A typology of relative clauses in mainland Southeast Asian languages*

NATCHANAN Yaowapat Chulalongkorn University, Thailand AMARA Prasithrathsint Chulalongkorn University, Thailand

Abstract

The present study aims to investigate relative clauses in four mainland Southeast Asian languages, that is, Thai, Lao, Vietnamese, and Cambodian, and to classify relative clauses found in those languages. Using seven typological parameters, that is, position of head noun, order of relative clause and head noun, relativization strategies, grammatical functions of relativized nouns according to Noun Phrase Accessibility by Keenan and Comrie (1977), omission of relativizers, status of verb in relative clause, and relative pronoun or not relative pronoun parameter, it is found that there are eight types of relative clauses found in Thai, Lao, Vietnamese, and Cambodian. They are 1) external relative clauses, 2) postnominal relative clauses, 3) types of relative clauses with pronoun retention, 6) relative clauses without relativizers and with finite verbs, 7) relative clauses without relativizers and with nonfinite verbs or reduced relative clauses, and 8) types of relative clauses related to grammatical functions of relativized nouns.

Key words: relative clause, typology, types of relative clauses, mainland Southeast Asia, Thai, Lao, Vietnamese, Cambodian.

1. Introduction

In this study, the definition of relative clause is two-fold. Functionally, a relative clause is a clause that attributively modifies a noun. Semantically, a relative clause is a clause narrowing the potential reference of a referring expression by restricting the reference to those referents of which a particular proposition is true (Comrie and Kuteva 2005:494).¹

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¹Even though this definition by Comrie and Kuteva is intended to be universally accepted, some may see it as technically falling only restrictive relative clauses. Also, they may think that the definition does not cover what they label as "free relative clauses" in some languages, e.g. what's on the table in what's on the table is a book, in which is considered to contain an overt abstract head noun—the thing that is on the table.

An example of a relative clause is who came to see you yesterday in I know the man who came to see you yesterday. As can be seen in the example, functionally, the relative clause attributively modifies the noun man, and semantically, the relative clause narrows the potential reference of the head noun man to just those men of whom the proposition the man came to see you yesterday is true.

Relative clauses are one of the most common features in languages. This paper deals with this phenomenon in mainland Southeast Asian languages. The languages that we focus on are Thai, Lao, Vietnamese, and Cambodian. The reason we chose these languages is that they share several common typological features, such as being non-inflectional languages, having SVO word order, using post nominal modifiers, having adjectives as verbs (Prasithrathsint 2000), having prepositions and classifiers (Bisang 2006), using directional verbs and coverbs as Tense, Aspect, Modality markers (Bisang 2006), and having adversative passive constructions (Prasithrathsint 2004). It will be informative to see whether they share the same types of relative clauses.

Most of the previous studies have been carried out in each particular language using various approaches, that is, there have been no typological, comparative studies of this phenomenon in all four languages. Some previous studies discuss noun modifying clauses, attributive clauses and relative clauses in some of the four languages such as Comrie and Horie (1995), and Comrie (1996, 1998a.). There are also some previous studies comparing two or more of these SEA languages, but not in terms of noun modifying clauses, attributive clauses, or relative clauses, such as Bisang (1991, 1996, 1998, 1999). Besides, several typological problems remain to be investigated, such as:

- (a) Are the relativizers in those languages the same kind of markers—are they relative pronouns or complementizers?
- (b) Are the same or different strategies used in forming relative clauses in the four languages?
- (c) Can the head noun of all grammatical functions be relativized in those languages?

This study aims to investigate these problems.

1.1 Purpose and hypothesis

The purpose of this study is to analyze relative clauses in Thai, Lao, Vietnamese, and Cambodian and determine their properties in terms of the markers of relative clauses, the positions related to the head noun, relativization strategies, and the grammatical functions of the relativized noun.

It is hypothesized that relative clause structures in the four languages are in type identical in all the following parameters. First, relative clauses in these languages are external and postnominal since the four languages are SVO languages. Second, the gap strategy is used to form relative clauses in the four languages since this strategy is normally used in languages which express grammatical relations via the position of core nominals in a clause. Third, the occurrence of the grammatical functions of the relativized noun follows the NP Accessibility Hierarchy proposed by Keenan and Comrie (1977). Fourth, relativizers in the four languages can be omitted because they are not significant as a reference to a modified noun. Fifth, verbs in relative clauses are finite and in some types are non-finite. Lastly, there is no relative pronoun in these four languages because words heading relative clauses in these languages do not change their form to tell the grammatical function of the relativized noun.

1.2 Procedures

The data for the analysis was taken from written texts and elicitation. Sentences with relative clauses were collected from newspapers, narrative texts, and grammar books in the four languages. Then we checked with a few native speakers of each language the meanings and grammaticality of the sentences that we created. Approximately, there were one hundred sentences for analysis in each of the languages.

The data were analyzed in regard to their syntactic typology with the hope that the result will provide insight into the syntactic typology of SEA languages and the universality of human languages.

2. Theories and conceptual framework

2.1 Universals of relative clauses

Universally, relative clauses are types of noun modifying clauses, for example the clause *who hit the dog* modifies the noun *man* in *I know the man who hit the dog*.

A unique characteristic of relative clauses which makes them distinct from other kinds of noun modifying clauses is that they involve coreference with their head nouns. The relative clause who hit the dog, which modifies the noun man, contains the coreference to the head noun man, that is, the relative pronoun who positioned at the beginning of the relative clause links the head to the modifier. The relative pronoun who in English normally refers to a human head noun, like man in the previous example. Structurally, relative clauses in some languages have a distinct syntactic structure from other types of noun modifying clauses. For example, English has a distinct construction for relative

clauses which is different from that of complement clauses (Comrie 1996). Relative clauses in English can be introduced either by relative pronouns (who, whom, which etc.) which are case-marked, by the complementizer that, or by zero. These are illustrated in the following examples.

- (1) The man [whom you met yesterday] is an actor.
- (2) The man [that you met yesterday] is an actor.
- (3) The man [you met yesterday] is an actor.

Complement clauses or "fact clauses" in English can be introduced only by the complementizer that or sometimes by zero, but not by wh-relative pronouns, as in the following example.

- (4) a. The fact [that you saw an actor] surprised me.
 - b. *The fact [which you saw an actor] surprised me.
 - c. The fact [you saw an actor] surprised me.

On the other hand, relative clauses in some languages, such as in Japanese, have a similar syntactic structure as other noun modifying clauses. In Japanese, both relative clauses and complement clauses precede a head noun and they are easily attached to the head noun without any linkers or complementizers, for instance

(5) Japanese (Comrie and Horie 1995:68)

[gakusei ga kat-ta] hon student NOM buy-PAST book (Relative clause) 'The book that the student bought'

(6) Japanese (Comrie and Horie 1995:68)

[gakusei ga hon o kat-ta] zizitu student NOM book ACC buy-PAST fact (Complement clause)

'The fact that the student bought the book'

Some relative clauses have an element attaching or connecting them to a head noun. These elements can be relative pronouns, for example who, whom, which in English and relative pronouns in other European languages, or can be complementizers, for example mà in Vietnamese or that in English, as in The food that you cooked looks nice. However, some relative clauses do not have any element attaching them to the head noun. For example the English relative clause you bought yesterday does not have any element attaching it to the head noun book in The book you bought yesterday is very interesting.

Syntactically, some types of relative clauses are embedded in main clauses and some are loosely joined with the main clauses (Comrie and Kuteva 2005, Nikolaeva 2006). For those embedded in main clauses, relative clauses and head nouns together form noun phrases. For example the relative clause who came here yesterday is embedded in the noun phrase the man and both of them form the noun phrase constituent which functions as the subject of the sentence The man who came here yesterday is German. For those loosely joined with main clauses, head nouns appear as full noun phrases in relative clauses and again are repeated in the main clauses in the form of the full noun phrases or in pronominal forms, for example

(7) Hindi (Comrie 1989:139)

[ādmī ne jis cākū se murgī ko māra thā], man ERG which knife with chicken ACC killed us cākū ko Rām ne dekhā that knife ACC Ram ERG saw 'Ram saw the knife with which the man killed the chicken.'

(8) Amele (Comrie and Kuteva 2005:495)

[mel mala heje on] ((mel) eu) boy chicken illicit take.3SG.SUBJ-REM.PST boy that

busali nu-i-a run away go-3SG.SUBJ-TOD.PST 'The boy that stole the chicken ran away.'

To sum up, relative clauses are clauses modifying nouns with or without relativizers. They may or may not be the same as other noun modifying clauses. Relative clauses may be embedded in or loosely joined with the main clauses.

2.2 Typological classification and parameters of relative clauses

Relative clauses in languages can be classified into different types according to different parameters. So far in previous typological studies, there are four parameters used to classify relative clauses, that is,

- (a) position of head noun
- (b) word order of relative clause and head noun
- (c) relativization strategies
- (d) grammatical functions of relativized nouns in relative clauses

2.2.1 Position of head noun

According to Keenan (1985), relative clauses can be divided into two subtypes. The first type is called an EXTERNAL OR HEADED relative clause in which a head noun occurs outside the relative clause, for instance, the example (5) in Japanese.

The second type of relative clauses classified by the positions of the head noun is called an INTERNAL RELATIVE CLAUSE in which the head noun occurs inside the relative clause, for instance

(9) Diegueño (Comrie 1989:138)

[tənay ?əwa: ?əwu:w]-pu -l^Y ?ciyawx yesterday house I-saw DEF LOC I-will-sing 'I will sing in the house that I saw yesterday.'

2.2.2 Order of relative clause and head noun

Relative clauses in languages can be divided into three subtypes according to order of relative clauses and head nouns. Relative clauses which precede their head nouns are PRENOMINAL relative clauses, for example, the relative clause in (5).

Relative clauses which follow their head nouns are POSTNOMINAL relative clauses, for example the relative clause *that the girl bought* follows its head noun *ring* in *I like the ring that the girl bought*. The postnominal type is almost the only one attested in verb-initial languages and is the dominant and productive type in verb-medial languages (Keenan 1985:144).

The last type of relative clauses classified in this parameter is CIRCUMNOMINAL relative clause (Comrie and Kuteva 2005:494) where a head noun is surrounded by a relative clause. In other words, the head noun is inside the relative clause, for example the relative clause in (9).

2.2.3 Relativization strategies

Relative clauses in the languages of the world can be formed by different strategies. There are two major parameters of relativization strategies. The first parameter is the ROLE OF THE HEAD in the relative clause which include four strategies, that is, gap strategy, relative pronoun strategy, pronoun retention strategy, and non-reduction strategy. The second parameter is verb-marking versus non verb-marking strategies.

2.2.3.1 First parameter: Role of the head

Relative clauses formed by the GAP STRATEGY have no overt coreference to the head noun within the relative clause (Keenan 1985, Comrie 1989, 1998b, 2002, Comrie and Kuteva 2005). For example, the relative clause the girl bought which modifies the head noun ring in I like the ring the girl bought has a gap or a missing object noun phrase, as we know that the verb bought is a transitive verb and it normally requires the object argument. The gap or the missing object noun phrase in this example is coreferential with the head noun ring.

The second strategy, the RELATIVE PRONOUN STRATEGY, is used to form relative clauses in literary English and in other European languages such as German. With this strategy, the relativized noun is indicated inside the relative clause by means of a clause initial pronominal element which is cased marked (by case or by adposition) to indicate the role of the relativized noun within the relative clauses (Keenan 1985, Comrie 1989, 1998b, 2002, Comrie and Kuteva 2005). An example of a relative clause formed by this strategy is the relative clause whom you know which modifies the head noun man in The man whom you know came here yesterday. The relativized noun in the relative clause is the object noun of the verb know and is indicated in the relative clause by the relative pronoun whom in the clause initial position.

The third strategy is the PRONOUN RETENTION STRATEGY. Within the relative clause formed by this strategy, there is a resumptive pronoun which is coreferential with the head noun and which occurs in the normal position as it occurs in an independent clause (Keenan 1985, Comrie 1989, 1998b, 2002, Comrie and Kuteva 2005), for instance

(10) Thai

thəə mây khuan kin yaa [thîi man mòt?aayú?] 2SG not should eat medicine REL 3SG expire 'You should not take the medicine which expired.'

In the above example, the relative clause thîi man mòt?aayú? 'which expired' contains a resumptive pronoun man which is coreferential with the head noun yaa 'medicine'. The pronoun occurs in the subject position of the clause, that is, preceding the main verb.

The fourth strategy is the NON-REDUCTION STRATEGY in which the head noun or the modified noun appears as a full noun phrase in the relative clause (Comrie and Kuteva 2005:495). This strategy has three subtypes, CORRELATIVE CLAUSES, INTERNALLY HEADED RELATIVE CLAUSES, and PARATACTIC RELATIVE CLAUSES.

A correlative clause refers to a clause in which the head noun appears in a full form within the relative clause and appears again in the main clause in a pronominal or nonpronominal form. A correlative clause normally occurs on the left of the main clause (Downing 1978:375, 382). In some languages, there is a correlative marker in the relative clause and this type of relative clause is limited to verb-final languages (Keenan 1985:164). The sentence (7) from Hindi illustrates this type of relative clause. In that example, the head noun $c\bar{a}k\bar{u}$ 'knife' appears as a full noun phrase within the relative clause $\bar{a}dm\bar{i}$ ne jis $c\bar{a}k\bar{u}$ se murgī ko māra thā 'with which the man killed the chicken' and appears again in the main clause in the full form $c\bar{a}k\bar{u}$ 'knife'.

An internally headed relative clause is the one with the head noun inside the relative clause but no repetition of it in the main clause, for instance sentence (9) from Diegueño. The head noun or the modified noun *?awa:* 'house' appears inside the relative clause *tanay ?awa: ?awu:w* 'that I saw yesterday' and there is no element coreferential with the head noun in the main clause.

A paratactic relative clause also contains the full form of the head noun within the relative clause. The relative clause looks the same as a simple declarative clause and it is loosely joined with the main clause. The head noun may be or may not be referred to again in the main clause, for instance the example (8) above.

2.2.3.2 Second parameter: Verb-marking versus non-verb marking

Turning to the second parameter, a relative clause formed by the verb-marking strategy is the relative clause in which the head noun modified by the relative clause is indicated within the relative clause by marking the verb (Comrie 2003). This strategy is attested in some Austronesian languages, Turkish, and in some Tibeto-Burman languages. The following relative clauses from Kambera illustrate this strategy.

(11) Kambera (Comrie 2003:8)

a) ku-ita-yana na tau 1SG.NOM-see-3SG.ACC ART person

[na ma-pàpu water] ART REL.SUBJ-pluck corn 'I see the person that plucks corn.'

b) na njara [na **pa**-kei ART horse ART REL.OBJ-buy

memang-na-nya] immediately-3SG.GEN-3SG.DAT 'the horse that he immediately bought for her.'

Examples of relative clauses with the non verb-marking strategy are the Japanese and Thai examples mentioned earlier.

It is found that a language can use more than one strategy to form relative clauses (Keenan and Comrie 1977, Nikolaeva 2006), for example English uses both relative pronoun strategy and gap strategy. It is also found that even for one relativized position of the noun phrase, the strategy can vary. For example, in Thai, it is possible to relativize subjects by either gap strategy or pronoun retention strategy. In some cases, the strategy varies according to the animacy of nouns, for example in Chinese (Keenan and Comrie 1977).

2.2.4 Grammatical functions of relativized nouns in relative clauses

According to Keenan and Comrie (1977), there are six types of HIERACHICALLY ARRANGED RELATIVIZED NOUN PHRASES.

Subject>Direct Object>Indirect Object>Oblique>Possessor>Object of Comparison

The hierarchy above implies that some nouns are more accessible or easier to relativize than other nouns. The sign > in the hierarchy means more accessible to relativization. So subjects are more accessible to relativization than direct objects, direct objects are more accessible to relativization than indirect objects, and so on.

According to this criterion, languages can be classified into different types. There are some languages that can relativize only subjects such as Malayo-Polynesian languages like Malagasy. Some languages can relativize only subjects and direct objects such as Luganda. Some languages allow relativization on subjects, direct objects, and indirect objects such as Basque. Some languages allow relativization on subjects, direct objects, indirect objects, and obliques such as North Frisian. Some languages like French can relativize possessor. A few languages like English and Urhobo allow relativization for all types of nouns.

3. Types of relative clauses in mainland Southeast Asian languages

In classifying relative clauses in Thai, Lao, Vietnamese, and Cambodian, there are seven parameters used in this study, that is,

- (a) position of head noun,
- (b) order of relative clause and head noun
- (c) relativization strategies
- (d) grammatical functions of relativized nouns
- (e) omission of relativizers, status of verb in relative clause
- (f) relativizer as a relative pronoun or not

Based on those typological parameters, relative clauses in Thai, Lao, Vietnamese, and Cambodian can be classified into eight major types, as follows.

3.1 External relative clauses

Concerning the position of head noun, only external relative clauses are attested in Thai, Lao, Vietnamese, and Cambodian. In this type, head nouns appear outside the relative clauses, for example

(12) Thai

klûay [thîi khǎw sɨɨ] phεεŋ banana REL 3SG buy expensive 'Bananas that she bought are expensive.'

(13) Lao

wáŋwiaŋ pěn mɨaŋ nɨŋ [thii nóɔn yūu ná Wangwiang COP town one REL lie stay in

khwěeŋ wíaŋcǎn] county Vientiane 'Wangwiang is a town in Vientiane County.'

(14) Vietnamese

đây là sựkiện [mà đã xảyra tuần trước] this COP event REL PST happen week before 'This is an event which happened last week.'

(15) Cambodian

k?aek toteahslaaphaə samdav tiimoatstun muəy crow fly toward river one

[dael riintwk?ah]

REL dry

'The crow flies to a river which is dry.'

In (12), the head noun is *klûay* 'banana' and it occurs outside the relative clause *thîi khăw sîi* 'that you bought'. In (13), the head noun is *miaŋ* 'town' and it occurs outside the relative clause *thīi nɔɔn yūu náy khwɛɛŋ wiaŋcăn*. In (14), the head noun is *sựkiện* 'event' and it occurs outside the relative clause *mà đã xảyra tuần trước* 'which happened last week'. In (15), the head noun is *tiimoatstuŋ* 'river' and it occurs outside the relative clause *dael riiŋukʔah* 'which is dry'.

All relative clauses found in Thai, Lao, Vietnamese, and Cambodian belong to this type. There is no internal type found in these four languages.

3.2 Postnominal relative clauses

Thai, Lao, Vietnamese, and Cambodian consistently show postnominal relative clauses in which relative clauses follow their head nouns. The examples (12) - (15) above are postnominal relative clauses. In (12), the relative clause thii khảw sử 'that you bought' follows the head noun klûay 'banana'. In (13), the relative clause thii nóon yūu náy khwžɛŋ wíaŋcǎn 'which is in Vientiane County' follows the head noun mĩaŋ 'town'. In (14), the relative clause mà đã xảyra tuần trước 'which happened last week' follows the head noun sựkiện 'event'. In (15), the relative clause dael riiŋtuk?ah 'which is dry' follows the head noun tiimoatstuŋ 'river'.

3.3 Types of relative clauses related to relativizers

None of the words introducing relative clauses in Thai, Lao, Vietnamese, and Cambodian are relative pronouns. These words do not substitute for relativized nouns in the relative clauses. They are not casemarked or adposition-marked as relative pronouns normally are. They are invariant elements no matter what grammatical functions the relativized nouns have within the relative clauses. They are just the subordinate linkers that connect the relative clauses to the head nouns. In this study, all words introducing relative clauses in the four languages are called RELATIVIZERS.

In Thai, there are three types of relative clauses according to three relativizers, that is, *thîi*, *sîŋ*, or *ʔan*. *thîi* is grammaticalized from a noun meaning 'place' (Kullavanijaya 2002). The origin of *sîŋ* is still obscure whereas *ʔan* is grammaticalized from a classifier. The following examples illustrate three types of relative clauses in Thai.

- (16) mêe [thîi yùu chianmày] sà?baay dii máy mother REL stay Chiangmai fine good Q 'Is (your) mother who lives in Chiangmai fine?'
- (17) khǎw tôŋkaan khon [sɨŋ mii prà?sòpkaan] 3SG want person REL have experience 'S/he wants (to get) a person who has experience.'
- (18) nîi pen raaŋwan [?an yîŋyày thîisùt this COP prize/reward REL big/great superlatively nay chiiwít] in life 'This is the prize which is the biggest in (my) life.'

In Lao, there are also three types of relative clauses introduced by either thīi, sîŋ, or ?án, for instance

- (19) wáŋwiaŋ pěn mɨaŋ nɨŋ [thɨl nóɔn yūu náy Wangwiang COP town one REL lie stay in khwĕɛŋ wiaŋcăn] county Vientiane 'Wangwiang is a town in Vientiane County.'
- (20) siakhōon lāy kin kuan [sin ?òɔk máa hǎa kin tiger chase eat deer REL out come find eat náy tɔɔn huakhām] in part head-night 'Tigers hunt for deer which come out to find food early at night.'
- (21) fǔuŋ wúa khúay yāaŋ ʔòɔk càak thūŋyàa [**ʔán** kûaŋ yāy] herd cow buffalo walk out from meadow REL wide big 'A herd of cattle ran out of the wide meadow.'

There is only one type of relative clause in Vietnamese and in Cambodian. In Vietnamese, relative clauses are introduced by $m\grave{a}$, as in the example (14). In Cambodian, relative clauses are introduced by dael, as in the example (15).

3.4 Relative clauses with gaps

Relative clauses with relativizers in Thai, Lao, Vietnamese, and Cambodian can be divided into two types, the ones with gaps and the ones without gaps. This section is devoted to the first type, the one which is typical to languages which express grammatical relations via the position of the nominals in a clause. Gaps here are missing noun phrases within relative clauses and the gaps are coreferential with the head nouns modified by the relative clauses. The gaps in the relative clauses also reflect the grammatical functions of the relativized nouns. Most relative clauses in the four languages are formed by the gap strategy. In other words, the gap strategy is the dominant relativization strategy in these four languages. The following examples in Vietnamese and Thai show this type of relative clauses. The symbol \varnothing in the relative clauses indicates gaps.

- (22) Subject
- (22a) hôŋ khápkhêεp (Thai) room narrow/small 'The room is small.'

- (22b) raw yùu nay hôŋ [thîI Ø khápkhεερ] 1PL stay in room REL narrow/small 'We are in the small room.'
- (23) Direct object
- (23a) rátthabaan kêɛkhǎy panhǎa sǎŋkhom níi dâay yâak(Thai) government solve problem society this get difficult 'It is hard for the government to solve this social problem.'
- (23b) nîi pen panhǎa sǎŋkhom [thîi kɛ̃εkhǎy Ø yâak] this COP problem society REL solve difficult 'This is a social problem that is difficult to solve.'
- (24) Indirect object
- (24a) khun hây ?aahǎan mǎa (Thai) 2SG give food dog 'You gave food to the dog.'
- (24b) mǎa [thîi khun hây ?aahǎan ∅] nâasŏŋsǎan dog REL 2SG give food pitiful 'The dog you gave some food to is pitiful.'
- (25) Locative oblique
- (25a) mẹ tôi đến để gặp bácsĩ ở bệnhviện(Vietnamese) mother 1SG go to meet doctor at hospital 'My mother went to see a doctor at the hospital.'
- (25b) Cái bệnhviện [mà mẹ tôi đến để gặp bácsĩ Ø] CLF hospital REL mother 1SG go to meet doctor ở gần nhà tôi at near house 1SG 'The hospital where my mother went to see a doctor is near my house.'
- (26) Instrumental oblique
- (26a) tôi ăn mì bằng đũa (Vietnamese) 1SG eat noodle by chopstick 'I eat noodle with chopsticks.'
- (26b) Cái đũa [**mà** tôi ăn mì Ø] làm bằng gỗ CLF chopstick REL 1SG eat noodle make by wood 'The chopsticks that I eat noodle with are made of wood.'

- Commitative oblique (27)
- (27a) knom ni?yiey ciemuəy bo?rah (Cambodian) 1SG talk with man 'I talk with the man.'
- (27b) bo?rah [daelknom ni?yiey ciemuəy \emptyset] cie COP friend man REL 1SG talk with robah knom of 1SG 'The man with whom I talk is my friend.'
- (28)Possessor
- (28a) phiw khón nîi bāo dii (Lao) skin person this not good 'This person's complexion is bad (not fair).'
- (28b) khón [thii phiw Ø bōo dii] míi búkkhalīk bōo dii not good have personality not person REL skin 'A person with a bad complexion has a bad personality.'
- Object of comparison (29)
- kwàa khon ?iin (Thai) (29a) chǎn kèŋ smart than person other 1SG 'I am smarter than other people.'
- kwàa ∅] mii (29b) khon [**thîi** chǎn kèŋ person REL 1SG smart than have many 'There are many people that I am smarter than.'

So far, relative clauses with gaps are attested in Thai, Lao, Vietnamese, and Cambodian. This type of relative clauses is dominant and very productive in these four languages.

3.5 Relative clauses with pronoun retention

Thai, Lao, Vietnamese, and Cambodian also use the pronoun retention strategy to form some relative clauses. Within this type of relative clause, there is a resumptive pronoun which is coreferential with the head noun or the modified noun and the pronoun occurs in the normal position as it occurs in a normal independent declarative clause. The following examples illustrate this type of relative clauses in the four languages.

(30) Subject

khảw dâay hây nεεwkhít [**sɨŋ man** pen prà?yòot 3SG PST give idea REL 3SG COP benefit

sămràp thúk khon] (Thai) for every people

'He gave an idea which is beneficial for everyone.'

(31) Direct object

người [**mà** bạn gặp **ngưởi ta** hômqua] là thàygiaó person REL 2SG meet 3SG yesterday COP teacher

của tôi of 1SG

'A person whom you met yesterday is my teacher.' (Vietnamese)

(32) Indirect object

déknôy [thīi khòy hày ŋón **mán**] máa ?ìik lêɛw (Lao) child REL 1SG give money 3SG come again already 'The child to whom I gave money came again.'

(33) Commitative oblique

khun rúucàk khon [thîi chăn phûut kàp khǎw]
2SG know person REL 1SG talk with 3SG

mǎy (Thai)
Q

'Do you know the person with whom I talk?'

(34) Possessor

kav?əy [dael cəəŋ vie baan bak] cie kav?əy rəbah koat chair REL leg 3SG PST break COP chair of 3SG 'The chair the leg of which is broken is his chair.' (Cambodian)

(35) Object of comparison

cái đứa [**mà** tôi cao hơn **nó**] là emtrai CLF person REL 1SG tall more 3SG COP younger brother của tôi

of 1SG 'The man who I am taller than is my brother.' (Vietnamese)

Impressionistically, relative clauses formed by the pronoun retention strategy in Thai are rare in written texts. They are usually found in spoken language. In Cambodian, there are some constraints with this type of relative clauses. Cambodian does not allow this type of relative clauses with relativized direct objects. In addition, relativized possessors are obligatorily to be formed by the pronoun retention strategy (Yaowapat 2005).

3.6 Relative clauses without relativizers and with finite verbs

This type of relative clause is attached to a head noun without any relativizer. A main verb in the relative clause is finite. The syntactic difference between a finite verb and a non-finite verb in SEA languages is that the finite verb can co-occur with auxiliaries such as 'must', 'should', 'will' etc., or with tense-aspect markers, while the non-finite verb cannot.

This type of relative clause is found only in Thai, Lao and Vietnamese and with limited grammatical functions of relativized nouns, for instance

(36) Subject

đây là sựkiện [đã xảyra tuần trước] (Vietnamese) this COP event PST happen week before 'This is an event that happened last week.'

(37) Direct object

năŋsɨi [chăn dâay sɨi maa mɨawaan] hǎay book 1SG PST buy come yesterday lose

pay lέεw (Thai) go already

'The book that I bought yesterday has been lost.'

(38) Locative oblique

hóoŋhɛ́ɛm [phôn cá phāk khɨɨn nîi] yūu náy wíaŋcǎn hotel 3SG will stay night this COP in Vientiane 'The hotel where he will stay tonight is in Vientiane.' (Vietnamese)

3.7 Relative clauses without relativizers and with nonfinite verbs or reduced relative clauses

Some relative clauses in Thai, Lao, Vietnamese, and Cambodian are attached to head nouns without relativizers, and main verbs in these relative clauses are non-finite. The main verbs in this type of relative clauses cannot co-occur with auxiliaries or tense-aspect markers. In this study, this type of relative

clause is called a reduced relative clause. The following examples from Thai illustrate this type of relative clause.

- (39) Subject
- (39a) thîi nîi mii ?aacaan [sɔɔn dii] lǎay khon place this have teacher teach good several CLF 'This place has several teachers who teach well/skillfully.'
- (39b) *thîi nîi mii ?aacaan [cà? sɔɔn dii] lǎay khon place this have teacher will teach good several CLF 'This place has several teachers who teach well/skillfully.'
- (40) Direct object
- (40a) chăn yàak dâay năŋšɨ [cɛɛk nay ŋaan kasian I want get book distribute in party retirement aacaan] teacher 'I want to get a book which will be distributed in the teacher's retirement party.'
- (40b) *chǎn yàak dâay nǎŋs¾ [cà? cèɛk nay ŋaan I want get book will distribute in part kas¾an ?aacaan] retirement teacher 'I want to get a book which will be distributed in the teacher's retirement party.'
- (41) Locative oblique
- (41a) klòŋ [sày khỏoŋ yớ? kəən pay] mák phaŋ rew box put thing many over go often break fast 'A box in which (you) put too many things often gets broken soon.'
- (41b) *klòn [dâay sày khỏon yớ? koon pay] mák phan rew box PST put thing many over go often break fast 'A box in which (you) put too many things often gets broken soon.'
- (42) Possessor
- (42a) chǎn mây chôop plùuk tônmáay [râak yaaw]
 1SG not like grow tree root long
 'I do not like growing a tree the root of which is long.'

(42b) *chǎn mây chôop plùuk tônmáay[râak cà? yaaw]
1SG not like grow tree root will long
'I do not like growing a tree the root of which is long.'

This type of relative clause is very common with relativized subjects and possessors. It should be noted here that relativized possessors in this type of relative clause are only inalienable.

3.8 Types of relative clauses related to Noun Phrase Accessibility Hierarchy

According to Keenan and Comrie (1977), six major types of noun phrases with different grammatical functions in relative clauses can be relativized, that is, subjects, direct objects, indirect objects, obliques, possessors, and objects of comparison.

Subject>Direct Object>Indirect Object>Oblique>Possessor>Object of Comparison

Since the major parameter in defining relativization strategy used in Keenan and Comrie (1977) is whether the role of the head noun is explicitly marked in the relative clause or not, only two types of relative clauses mentioned in this paper can be considered. That is, relative clauses with gaps and the ones without gaps. Relative clauses with gaps are considered [-case] as the role of the head noun is not explicitly marked in the relative clause, while relative clauses without gaps (pronoun retention) are considered [+case] as the role of the head noun is explicitly marked in the relative clause by means of resumptive pronouns. Related to the hierarchy, each type of relative clauses in a language should occur with continuous segments on the hierarchy. Cambodian provides some counterexamples with relative clauses without gaps. With this type, subjects, indirect objects, and possessors can be relativized, but direct objects cannot. According to the claim, if pronoun retention applies to subjects, it should also apply to other lower noun phrases on the hierarchy including direct objects. But this is not the case in Cambodian.

In addition, the [+case] versus [-case] parameter, seems not to be the only necessary parameter to deal with relative clauses found in SEA languages. The other two parameters, that is, the omission of relativizers and the status of verbs in relative clauses (finite or non-finite) should be included.

3.9 Summary table of the typology of relative clauses in mainland Southeast Asian languages

Table 1. Summary of typology of relative clauses in mainland Southeast Asian languages

Parameters				Languages			
				Thai	Lao	Vietnamese	Cambodian
1.Position	Internal			X	X	X	X
Of H.N.	External			✓	✓	✓	✓
2.Order of RC	Prenominal			X	X	X	X
& H.N.	Postnominal			✓	✓	✓	✓
3.Relativization	w/	w/ga	SUBJ	✓	✓	✓	✓
strategies	REL	p	DO	✓	✓	✓	✓
			IO	✓	✓	✓	✓
			OBL	✓	✓	✓	✓
			POSS	✓	✓	✓	✓
			OCM	?	?	X	X
		w/o	SUBJ	✓	✓	✓	✓
		gap	DO	✓	✓	✓	✓
			IO	✓	✓	✓	✓
			OBL	√ /X	√ /X	√/X	√/X
			POSS	✓	✓	✓	✓
			OCM	?	?	✓	X
	w/o	Finite	SUBJ	X	X	✓	X
	REL		DO	✓	✓	✓	X
			IO	X	X	X	X
			OBL	√ /X	√ /X	X	X
			POSS	X	X	X	X
			OCM	X	X	X	X
		Non-	SUBJ	✓	✓	✓	✓
		finite	DO	✓	✓	✓	X
			IO	X	X	X	X
			OBL	√/X	√ /X	√/X	X
			POSS	✓	✓	✓	✓
			OCM	X	X	X	X
4. Relativizer	Relative pronoun			X	X	X	X
	Not relative pronoun			✓	✓	✓	✓

 $[\]checkmark$ = found

x = not found

 $[\]checkmark/x$ = found in certain minor types only

^{? =} marginal

4. Generalization and conclusion

The main focus of the present study was to analyze relative clauses in four mainland SEA languages, that is, Thai, Lao, Vietnamese, and Cambodian. Seven typological parameters: position of head noun, order of relative clause and head noun, relativization strategies, grammatical functions of relativized nouns according to Noun Phrase Accessibility by Keenan and Comrie (1977), omission of relativizers, status of verb in relative clause, and relative pronoun or not relative pronoun parameter, were investigated here.

Our results show that eight major types of relative clauses are found in mainland SEA languages. All relative clauses found in Thai, Lao, Vietnamese, and Cambodian are EXTERNAL and POSTNOMINAL. Words introducing relative clauses are RELATIVIZERS, not relative pronouns. The dominant and the most productive type of relative clauses is the one with GAPS. On the other hand, some RELATIVE CLAUSES CONTAIN PRONOUNS instead of having gaps. In some cases, relativizers introducing relative clauses can be omitted. Main verbs in relative clauses can be FINITE OR NON-FINITE. Relative clauses with non-finite verbs are called reduced relative clauses in this study. Lastly, relative clauses found in mainland SEA languages provide some COUNTEREXAMPLES to the Noun Phrase Accessibility Hierarchy.

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Department of Linguistics Chulalongkorn University Phyathai Road, Bangkok 10330 THAILAND <nutchanun@hotmail.com>

Symbols used in this study

Thai

v = mid tone

 $\hat{\mathbf{v}} = \text{low tone}$

 $\hat{\mathbf{v}} = \text{falling tone}$

 $\check{\mathbf{v}} = \mathbf{rising}$ tone

Lao

 $\bar{\mathbf{v}} = \mathbf{mid}$ tone

 $\hat{\mathbf{v}} = \mathbf{high} - \mathbf{falling}$

 $\dot{\mathbf{v}} = \mathbf{high} - \mathbf{rising}$

 $\hat{\mathbf{v}} = \text{low-falling}$

 $\check{\mathbf{v}} = \mathbf{low}\text{-rising}$

1 =first person

2 = second person

3 =third person

COMP = complementizer

COP = copula

CLF = classifier

DEF = definite

DO = direct object

H.N. = head noun

IO= indirect object

LOC = locative

LP = linking particle

OBL= oblique

OCM = object of comparison

PASS = passive

POSS = possessor

PP = pragmatic particle

PROG = progressive

PST = past

PL = plural

Q = question particle

RC = relative clause

REL = relativizer

REM.PST= remote past

SG = singular

SUBJ = subject

TOD.PST = today past