Logical Resultative Construction in Thai

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1. Introduction

Our understanding of causal relation, namely one situation is correlated with another situation, is basic in our mental life. [1] Causal relation consists of cause/reason and effect/result. The content relation between the first pair 'cause-effect' involves phenomenal motivation, i.e., a cause produces an effect, as illustrated in (1a), while the epistemic relation between the second pair 'reason-result' involves logical motivation, i.e., a reason accounts for a result, as in (1b).

(1)　　a.　　'Because he bumped me, I dropped the glass' (Givón 1990: 834)

　　　　b.　　'Because it was boring, I left' (Givón 1990: 835)

Although causes and effects are semantic components for the description of objective events taking place in the physical world, a link between a cause and an effect never exists as part of objective reality, but is established by virtue of human thinking encompassing expectation, inference, reasoning, and so on. Therefore, causal relations, be they phenomenal or logical, exist in relation to our interpretation of reality. I assume that we acquire from everyday experiences the 'idealized cognitive model' (ICM) (cf. Lakoff 1987) for causal relation. ICM is the mental structure of our knowledge of world.

The Thai language has a function word signifying a certain causal relation between two propositions, namely **cɯŋ**. [2] The usage of **cɯŋ** in modern Thai is exemplified in (2) and (3).

(2)   a.   kháw   kin   khâaw   sèt   chán   cɯɯŋ   pay

       PRONOUN eat   rice   finish   PRONOUN   go

       'S/he finished a meal, then I went'

       b.   kháw   pen   prathaan   bɔɔrisàt

       PRONOUN COPULA   president   company

       khray khray   cɯɯŋ   kreeŋ cay

       anyone   be afraid of offending (one)

       'S/he is the president of a company, so anyone is afraid of offending

       (her/him)' (Bandhumedha 2001: **yɔɔ-yǐŋ**101)

(3)   a.   kháw   kin   khâaw   sèt   cɯɯŋ   pay

       PRONOUN eat   rice   finish   go

       'S/he finished a meal, then went'

       b.   kháw   pen   prathaan   bɔɔrisàt

       PRONOUN COPULA   president   company

       cɯɯŋ   mây   kreeŋ cay   khray

       NEG.   be afraid of offending (one)   anyone

       'S/he is the president of a company, and is not afraid of offending

       anyone'

    The antecedent and consequent clauses in (2) have a different subject, whereas the serialized verb phrases in (3) share the same subject. At any rate, these examples are composed of two propositions, the latter of which expresses some effect/result situation interpreted by the speaker. Before the Ratanakosin period (from the 18th century through the present time) the syntactic position of **cɯɯŋ** was relatively free. It could occur before the subject noun phrase at the beginning of the consequent clause: **cɯɯŋ** + NP + VP.

Moreover, the subject noun phrase could be sandwiched between two **cɯɯŋ**'s: **cɯɯŋ** + NP + **cɯɯŋ** + VP. But in modern Thai only one **cɯɯŋ** is placed immediately before the verb phrase: NP + **cɯɯŋ** + VP.

The antecedent clause of **cɯɯŋ** constructions may begin with a subordinator specifying a type of the correlation of that clause with the following clause. For example, (4a) includes a temporal subordinator **mɯ̂a** 'when, once' and (4b) includes a causal subordinator **phrɔ́ʔ** 'because.'

(4)   a.   <u>mɯ̂a</u>   kháw   kin   khâaw   sèt   chán   <u>cɯɯŋ</u>   pay

                when   <small>PRONOUN</small>   eat   rice   finish   <small>PRONOUN</small>   go

                'When s/he finished a meal, I went'

    b.   <u>phrɔ́ʔ</u>   kháw   pen   prathaan   bɔɔrisàt

                because   <small>PRONOUN</small> <small>COPULA</small>   president   company

                khray khray   <u>cɯɯŋ</u>   kreeŋ cay

                anyone   be afraid of offending (one)

                'Because s/he is the president of a company, anyone is afraid of offending (her/him)'

The aim of this paper is to examine the meaning of the Thai connective **cɯɯŋ** by investigating the history of linguistic constructions including it. I propose that the essential property of **cɯɯŋ** is to activate the ICM for causal relation, which can be schematically represented as follows: CAUSE → EFFECT. The arrow between CAUSE and EFFECT stands for indirect causal link, by means of the speaker's internalization, between two propositions represented by two clauses or phrases connected by **cɯɯŋ**. I name constructions including **cɯɯŋ** 'logical resultative constructions' (LRC's) since they highlight an effect/result situation involving the speaker's reasoning. The analysis of my

data of LRC's, which I gathered from literature on inscriptions and documents in the Sukhothai period (the 13th – 14th centuries) through the Ratanakosin period (from the 18th century to the present time) and from published books and students' compositions in modern Thai, shows that the use of **cɯŋ** has changed little since the 13th century. The meaning of **cɯŋ** is confined to the non-interpersonal domain and resists further development with respect to 'subjectification' (cf. Traugott 1982, 1989, 1999). Instead, it keeps 'pragmatic ambiguity' (cf. Horn 1985).

The following discussion is divided into three sections, as follows. Section 2 explicates the meaning of **cɯŋ**, relying on Halliday's (1970) idea of 'language functions' of three types, namely 'ideational,' 'interpersonal' and 'textual' functions. Section 3 examines the conceptual parallelism between LRC's and the other type of resultative constructions which I call 'physical resultative constructions' (PRC's) in contrast to LRC's, referring to findings in Kessakul & Methapisit (2000). Section 4 summarizes the findings in this study.

2. The meaning of cɯŋ

cɯŋ, as a discourse connective, has 'textual' function, that is, it constrains the relevance of one clause to the preceding clause. I will first examine **cɯŋ** and LRC's from the perspective of clause linkage.

Ohori (1994: 142) proposes the general tendency in the development of clause linkage, namely from lower to higher integration in terms of dependency on each other of two elements linked and the level of linkage, as graphically represented below.

low --------------------- integration --------------------- > high

Dependency: 　　*Juxtaposition* (Coordination)

　　　　　　　　e.g. 'They ate a lot, and went to sleep'

> *Incorporation* (Subordination)

e.g. 'Because they ate a lot, they went to sleep'

low -------------------- integration -------------------- > high

Level:　　　　*Clause* (Predicate + Arguments + Periphery)

e.g. **tosyokan de bunken o sirabeta <u>node</u>, kurasu de happyoo ga seekooshita** 'Since (I) had consulted documents in the library, (I) succeeded in presenting in the class'

> *Core* (Predicate + Arguments)

e.g. '**gohan o tabe <u>nagara</u>, terebi o mita** 'While taking a meal, (I) watched TV'

> *Nucleus* (Predicate)

e.g. **tome <u>te</u> oita** '(I) left (it) stopped'

His diachronic study on the Japanese connective -**ba** (Ohori 1994, 1998) reveals that the degree of integration of two linguistic elements linked by -**ba** has increased according to the above schema. As for the **V**-(**r**)**eba** desinence (*izenkee* 'perfective form' -**ba**), he has attested that it originally involved temporal sequence but has undergone the following semantic extensions. [3]

Temporal relation, e.g. (5)

(non-motivated relation of realized situations)

[+realized, -motivated]

> *Causal/Logical relation*, e.g. (6)

(motivated relation of realized situations)

[+realized, +motivated]

> *Dispositional (generalized conditional) relation*, e.g. (7)

(motivated relation of realized or unrealized situations)

[+/-realized, +motivated]

> *Hypothetical conditional relation*, e.g. (8)

(motivated relation of unrealized situations)

[-realized, +motivated]

(5)   hi-no   kure-nure-ba   suberi   ide.tamahi.nu

         day-PRT   darken-PERF-BA   sneak   go.out.POL.PERF

         'As the day darkened, (he) sneaked out' (*Taketori Monogatari*, 10C)

(6)   kore-wo   hito-ni   katari.tamahe-ba kiku hito   mina

         this.ACC   people-DAT   tell.POL-BA   hear people   all

         minokeyodati.keri

         become.terrified.EVID

         '(She) told this to her people, and all the people who heard (it) became

         terrified' (*Heike Monogatari*, 13C)

(7)   kwan'on-wo   sinzimause-ba   aratani gorisyau   ari

         Kannon-ACC   believe.POL-BA truly   divine.patronage be

         'When[ever] (one) believes in Kannon, there truly is divine patronage' (*Otogi

         Sausi*, 15C)

(8)   sasiagere-ba   tori-mo   ue-ni   agari,   sagere-ba

         hold.up-BA   bird-also   above-DAT   go.up   hold.down-BA

         tori-mo   mata sagaru

         bird-also   again go.down

         'When/If (they) hold (it) up, the birds will go up, and when/if (they) hold (it)

         down, the birds will go down' (*Amakusa-ban Isopo Monogatari*, 16C)

Formerly **V**-(**r**)**eba** linkage had the positive value of the realization feature and the negative value of the motivation feature: [+realized, -motivated] (genuine temporal relation); but by the present the former feature has become unrestricted and the latter feature has become positive, hence [+/-realized, +motivated] (causal/logical and conditional relations).

Ohori (1994: 145) states that clauses linked by -**ba**, because of being juxtaposed in the discourse context, invite pragmatic inferences in accord with the cooperative principle of communication, such that the antecedent event is taken to be the cause for the following event. He regards this inference as the effect of 'pragmatic strengthening' (cf. Traugott 1988, 1989). The strengthening of pragmatic inferences to relevance (in other words, the conventionalizing of a salient conversational inference) resulted in higher semantic dependency between two events represented by serial two clauses. This process corresponds to the notion of 'subjectification' introduced by Traugott. In her view (Traugott 1999: 179), if the meaning of a lexical item or construction is grounded in the socio-physical world of reference, it is likely that over time speakers will develop polysemies that are grounded in the speaker's world, whether reasoning, belief, or metatextual attitude to the discourse. Subjectification, thus, involves increase of encoding of speaker informativeness about his/her attitude.

In a similar vein, Traugott & König (1991) argue that the temporal and logical meanings of the English connective 'since,' as exemplified in (9a) and (9b) respectively, arise historically through changes in the status of inferences, i.e., from temporal to logical.

(9)   a.   'I have done quite a bit of writing since we last met'

                  (Traugott & König 1991: 194)

    b.   'Since you are so angry, there is no point in talking with you'

            (Traugott & König 1991: 195)

Reviewing the use of the Thai connective **cɯɯŋ** from the 13th century through the present time, however, I do not think that the same story of semantic extension as **V**-(**r**)**eba** and 'since' goes for **cɯɯŋ**. **cɯɯŋ** has not undergone semantic extension from the physical domain into the epistemic domain. Rather, 'pragmatic ambiguity' should underlie the meaning of **cɯɯŋ**. Like the negative 'not' and the additive connective 'and' in English, **cɯɯŋ** has pragmatically ambiguous meanings. Actually one may interpret the relationship between the two juxtaposed propositions in (2) and (3) above as either temporal or logical, given appropriate pragmatic context (which subsumes the linguistic discourse and the extralinguistic world knowledge). I assume that the meaning of **cɯɯŋ** inherently is abstract enough to apply to both spatio-temporal and logical structures of language. Naturally, the function of **cɯɯŋ** pertains to both the 'ideational' and the 'textual' mode of language. The ideational function is to indicate the speaker's experience of the outside and the inside world, and the textual function is to mark sequential dependence to constrain the relevance of one proposition to the preceding proposition. In my opinion, **cɯɯŋ** is a 'contextual operator' (cf. Kay 1989) whose semantic value consists, at least in part, of instructions to find a certain kind of information structure in the context. In particular, **cɯɯŋ** invokes the ICM that imposes the causal framing (CAUSE → EFFECT) upon some propositional material and places emphasis on its effect/result involving the speaker's interpretation.

The linkage level of **cɯɯŋ**, unlike that of **–ba**, has not changed in the direction of Ohori's hypothesis, namely from clause (predicate plus arguments and periphery) to core (predicate plus arguments) and further to nucleus (predicate). (10) below shows **–ba** linkage at the core (phrase) level.

(10)　　kare-wa asi-mo　　　　haya-kere.ba　　kata-mo　　　　tuyoi

　　　　he-TOP foot-also　　　be.fast-BA　　　shoulder-also　be.strong

　　　　'He runs fast and has a strong throwing arm as well'

The level of –**ba** linkage has expanded from clause, as in (5) to (8), to core, as in (10). By contrast, the connective **cɯɯŋ** has been used as a linker at both of the levels since the Sukhothai period (the 13-14th centuries). It links linguistic elements either at the clause level or at the core level very flexibly. Examples include (11) which are fragmentary glosses of an inscription in the 13th century. In (11a) **cɯɯŋ** links clauses; in (11b) it links verb phrases.

(11)　　a.　　King Rāma Gamhèn, the ruler of the kingdom, hears the call; he goes

　　　　　　　and questions the man, examines the case, and decides it justly for him.

　　　　　　　So the people of this Möan of Sukkhodai [**cɯɯŋ**] praise him.

　　　　　　　(Griswold & naNagara 1971c: 198, 208)

　　　　b.　　They were worshiped for a month and six days, [**cɯɯŋ**] were buried in

　　　　　　　the middle of Srī Sajjanālai.

　　　　　　　(Griswold & naNagara 1971c: 201, 217)

Since the 13th century **cɯɯŋ** has been able to co-occur with a subordinator not only for 'realis' relation (e.g. **mɯ̂a** 'when, once;' **phrɔ́ʔ** 'because') but also for 'irrialis' relation, i.e., conditional (e.g. **thâa** 'if' in (12) below). Furthermore, in the Ratanakosin period (the 18th century through the present time) it may co-occur with a subordinator for purpose relation as well (e.g. **phɯ̂a** 'in order to' in (13) below).

(12) <u>thâa</u>   thùuk tôŋ   lέʔ   khróp   camnuan

       if   correct   and   full   number

       phîthii   <u>cɯɯŋ</u>   damnəən   tɔ̀ɔ pay dâay

       ceremony   proceed   go on   can

       'If its manner and number are correct, then the ceremony can be resumed'

       (National Language Institute's composition corpus: th034m)

(13) phɯ̂a   pen   kaan   ʔanurák   wathanátham

       in order to   COPULA NOMINALIZER conserve   culture

       thîi   kàw kὲɛ   lέʔ   sǔay ŋaam   wáy

       RELATIVE PRONOUN old   and   beautiful   keep

       <u>cɯɯŋ</u>   yaŋ   càt   ŋaan   nîi   khɯ̂n   maa

             still   arrange fair   this   ascend   come

       'In order to conserve the old and beautiful culture, (people) still set up this fair'

       (National Language Institute's composition corpus: th079m)

   I summarize types of semantic relation existing between two linguistics elements linked by **cɯɯŋ** below.

Realis types [+realized, +motivated]:

       Temporal relation (temporally motivated relation of realized situations)

       Causal/Logical relation (logically motivated relation of realized situations)

Irrealis types [-realized, +motivated]:

       Conditional relation (logically motivated relation of unrealized situations)

        > *Purpose relation* (volitionally motivated relation of unrealized situations)

Here the semantic features for temporals are the same as those for causals/logicals, i.e.

[+realized, +motivated], which seemingly does not fit Ohori's account that temporals have the semantic features [+realized, -motivated]. However, he also comments that the semantic features [+realized, -motivated] characterize 'genuine' temporals. I regard temporal relation marked by **cɯŋ** as having the motivation feature [+motivated], that is, the relation is interpreted as temporally motivated.

The emergence of LRC's with a purpose subordinate clause is relatively recent. To my knowledge, they are not included in inscriptions. I consider this change as having happened to the semantics of LRC at the construction level, but not the semantics of **cɯŋ** at the lexical level. **cɯŋ** by itself keeps its highly abstract sense of causality established by the speaker's reasoning. This general causal sense is compatible with conditional and purpose relations entailing some anticipated effect/result. Those irrealis relations cannot be encoded by the connective **cɯŋ** alone. To express a specific irrealis relation, a subordinator or other lexical element's help is needed.

Crucially, **cɯŋ** does not bear on the 'interpersonal' mode of language. It cannot express the speaker's attitude toward the proposition, nor effect cooperation between the speaker and the hearer. In this regard, **cɯŋ** differs from English connectives 'then' and 'so.' According to Halliday & Hasan (1976: 241), English connectives largely have both the 'experiential' function (subtype of ideational function) for describing objective events, as in (14), and the 'interpersonal' function for enhancing communication process, as in (15).

(14)   a.   <u>Then</u>, as dusk fell, he sat down to rest. (Halliday & Hasan 1976: 239)

        b.   She was never really happy here. <u>So</u>, she's leaving.

            (Halliday & Hasan 1976: 241)

(15)   a.   A: Supposing it couldn't find any?

            B: <u>Then</u> it would die, of course. (Halliday & Hasan 1976: 258)

       b.   A: She'll be better off in a new place.

                B: <u>So</u>, she's leaving? (Halliday & Hasan 1976: 241)

The Thai connective **kɔ̂**, which is another contextual operator and is given multiple translations such as 'then,' 'that being the case,' 'in addition,' 'similarly,' 'at least,' etc. depending on the context, seems to have acquired some additional interpersonal function, as in (16).

(16)   A: thammay   mây   pay

                  why   NEGATIVE go

                  Why won't (you) go?

         B: <u>kɔ̂</u>   mây   yàak   pay

                  NEGATIVE want   go

                  (Because I) don't want to go.

In contrast, **cɯŋ** has nothing to do with the interpersonal mode of language. It does not have the social or expressive or conative function at all.

3. Conceptual parallelism between two resultative construction types in Thai

It is known that the Thai language uses resultative constructions to encode quite a wide range of causal relations between an activity and its resultative state. For convenience' sake, here I call those constructions 'physical resultative constructions' (PRC's) in contrast to LRC's. Kessakul & Methapisit (2000) analyzed Thai PRC's from the scalar view point. Taking into account the compatibility with the connective **con** 'until' indicating duration needed for the activity to progress before reaching the resultative state (which they named 'transition marker'), they classified Thai PRC's into

three patterns:

Pattern 1: *Peripheral PRC*, e.g. (17)   N1 V1 N2 V2 Modifier

Pattern 2: *Typical PRC*, e.g. (18)   N1 V1 N2 (**con**) V2 (Modifier)

Pattern 3: *Marginal PRC*, e.g. (19)   N1 V1 **con** N2 V2 (Modifier)

The resultative state represented by the second verb (V2) is rather fixed in Pattern 1, variable in Pattern 2, and unlimited in Pattern 3. On this basis, Kessakul & Methapisit characterized Pattern 1 as 'peripheral' PRC, Pattern 2 as 'typical' PRC, and Pattern 3 as 'marginal' PRC. Below is further explanation for each pattern.

In Pattern 1, the first verb is a causative-activity verb and the second verb is a change-of-state or state verb, as in (17). Normally this pattern includes a modifier for describing the speaker's evaluation towards the resultant state. The transition marker **con** is not compatible with this pattern, since this pattern represents an accomplishment event in which the result state takes place instantly after the cause activity.

(17)   kháw   khôon tôn máy   lóm   mòt lə́əy

         PRONOUN topple   tree   topple over   completely

         'S/he toppled a tree (and the tree toppled over) completely'

In Pattern 2, the first verb is a transitive activity verb and the second verb is a change-of-state or state verb, as in (18). A modifier may or may not be included. **con** is optionally placed between the second noun and the second verb. (18b) with **con** implies that s/he repeatedly beat something until it became broken.

(18)   a.   kháw   tii   man   tɛ̀ɛk

                   PRONOUN beat   PRONOUN be broken

                   S/he beat it broken.

        b.   kháw   tii   man   <u>con</u>   tɛ̀ɛk

                   PRONOUN beat   PRONOUN   be broken

                   S/he beat it until (it) was broken.

In Pattern 3, the first verb is an unergative activity verb and the second verb is a state verb, as in (19). A modifier may or may not be included. **con** is obligatorily used to mark a transition time from the action scene to the result scene. The second noun in (19a) is unspecified because it is identical to a person represented by the first noun. That in (19b) represents a body-part (of the person represented by the first noun), and that in (19c) represents any other participant.

(19)   a.   kháw   dəən   <u>con</u>   nɯ̀ay

                   PRONOUN walk   be tired

                   S/he kept walking until feeling tired.

        b.   kháw   rɔ́ɔŋ hây   <u>con</u>   taa   buam

                   PRONOUN cry   eye   be swollen

                   S/he kept crying until her/his eyes became swollen.

        c.   kháw   dəən   <u>con</u>   sôn   rɔɔŋ tháaw   sɯ̀k

                   PRONOUN walk   heels shoes   be worn out

                   S/he kept walking until the heels of the shoes became worn out.

Varieties of PRC's in Thai are summarized below.

	Pattern 1	*Pattern 2*	*Pattern 3*
Type of action verb	causative V	transitve V	unergative V
Appearance of **con**	incompatible	optional	obligatory
Possible result	rather fixed	variable	unlimited
Status of PRC	Peripheral	typical	marginal

My claim here is that in modern Thai there is parallelism between PRC and LRC in terms of conceptualization. **con** in PRC's and **cɯɯŋ** in LRC's both belong to the ideational system of language, though they function in different sub-domains, namely 'experiential' and 'logical' domains. The experiential domain is concerned with the speaker's experience of the outside world (physical space), while the logical domain is concerned with that of the inside world (mental space). The use of **con** involves a durative or repetitional activity that eventually leads to the change of state of a patient, whereas the use of **cɯɯŋ** involves the speaker's mental process to determine some causal relation. Thus, **con** and **cɯɯŋ** in common signal an indirect causal link between two propositions represented by the construction, highlighting the effect/result part.

4. Conclusion

Thai LRC's are used to encode not only realis causal relations (temporal and causal/logical relations) but also irrealis causal relations (conditional and purpose relations) between propositions denoted by clauses or phrases in the construction. To explicitly express irrealis causal relations, however, the construction needs an additional lexical item specifying those relations. I claim that the connective **cɯɯŋ** included in the construction serves as a contextual operator that invokes the ICM imposing causal relation with the highlighted effect/result upon the given propositions. I reject the idea that the meaning of **cɯɯŋ** has historically extended from the spatio-temporal domain to

the abstract domain. From the corpus date in 13th century through the present time, we can see that the meaning of **cɯɯŋ** constantly has pragmatic ambiguity. LRC's can be interpreted either phenomenally or logically, unless they include subordinators or other lexical elements that indicate a specific relation between two propositions in question. Which interpretation is more plausible or salient depends on the context.

What is more, I have found that there is conceptual parallelism between the meanings of PRC's containing **con** and LRC's containing **cɯɯŋ**. Both of **con** and **cɯɯŋ** mark some indirect causal link. The indirect link indicated by **con** (i.e. duration of activity) exists in the outside world or physical space, while that indicated by **cɯɯŋ** (i.e. inference of the speaker) exists in the inside world or mental space.

NOTES

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2. **cɯɯŋ** has synonyms such as **ciŋ**. In this paper I will use **cɯɯŋ** as a representative of them.

3. Examples (5) to (8) and (10) are Ohori's (1998). Abbreviations for function words are: ACC(usative); DAT(ive); EVID(ential); PERF(ect); POL(ile); PRT(=particle); TOP(ic); VOL(itional).

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MAIN DATA

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