen 1969, Chomsky 1965) Chomsky's DO is present at the level of "deep structure" whereas Jespersen's appears at "surface structure". Semantically, the TV is defined as a verb which expresses an activity which is "carried over" or "transferred" from one participant to another, or a verb that expresses the effects of an action which pass over from the agent to the patient. (Lyons 1968) The IV, in contrast, denotes an action which is not transferred between two participants or which does not have an effect on another participant. The semantic definition presupposes that the TV has two arguments denoting two participants whereas the IV has but one. However, the verbs "to leave", "to hear", "to reach" and "to suffer" as in He left Bangkok., I heard a noise., He reached Bangkok. and He suffered a stroke., are considered TVs by the syntactic definition but, by the semantic criteria, are not incorporated within the TV class. We can see that some syntactically defined TVs are in conflict with the semantic definition of TVs as illustrated in the examples above.

The TVs and IVs in Thai are defined along the same line. Panupong (1962), Warotamasikhhadit (1963), and Kullavanijaya (1974) propose the syntactic definition for the TV whereas Phraya Uppakitsilpasarn (1918), a traditional Thai grammarian, postulates the

semantic definition, that is, a TV is a verb that is not complete in meaning without an object. Some linguists recognize that DOs of the TVs in Thai are optional. Kullavanijaya states that DOs can be omitted on two conditions, that is, (1) in certain contexts subject to recoverability (where the omitted DO is easily understood) and (2) when the DOs are either indefinite or cognate.² Noss (1964) even claims that DOs in Thai can be freely omitted.

To determine whether a given verb in Thai is a TV or an IV is not as simple as one might think. The semantic criteria for identifying both types of verbs is characteristically vague and elusive. It is not always easy to prove whether or not a verb is complete in meaning, or whether or not a verb expresses an activity which is carried over or transferred to another participant. Therefore, the semantic criteria cannot be completely relied upon. As for the syntactic criteria, it identifies as a TV a verb that can be followed by a noun. However, omitting linguistic elements in sentences is prevalent in Thai. Therefore the DOs can always be omitted in appropriate contexts. The question is how we know whether a particular verb which appears without a DO in a sentence is **actually** followed by a DO or not. In other words, how do we know if the DO is merely omitted but in fact understood, or if there is no DO present at any level of understanding? One of the tests is to try and put a noun after the verb. If the verb allows an occurrence of the following noun, it can be considered a TV. Another test is to put the interrogatives ʔàray "what" or khray "who" after the verb. If a meaningful question arises or if it is possible to think of an answer to that question, it means that the verb does have a DO; otherwise the DO could not be questioned. For example the verbs such as wítòk "worry", kít "think", nân "sit", dâyvin "hear", kròot "be angry", nòon⁴ "sleep" are identified as TVs since they can be followed by nouns or interrogative words. In contrast, such verbs ròonhây "cry", yuun "stand", lúk "rise", are considered IVs since they can be followed by neither nouns nor interrogative words. That a verb allows the presence of a DO may lead one to believe that the verb is in itself semantically incomplete and so needs a DO to complete its meaning. The problem is that our intuition sometimes makes us feel that some verbs which occur with DOs such as prà?mâa "be nervous", sònsây "wonder" d33n⁵ "walk", thûam "flood", piak "be wet", com "sink" are **not** semantically incomplete when occurring without a DO. Some people think that these verbs are already semantically complete without DOs. We can see that

there are two kinds of transitivity emerging from the discussion above, namely, syntactic transitivity and semantic transitivity. It is apparent that the two kinds of transitivity do not necessarily coincide in Thai.

From my preliminary observation, there are some cases in which Thai speakers are of the same opinion and some other cases in which they are not as to the type a given verb belongs to. For example, Thai speakers consider the verbs tii "hit", lây "expell", tât "cut", lâaN "wash", TVs, and the verbs rîip "hurry", rOONhây "cry", yîm "smile", rûaN "fall", IVs. However, there are some disagreements as to the verbs kròot "be angry", kêN "be skilful", phOocay "be sastisfied", thûam "flood", chaná? "win", etc. In this paper, I will investigate what semantic underpinnings may lie behind such intuitive judgements. To be precise, I will analyze the semantic properties of the groups of verbs that are uniformly and not uniformly agreed upon as TVs and IVs.

The data analyzed in this paper is drawn from the appendices in three theses, namely, Intransitives in Thai (Phancharoen 1967), Transitive Verbs in the Thai Language (Kanchanawan 1969), Thai Intransitive Verbs: A Study and Classification in Case Grammar (Wongsiri 1982). These appendices contain lists of three groups of verbs, that is, TVs, IVs, and "trans-intransitive" verbs (henceforth TIVs). TVs are syntactically defined in these theses as verbs that inherently require DOs. However, the DOs can be omitted in appropriate contexts. IVs are defined as verbs that do not allow the presence of any DO. TIVs are defined as verbs that have DOs which are optional even out of context; therefore, they may occur with DOs but this is not a mandatory requirement.⁶ The DOs of TIVs are regarded as extra arguments of the verbs.

2. Semantic properties of the three groups of verbs

As mentioned above, the verbs appearing in the appendices in the three theses can be classified into TVs, IVs and TIVs. Each group of verbs are semantically accounted for as below.

2.1 Transitive verbs

The verbs that are listed under the TV list in the appendix in Transitive Verbs in the Thai Language are **volitional**, **action verbs**, i.e., verbs which denote activities performed with volition on the part of the actor. The TVs in this appendix may be classified into two subclasses according to the semantic roles of the DOs. These subclasses are TVs

whose DOs are in the target role, and the TVs whose DOs are in the non-target role.

2.1.1 TVs with target DOs

The target refers to an entity which either "receives" a volitional action or is created by volitional action carried out by an agent. The target is the entity which an action is directed at. The verb of this type can be subclassified according to whether the entities denoted by the DOs exist before the actions signified by the verbs or not.

2.1.1.1 TVs with non-preexisting DOs

The TVs of this type are creation verbs such as sāaN "build", tāaN "compose", and kOO "build". The entities referred to by the DOs of these verbs do not exist before the performance of the actions. However, these entities represent the targets that the agent have in mind while performing the actions.

2.1.1.2 TVs with preexisting DOs

The verbs of this type express actions which are directed at entities that do exist before the performance of the actions. These entities "receive the action" in some way. This type of TVs is classified into three groups according to the degree of effect incurred upon the DO.

2.1.1.2.1 TVs of the first degree effect

The verbs of this type may be used as answer to the question "What does someone do to an entity?". The verbs indicate that the entities denoted by the DOs are physically affected by the agents. The actions expressed by these verbs are carried out by means of physical and direct contact. Consequently, such actions result in some kind of obvious and perceptible change in the affected entities, for example, change of location, change of state, change of size or change of shape. Some of the verbs in this type are daay "cut (grass)", rin "pour (water)", tōy "punch", yók "lift", tii "hit", sūup "pump", etc.

2.1.1.2.2 TVs of the second degree effect

The verbs of this type can also be answers to the question "What does someone do to an entity?". The actions expressed by these verbs are vague in such way that they may not be concretely specified. In addition, these actions may consist of several more specific "subactions". The entities indicated by the DOs are not necessarily physically affected. However, the actions are likely to produce some pragmatical inferred effects on the target entities. Some of the verbs are kòtkhii "oppress", khúkkhaam "endanger", ko "deceive", ?ūppathām "support", tōmtūn "fool", raNkhwaan "annoy", etc.

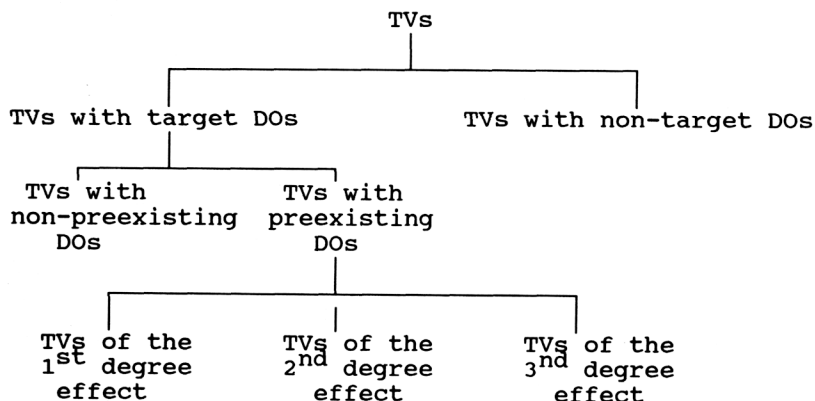
2.1.1.2.3 TVs of the third degree effect

The actions expressed by the verbs of this type do not produce any perceptible change or effect on the entities denoted by the DOs. Unlike the TVs above in 2.1.1.2.1 and 2.1.1.2.2, the TVs of this type **do not** constitute appropriate answers to the question "What does someone do to an entity?" However, the DOs still represent the targets of the actions but receive **no** effect from them. Some verbs of this type are klàp "return", dàa "scold", piin "climb", bòn "complain", hàw "bark", pay "go", pronnibàt "please", thákthaay "greet", etc.

2.1.2 TVs with non-target DOs

The verbs of this type express body motions which may result in certain body postures. The DOs denote the body parts that are used in the motions. Some examples of these TVs are bòok "wave (hand)", m33n "turn (face)", phayák "nod (face)", N33y "lift (face)", kôm "lower (face)", khóom "bend (body)", etc. It is apparent that the body parts realized by the DO noun phrases are the entities that are actually in motion. They are therefore the entities that "act", not the entities that are "acted upon". The entities indicated by the subject noun phrases represent the human beings that are in possession of the relevant body parts and in control of those body motions. We can see that the body parts expressed by the DOs represent the "immediate" actors of the motions whereas the human beings expressed by the subjects represent the more "remote" actors of the motions. Since the body organs are found to be "active" entities rather than "passive" entities in the actions, they are considered **non-target entities**.

The semantic properties of the TVs are represented in the chart below.



2.2 Intransitive verbs

The verbs that are listed under the IV list of the appendix in Intransitives in Thai may be classified into two major classes : nonvolitional IVs and volitional IVs. Each class of IVs can be further subclassified according to their semantic properties as below.

2.2.1 Nonvolitional IVs

The IVs of this type are semantically nonvolitional since all of the processes⁸, states and properties that they express belong to inanimate entities, and if they are attributed to animate beings, they happen unconsciously or without volition. The nonvolitional IVs may be subclassified as below.

2.2.1.1 IVs indicating processes

The processes expressed by the IVs of this type are attributed to inanimate entities, body parts and human beings. In the last case, the human processes happen unintentionally, unconsciously, or without control. These processes may be specified as follows.

2.2.1.1.1 Deformations of inanimate entities such as buam "swell", NÔOk "bud", phOON "expand", hò "shrink", etc.

2.2.1.1.2 (Unconscious) Motions of inanimate entities and human beings such as rûaN "fall", dê "bounce", pliw "drift in the air", lây "flow", etc.

2.2.1.1.3 Physical sensations and symptoms of human beings such as sadûN "become startled", ?a "cough", khan "itch", khleunsây "become dizzy", caa "sneeze", etc.

2.2.1.1.4 Changes of properties in inanimate entities such as NOOm "become ripe", phæaN "become expensive", nâw "become rotten", caaN "become faded", rOON "become hot", etc.

2.2.1.1.5 Mental and emotional changes in human beings such as kaNwon "worry", tântên "become excited", Năw "become lonely", talauN "become stunned", NoN "become confused", etc.

2.2.1.2 IVs indicating states and properties

The IVs of this type express states and inherent properties of inanimate entities and human beings. Some of the verbs in this class are homophonous with the IVs in 2.2.1.1. Some examples of this class of IVs are tâun "be shallow", talòk "be funny", yaaw "be long", krôOp "be crispy", phlia "be weak", sûay "be beautiful", riapróoy "be polite", yâap "be rough", etc.

2.2.2 Volitional IVs

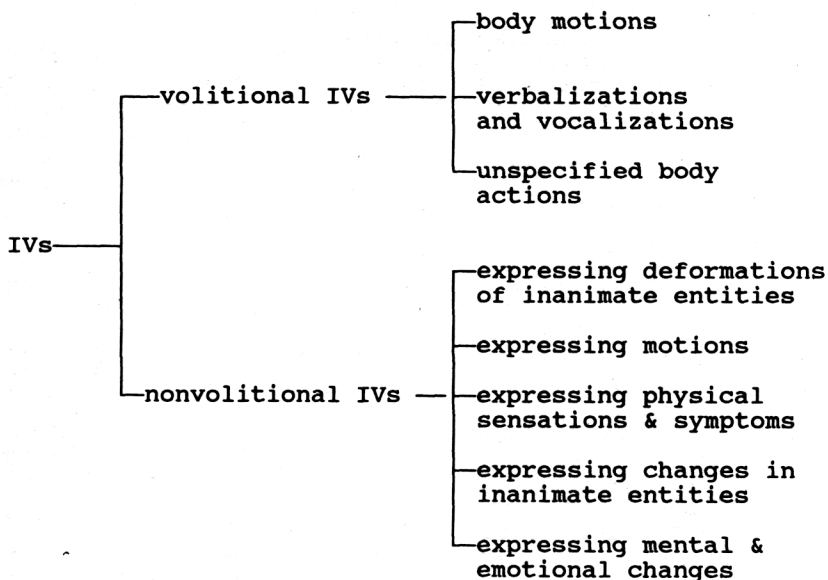
The IVs of this type express actions that are under the control or the consciousness of animate beings. These verbs can be subclassified as follows.

2.2.2.1 Body motions such as khlaan "crawl", noOn "sleep", wiN "run", tên "dance", etc.

2.2.2.2 Verbalizations and vocalizations such as phumphan "murmur", phut "say", hàw "bark", kriit "scream", móo "boast", etc.

2.2.2.3 Unspecified body actions such as phákphòOn "rest", riip "hurry", thaláy "dawdle", etc. These verbs are semantically vague in the sense that we cannot specify what particular body actions the agents perform.

The semantic properties of the IVs can be represented as below.



2.3 Tran-intransitive verbs

There are a group of verbs that are listed in the appendices of Phancharoen (1967) and Kanchanawan (1969) as being either TVs or IVs. That is, they are claimed to appear both with and without DOs out of context. These verbs are termed in this paper "tran-intransitive" verbs or TIVs. There are two major types of TIVs: (1) the TIVs that appear in either the TV list or the IV list in the appendices and (2) the TIVs that do not appear in either list. The TIVs which appear among the verbs that are claimed to be TVs are listed in the appendices as the verbs with DOs that are **optionally absent** out of context. Therefore, although

these verbs appears objectless in sentences, they are felt and considered to be TVs with omitted DOs rather than IVs. The TIVs which appear among the verbs that are claimed to be IVs are listed as verbs with an **optionally present DO**. The TIVs that cut across the TVs and IVs are termed in this paper "non-genuine" TIVs as shown in 2.3.1 since these TIVs are actually either TVs or IVs. The optional absence of DOs in the case of TVs and the optional presence of DOs in the case of IVs is not significant since this does not affect the subcategories of verbs. The other type of TIVs appear in neither the TV list nor the IV list in the appendices of the theses. That means these verbs are not claimed to be TVs or IVs; they constitute the other type of verbs, namely, the "genuine" TIVs as shown in 2.3.2. The genuine TIVs are claimed to be able to occur with or without DOs out of context.

2.3.1 Non-genuine TIVs

2.3.1.1 TIVs of the TV type

The TVs that allow an optional absence of DOs are of the following subtypes.

2.3.1.1.1 TVs of the second degree effect (See 2.1.1.2.2) Some examples are chûay (phûan) "help (a friend)", khúkkhaam (raw) "endanger (us)", raNkæ (chăn) "harass (me)", kæakhæan (khaw) "take revenge (on him)", etc.

2.3.1.1.2 TVs of the third degree effect (See 2.1.1.2.3) Some examples are maa (rooNrian) "come (to school)", khóon (khonduu) "bow (to the audience)", fa (khaw) "listen (to him)", etc.

2.3.1.1.3 TVs with non-target DOs (body parts) (See 2.1.2) Some examples are liaw (nâa) "turn (face)", khóom (tua) "bend (body)", ?iaw (tua) "twist (body)" etc.

2.3.1.2 TIVs of the IV type

It is found that all of the classes of IVs optionally allow the presence of a DO. However, not all IVs in each class do optionally allow the presence of a DO and are able to become non-genuine TIVs. The IVs that can become TIVs are semantically characterized in terms of the states of affairs they depict, namely actions, processes, states and properties, and in terms of the entities that co-participate in the states of affairs.

2.3.1.2.1 IVs expressing psychological processes and states which require stimulators. A stimulator is an entity which triggers or stimulates some feeling in a human being. The feelings denoted by this type of IV do not come about without cause. The stimulator can be considered the target of a feeling at the same time. That means the stimulator triggers some feeling in a

human being and the feeling is in turn projected towards the stimulator. Some of these TVs are ?itchhăa (chăn) "envy (me)", sốNsăy (khăw) "be suspicious (of him)", khilân (th33) "be crazy (about you)", etc.

2.3.1.2.2 IVs expressing physical processes and states of inanimate entities which require locations. The locations required by this type of IVs are actually the concrete entities that play crucial roles in the realization of the processes denoted by the IVs. In order for the processes and the states to take place, the entities expressed by the subject and object noun phrases must be in contact with each other. For example, thũam (thanôn) "(water) flood (road)", klàan (bân) "be scattered (around the house)", etc.

2.3.1.2.3 IVs expressing physical processes and states of inanimate entities which necessitates the presence of some secondary "substance".¹⁰ For example, l3? (khloón) "be dirty (with mud)", pìak (nâm) "be wet (with water)", chũm (Nũa) "be drenched (with sweat)", etc.

2.3.1.2.4 IVs expressing physical processes and states of human beings which require body parts and stimulators. For example, khan (khăa) "itch (at the leg)", pùat (lăn) "the back aches",¹¹ kràhăay (nâm) "be thirsty (for water)", ?im (khăaw) "feel full (with rice)", sâm rôok (aahăan) "vomit (food)", maw (rwa) "feel seasick"¹², etc. In the first two examples, the body parts represent the places where the physical sensations take place. The DOs in the other examples represent the stimulators which trigger the physical sensations or symptoms.

2.3.1.2.5 IVs expressing body motions and postures which require entities in contact with the bodies. For example, nân (kăw ?ii) "sit (on the chair)", nôon (tian) "sleep (on the bed)", d33n (thanôn) "walk (on the road)", etc.

2.3.2 Genuine TIVs

The TIVs in this group, which express volitional actions, are neither listed as TVs nor IVs in the appendices. The optional DOs of these verbs do not represent the targets, which receive the actions or are brought about by the actions of the agents. They represent what Halliday (1985) call "range". The range element is defined by Halliday as the element that specifies the range, domain, or scope of the process.¹³ The range is an indirect, not inherent, participant in the process. It is usually an optional extra. Some examples of the TIVs of this type are khâykhruan (khamtôop) "figure out (the answer)", thútcharit (N3n) "cheat (money)", tên (caNwâ? rew) "dance to a quick rhythm", etc.

In short, the TVs that allow a DO to be optionally absent out of context are those of the second and third degree effects, and those with non-target (body parts) DOs. The TVs that never allow a DO to be optionally absent are those occurring with non-preexisting DOs and those of the first degree effect. We can see that the DOs are always required if the actions are of the creation type, and if the actions are carried out by means of a physical and direct contact with some perceptible change in the affected entities. Thus, in these two cases, an activity is volitionally and physically "carried over" from one concrete entity to another concrete, created or preexisting entity functioning as the target of the action. In contrast, the TVs that allow a DO to be optionally absent signify that the actions are not necessarily physical and do not necessarily produce any effect in the target entities. In the case that the actions do produce some effects, the effects are not so concrete nor so obvious as those produced by the TVs of the first degree effect.

On the other hand, the IVs that allow a DO to be optionally present are those which are not semantically self-contained; they do need co-participating entities as shown above. The IVs which never require DOs express actions, processes, states and properties that **can** independently take place.¹⁴ They do not need any co-participating entities other than the actors, the experiencers, and the themes.¹⁵ Such "unalternating" IVs are as follows.

1. IVs expressing motions of inanimate entities such as chalæp "dash", yòt "(water) drop", kràsen "splash", kràd00n "bounce", etc.

2. IVs expressing motions of the whole bodies of animate beings such as bin "fly", lúk "rise, get up", yuun "stand", phaNà? "stop moving abruptly", hòklóm "fall", sàdûN "become startled", etc.

3. IVs expressing psychological processes and states that **can** occur without stimulators such as sòtchêur "become fresh", Năw "become lonely", kràsàpkràsàay "become restless", etc.

4. IVs expressing processes and states of human beings such as kràtâaN "recuperate", hòklóm "fall", pùay "become sick", lâp "fall asleep", ?ay "cough", etc.

5. IVs expressing physical processes and states of inanimate things such as tûN "become tight", tôc "become big", têun "become shallow", yâap "become rough", priaw "become sour", etc.

6. IVs expressing inherent properties of human beings and things such as Nôo "become stupid", dâu

"become stubborn", sâu "become honest", pràlàat "become strange", tàlòk "become funny", etc.

The aforementioned states of affairs realized by the unalternating IVs do not need co-participating entities in their actualization. It is noted that most of these states of affairs are **non-volitional**. Only some of the IVs which express motions of the whole bodies indicate actions that are volitional. I therefore regard these IVs as exceptional cases with respect to volition. My claim is that the unalternating TVs, i.e., TVs that do not allow a DO to be optionally absent out of context, are **prototypical TVs** in that they are characterized by the canonical semantic transitivity usually mentioned in traditional grammar, and that the unalternating IVs, i.e., IVs that do not allow any DO to be optionally present are **prototypical IVs** in that they are characterized by what I call the canonical semantic intransitivity. Canonical semantic transitivity is characterized by an activity that is volitionally and physically carried out by an animate being on another concrete entity. That concrete entity may either be an entity that does not exist before the action but which results from the action, or an entity that already exists and, therefore, "receives the action" performed by the agent in some way. This kind of activity inevitably produces some perceptible effect in the target entities. Canonical semantic intransitivity is characterized by a state of affairs which is non-volitional and is semantically self-contained as explained above. It can be concluded that canonical semantic transitivity and intransitivity are determined on the basis of five parameters, namely, (1) the number of participating entities in the state of affairs expressed by a verb (2) the semantic role of the DO (3) the volition of the actor (4) the manner of performing the action (whether the actor physically affects another concrete entity or not) and (5) the effect of the action.

It is apparent that the most extreme syntactic transitivity, i.e., the case of the unalternating TVs, coincides with canonical semantic transitivity, and that the most extreme syntactic intransitivity, i.e., the case of the unalternating IVs, coincides with canonical semantic intransitivity. The less extreme syntactic transitivity and intransitivity, i.e., the case of non-genuine and genuine TIVs, exhibit varying lesser degrees of semantic transitivity and intransitivity. I therefore propose the **transitivity continuum** where the unalternating, prototypical TVs and IVs are located at the the two ends. The alternating, nonprototypical TVs

and IVs (non-genuine TIVs), and the genuine TIVs are located at different points between the two extremes as shown below.

The degree of semantic transitivity and intransitivity is measured on the basis of five parameters mentioned above. For convenience, I postulate five semantic features to be used in the transitivity continuum, namely, [± 2 participants], [\pm target], [\pm volition], [\pm physical manipulation], [\pm obvious effect on the target]. Each positive feature implies an increase in the degree of semantic transitivity and each negative feature implies an increase in the degree of semantic intransitivity. In short, the more positive features, the greater the semantic transitivity; the more negative features, the higher the degree of semantic intransitivity. Although some features are implicative of some others, I will write out all of the five features explicitly so that we can combine the positive as well as the negative features in order to determine the degree of semantic transitivity and intransitivity.

Transitivity Continuum in Thai

most extreme syntactic transitivity

canonical semantic transitivity

unalternating TVs
(obligatory presence
of a DO)

[+2 participants]
[+target]
[+volition]
[+physical manipulation]
[+obvious effect on
the target]

alternating TVs
or non-genuine TVs
(optionally allow the DO
to be absent)

[+2 participants]
[+target]
[+volition]
[±physical manipulation]
[±obvious effect on
the target]

genuine TIVs
(may or may not occur
with DOs)

[±2 participants]
[-target]
[+volition]
[-physical manipulation]
[-obvious effect on
the target]

alternating IVs
or non-genuine TVs
(optionally allow the DO
to be present)

[±2 participants]
[-target]
[-volition]
[-physical manipulation]
[-obvious effect on
the target]

unalternating IVs
(never occur with a DO)

[-2 participants]
[-target]
[-volition]
[-physical manipulation]
[-obvious effect on
the target]

most extreme syntactic intransitivity

canonical semantic intransitivity

3. Conclusion

In this paper, I propose a transitivity continuum which can be applied to Thai verbs and which reflects the correspondences between syntactic and semantic (in)transitivity. This transitivity continuum is derived from a detailed semantic analysis of transitive verbs, intransitive verbs, and verbs with optional direct objects that are listed in the

appendices of three theses on transitive and intransitive verbs in Thai. The transitivity continuum can be used to account for the obligatory nature as well as the optionality of direct objects, and the conflict between syntactic transitivity and the conventional semantic definition of transitivity.

Notes

1. From Ripman, W. (1930)
2. A cognate object is an object that can be predicted by the selectional requirement of the verb. (Kullavanijaya 1974:119)
3. The symbol N is used in this paper to represent the voiced, velar, nasal consonant.
4. The symbol o is used in this paper to represent the high-mid, central, rounded vowel.
5. The symbol 3 is used in this paper to represent the mid, central, unrounded vowel.
6. Tran-intransitive verbs in this paper do not include such verbs as p33t "open (something), (something) open", phaN "destroy (something), (something) collapse", hàk "break (something), (something) break, etc. Such tran-intransitive verbs are characterized by the fact that the alternation between transitive and intransitive verb forms does change the argument structures of the verbs.
7. The word "volition" in this paper is used in a broad sense which covers consciousness; therefore, actions of all animate beings including animals are considered volitional.
8. A process is defined as a kind of event or "happening" in which an entity changes its state or condition. The verb which denotes a process can be used to answer the question "What happened?". (Chafe 1970:100)
9. A deformation in this paper refers to a process in which the shape of an entity changes. The term "deformation" as used in this paper does not carry any negative connotation.
10. Substance in this case refers to a non-actor, non-experiencer, and non-patient entity which plays a crucial role in the realization of the process. One of its important characteristics is that it does appear as the entity denoted by the subject noun phrase once the actualization of the process is completed.
11. Unlike in English, the word lăN "back" in Thai functions as the direct object of the verb pùat
12. The word maw in Thai literally means "to be drunk" or "to feel dizzy", and the word rua means "ship". The whole construction is rendered as "feel seasick" in English.

13. The process is defined by Halliday as all kinds of "goings-on" or patterns of experience : doing, happening, feeling, being. These goings-on are sorted out in the semantic system of the language, and expressed through the grammar of the clause. (Halliday 1985:101)

14. All states of affairs must occur in spatio-temporal settings. Such settings are thus taken for granted and are not taken into consideration in this case.

15. Intransitive verbs in Thai are claimed to co-occur with the subjects in the following semantic roles : (1) agent, which is defined as the animate beings that bring about actions volitionally or consciously (2) experiencer, which is defined as the animate being that is psychologically affected (3) theme, which is defined as the entity onto whom a certain property or state is predicated or referred to, or whose states and locations are changed. (Wongsiri 1981)

References

- Chafe, W.L. (1970) **Meaning and the Structure of Language**. University of Chicago Press.
- Chomsky, N. (1965) **Aspects of the Theory of Syntax**. MIT Press.
- Halliday, M.A.K. (1985) **An Introduction to Functional Grammar**. Edward Arnold.
- Jespersen, O. (1969) **Essentials of English Grammar**. George Allen & Unwin Ltd.
- Kanchanawan, N. (1969) **Transitive Verbs in the Thai Language**. M.A. Thesis, Department of Thai, Chulalongkorn University. (In Thai).
- Kullavanijaya, P. (1974) **Transitive Verbs in Thai**. Doctoral Dissertation, University of Hawaii.
- Lyons, J. (1968) **Introduction to Theoretical Linguistics**. Cambridge University Press.
- Noss, R. (1964) **Thai Reference Grammar**. Foreign Service Institute.
- Panupong, V. (1962) **Inter-sentence Relations in Modern Conversational Thai**. Doctoral Dissertation, University of London.
- Phancharoen, S. (1967) **Intransitives in Thai**. M.A. Thesis, Department of Secondary Education, Chulalongkorn University. (In Thai).
- Ripman, W. (1930) **A Handbook of the Latin Language** J.M. Dent and Sons Ltd.
- Uppakitsilpasarn, P. (1918) **Lak Phasaa Thai**. Thai WattanaaPhanit.
- Warotamasikkhadit, U. (1963) **Thai Syntax : An Outline**. Doctoral Dissertation, University of Texas.
- Wongsiri, P. (1982) **Thai Intransitive Verbs: A Study**

and Classification in case Grammar. M.A. Thesis,
Department of Linguistics, Chulalongkorn
University. (In Thai).