

A Corpus-Based Study of the Reflexive Form *Tua-eng* ‘Self’ in Thai

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Received 11 May 2022 | Revised 21 June 2022 | Accepted 22 June 2022 |

Published online 17 October 2023

Abstract

This paper aims to investigate semantic and syntactic characteristics of the reflexive form *tua-eng* ‘self’ in Thai and analyze reflexive constructions within the framework of Cognitive Grammar, adopting van Hoek (1995, 1997)’s approach. To observe how the reflexive appears in actual usage, 500 instances of *tua-eng* were collected from the Thai National Corpus (TNC). The reflexive is examined in relation to its antecedent regarding animacy, structural proximity and grammatical positions. Moreover, frequently encountered reflexive constructions are identified. The study claims that the prototypical reflexive construction in Thai is one in which the antecedent serves as a subject and *tua-eng* as a direct object. Other constructions are extensions from the prototype and can be accounted for when the antecedent’s point of view and the viewing relation are taken into consideration. The reflexive constructions in Thai are hence a network of related schemas that are prototypically organized.

Keywords

cognitive grammar – corpus-based study – reflexive – Thai – *tua-eng*

1 Introduction

Studies of anaphora have for a long time received much attention in linguistics and related fields. Anaphora describes a situation in which a linguistic expression corefers with a previous expression, that is, its antecedent, and thus receives its interpretation (see Crystal 2008). One particular type of anaphoric expression is reflexive anaphora. According to Haspelmath (forthcoming), in a reflexive construction two participants of a clause are coreferential and there is a special form (a reflexivizer) signaling this coreference. Reflexivity can be marked differently in different languages. It can appear in the form of a verbal inflection or clitic (in French *Elle s'aime*. 'She loves herself.') and also in the form of a reflexive pronoun (in English *She loves herself*.). In Thai, reflexive pronouns have two forms, bare reflexive *tua-eng* 'self' and compound reflexive *tua* pronoun *eng* (e.g., /tuachǎnʔeeŋ/ 'myself'; /tuakhǎwʔeeŋ/ 'himself/herself'), which are supposedly different with regard to their distribution and binding properties (See Hoonchamlong 1991 and Supwatanapaisan and Ratitamkul 2022). In this paper, the focus is on the bare reflexive *tua-eng* 'self.'

The reflexive pronoun *tua-eng* in Thai seems to have varied distributional patterns. It can occur in a direct object position and corefers with the subject of the clause as can be seen in Example (1). Moreover, different from English, *tua-eng* can be the subject of an embedded clause referring to a participant in the main clause. In (2), the reflexive subject in the embedded clause is coreferential with the main clause subject. It is also common for *tua-eng* to appear in a possessive construction as in (3). The possessive construction in Thai [X / khǎwŋ / 'of' Y], where X is the possessed and Y is the possessor, is comparable to the use of a possessive construction [X of Y] in English, where X is the possessed and Y is the possessor that appears in the form of a possessive pronoun (e.g., *a car of his (own)*). In both cases, the possessor is the object of a preposition. In addition, *tua-eng* can also be used generically. Example (4) illustrates such usage.

- (1) sǎn_i jìk tuaʔeeŋ_i
 San pinch self
 'San pinched himself.'

1 Abbreviations used in this paper are COMP = Complementizer, CON = Connective, FUT = Future marker, HON = Honorific marker, MOD = Modal, NEG = Negation, NOM = Nominative marker, NMLZ = Nominalizer, PASS = Passive marker, Q = Question marker.

- (2) sǎn_i khít wâa tuaʔeeŋ_i kèn
 San think COMP¹ self smart
 'San thought that he was smart.'
- (3) sǎn_i thúp rót khǎŋ tuaʔeeŋ_i
 San smash car of self
 'San smashed a car of self (= a car of his (own)/ his (own) car).'
- (4) kaan.duulɛ.tuaʔeeŋ pen sìn sǎmkhan
 NMLZ.take care.self be thing important
 'Taking care of oneself (self-care) is an important thing.'

In order to observe *tua-eng* patterns in naturally occurring language use, data from a corpus come in handy. To date, there has not been a study of reflexive anaphora in Thai that uses corpus data. The current study examines the distributional patterns of *tua-eng* in the Thai National Corpus (TNC) and accounts for its usage within the framework of Cognitive Grammar.

2 Background

2.1 Frameworks for the Study of Reflexive Anaphora

Attempts have been made to account for reflexive anaphora in English and other languages. Government and Binding theory is a syntactic theory which focuses on abstract syntactic relations (Government) and relationships between pronouns and the expressions with which they are co-referential (Binding). In the framework of Government and Binding theory, the binding principles are proposed to account for how different kinds of nominals, namely anaphors (reflexives and reciprocals), pronouns and R-expressions, are distributed in English (Chomsky 1981). In contrast to a pronoun, which must be free in its governing category, Principle A states that an anaphor (a reflexive and a reciprocal) must be bound² within its governing category.³ Example (5) shows that the anaphor

2 For A to bind B, A must c-command B, and A and B must be coindexed. A c-commands B when 1) A does not dominate B, and B does not dominate A, and 2) the first branching node that dominates A also dominates B. As for coindexation, A and B are coindexed when they refer to the same entity.

3 The governing category is a structural construct. Following Deen and Timyam (2018)'s simplified definition, the governing category of a nominal is a clause, a complex noun phrase, or a prepositional phrase.

himself is bound within its governing category (a clause), yielding a grammatical sentence; *himself* is c-commanded by *John* and coindexed with it. However, in (6) *himself* is bound by *Bill* in its governing category (a clause marked by square brackets) and cannot be bound by *John*. It can be seen that the closest accessible subject defines the binding domain in English.

- (5) John_i loves himself_i.
 (6) John_i knows that [Bill_j loves himself_{j/*i}].

Nonetheless, as pointed out in several studies, there are cases in which Principle A appears to be violated as well as cases where a reflexive anaphor and a pronoun can alternate in English (e.g., van Hoek 1997, Zribi-Hertz 1989). Some examples from Zribi-Hertz (1989, 698) are given in (7–8). An account that radically relies on a structural concept of c-command has proven to be inadequate in explaining such usage. Zribi-Hertz argues that a grammatical theory of English reflexive pronouns must include a discourse component.

- (7) John_i hid the book behind him_i/himself_i.
 (8) John_i thinks that Mary is taller than him_i/himself_i.

Van Hoek (1995, 1997), using the approach of Cognitive Grammar, presents a different view on the study of anaphora. Cognitive Grammar (CG) is a usage-based approach to grammar that does not assume the need for abstract syntactic constructs such as the c-command relationship. CG holds that syntax and semantics are inseparable and that grammatical structure can be explained with regard to semantic and phonological representations. With an emphasis on language use, grammar is viewed as emerging from conventional units of a language, which can be morphemes, words, phrases and schemas (conventional grammatical patterns of the language). (See Langacker (1987) for details.) Van Hoek then analyzes English reflexives in terms of a network of constructional schemas organized in relation to two prototypes. The primary prototype or the prototypical reflexive is observed in *John cut himself* or *Mary saw herself*.⁴ The prototypical reflexive construction has the following characteristics (van Hoek 1997, 174):

- a. Proximity: The antecedent and reflexive code arguments of the same verb.

⁴ Examples in this section are all from van Hoek (1997).

- b. Prominence: The antecedent is the most prominent nominal in relationship to the reflexive (i.e., the most prominent reference point).
- c. Subjectified view of the referent: The participant coded by the reflexive is viewed semisubjectively by the agent.

There is a semisubjective viewing relation between the antecedent and the reflexive since the agent cannot have a completely objective view of himself or herself as in an event with two distinct participants. Van Hoek proposes that the agent (the viewer) perceives the referent of the reflexive (himself/herself) semisubjectively within an onstage region.⁵ Near extensions from the prototypical reflexive are constructions in which the antecedent is not the trajector (the subject) and/or the reflexive is not the primary landmark (the direct object) as seen in (9) and (10).

- (9) I talked to Bill about himself.
- (10) Mary bought a book for herself.

The secondary prototype is the emphatic reflexive as in (11). The main difference between the two prototypes is that while the antecedent and reflexive are arguments of the same verb in the primary prototype, the reflexive occurs directly adjacent to the antecedent in the emphatic reflexive. An extension from the secondary prototype is shown in (12), where the emphatic reflexive does not immediately follow its antecedent.

- (11) John himself knows I'm right.
- (12) John wants to talk to her himself.

5 In light of Langacker (1985)'s stage model, which is a cognitive model of how the speaker and addressee relate to the discourse, a referent that is onstage is brought into the focus of attention by the speaker and the real-world context shared by the speaker and addressee is the offstage region. While the referent of the reflexive is semisubjectively viewed within the onstage region, a referent of a pronoun is viewed from the offstage region (van Hoek 1997).

6 According to van Hoek (1997, 182), picture-noun phrases contain a reflexive that is connected to its antecedent by an implicit viewing relation, not by having a direct relationship as would be in the case of a direct object reflexive. Picture-noun phrases are usually in the form of [NP preposition reflexive] as in *a book about himself* or *a portrait of herself*. They have posed a challenge in the Government and Binding framework as seen in, for example, Cantrall (1974) and Kuno (1987).

The implicit point of view (POV) associated with the prototypical reflexive motivates other extensions that involve the reflexive marker as a POV marker (Deane 1992 as cited in van Hoek 1997). Van Hoek elaborates on constructions containing POV reflexives, namely picture-noun phrases,⁶ logophoric reflexives in written discourse, and reflexives referring to the speaker or addressee. Examples are shown in (13–15), respectively. These extensions all exhibit an implicit viewing relation. The antecedent is conceived of as a perceiver or a cognizer of the participants and objects involved and thus serves as a reference point.

- (13) Mary found a picture of herself in the paper.
- (14) And that was exactly it, he thought. He really didn't care too much what happened to himself. (Patricia Highsmith, *The Glass Cell*, 1973, 79)
- (15) Someone like yourself might appreciate these things.

Given these constructional schemas, a reflexive is sanctioned when it represents a prototypical schema or an extension schema that is conventionally established. Van Hoek's characterization of English reflexives as a network of schemas that are prototypically organized can account for varied reflexive constructions, some of which at first glance appear to violate Principle A of the binding principles. Importantly, her work presents a unified account of reflexives in English and bridges the gap between syntax and discourse. This article will adopt the same framework in analyzing reflexives in Thai.

Crosslinguistic variations exist regarding the distribution of reflexives. In Chinese, for example, a bare reflexive can have a local or long-distance subject antecedent while a compound reflexive can only have a local antecedent. Examples (16a) and (16b) are taken from Tang (1989, 112); the reflexive *ziji* can refer to either its closest subject Lisi or the long-distance subject Zhangsan whereas *ta-ziji* can only refer to Lisi. To account for crosslinguistic variations in the distribution of reflexives, language-specific schemas must be proposed.

- (16a) Zhangsan_i juede [Lisi_j dui ziji_{i/j} mei xinxin]
 Zhangsan think Lisi to self no confidence
 'Zhangsan thought that Lisi had no confidence in himself_{i/j}.'
- (16b) Zhangsan_i juede [Lisi_j dui ta-ziji_{j/*i} mei xinxin]
 Zhangsan think Lisi to he-self no confidence
 'Zhangsan thought that Lisi had no confidence in himself_{j/*i}.'

An interesting question arises as to whether the framework of Cognitive Grammar can explain the use of reflexives in languages other than English. Uehara (2003) compares the Japanese reflexive *zibun* with English reflexives in parallel corpora. It has been found that more than 80% of the English reflexives occurring in the corpus belong to the two prototypes specified by van Hoek (1997). However, the Japanese *zibun* does not share the same prototypical schemas found in English. Moreover, one major difference is that *zibun* can occur by itself as a subject in an embedded clause. In accordance with Cognitive Grammar, Uehara proposes that the prototype schema for *zibun* is the viewpoint constructional schema where the cognizer, that is a person who conceptualizes an entity, is the most salient reference point for the reflexive. *Zibun* thus refers to the cognizer in relation to the conceived object or event. An example from Uehara (2003) is shown in (17). Since Thai also allows a reflexive in a similar construction as seen earlier in (2), it is interesting to see whether or not the reflexive in Thai exhibits patterns like Japanese *zibun*.

- (17) [zibun ga nooryoku de ninmei-sareta noka,
 self NOM ability owing to got.appointed Q
 alibi hurau na noka] to utagatta.
 alibi Frau be Q wondered
 (lit. ‘(I) wondered [if self had been given the job because of the ability
 or as an “alibi Frau”].’)
 ‘I wondered if I had been given the job on my own merits or as an “alibi
 Frau”.’⁷

2.2 Reflexives in Thai

A detailed analysis of Thai reflexives is seen in the work of Hoonchamlong (1991), who compares the distribution of the two forms of reflexive pronouns in Thai, the bare reflexive *tua-eng* ‘self’ and the compound reflexive *tua* pronoun *eng* (for instance, /tuachǎn?eej/ ‘myself’, /tuakhǎw?eej/ ‘himself/herself’) in

7 Uehara (2003) in Footnote 2 explains that ““alibi Frau” is a German expression (“women of straw”), meaning one who is given a post in order to demonstrate that women are being promoted.”

8 It should be pointed out that native speakers’ judgments may vary. For some speakers, when potential antecedents are both subjects in (18a) as opposed to objects in (19a), it is possible for *tua-eng* to be interpreted as also referring to the long-distance subject antecedent.

accordance with the Government and Binding theory. Focusing on their binding properties, Hoonchamlong claims that the bare form *tua-eng* is more constrained than its compound counterpart since it has to be bound by the closest accessible subject only, that is, the antecedent in the local clause. On the other hand, there is no restriction to the compound reflexive *tua* pronoun *eng* with regard to distance and grammatical position of the antecedent. This is shown in (18–19) taken from Hoonchamlong (1991, 56–57).⁸

(18a) *nóɔj_i bòɔk wâa nít_j chúa tuaʔeen_{j/*i} mâak kwàa khraj*
 Noy say COMP Nit believe self much than someone
 ‘Noy said that Nit believed herself more than anyone else.’

(18b) *nóɔj_i bòɔk wâa nít_j chúa tuakhăwʔeen_{i/j} mâak kwàa khraj*
 Noy say COMP Nit believe herself much than someone
 ‘Noy said that Nit believed her/herself more than anyone else.’

(19a) *nóɔj_i bòɔk nít_j wâa tuaʔeen_{i/*j} mâj nâacà plian ɲaan lɤj*
 Noy tell Nit COMP self not should change job at all
 ‘Noy told Nit that she (= Noy) should not have changed jobs at all.’

(19b) *nóɔj_i bòɔk nít_j wâa tuakhăwʔeen_{i/j} mâj nâacà plian ɲaan lɤj*
 Noy tell Nit COMP herself not should change job at all
 ‘Noy told Nit that she (= Noy or Nit) should not have changed jobs at all.’

Hoonchamlong (1991) proposes that referential behaviors of the bare and compound reflexives in Thai are different from those in Chinese and Korean. While the Chinese and Korean bare reflexives, *ziji* and *casin*, respectively, can have long-distance antecedents, the compound reflexives *pronoun ziji* and *pronoun casin* are constrained to the closest subject antecedent. In addition, both the bare and compound reflexives in Chinese and Korean are subject-oriented while only the bare reflexive form *tua-eng* is subject-oriented in Thai.

Supwatanapaisan and Ratitamkul (2022) investigated the processing of the bare and compound reflexive forms in Thai using a self-paced reading experiment. They found that both forms are subject to a locality bias (Dillon, Cho, and Xiang 2016) in that interpretation preference is given to a local dependency over a long-distance one. This means that in sentence comprehension, native Thai speakers have a tendency to assume that both *tua-eng* and *tua* pronoun *eng* refer to a local subject rather a distant one. To illustrate this, their study shows that the sentence in (20) is read more quickly than (21).

(20) *sàhàkɔɔn_i bòɔk wâa khun-lun_j cà-mâj-tòɔ samaachík hâj*
 co-op say COMP Hon-uncle FUT-NEG-renew membership to

tuaʔeen_{j/*i} naj pii nâa
self in year next

‘The co-op said that Uncle would not renew membership for himself next year.’

- (21) khun-luŋ_i bòok wâa sàhàkɔŋ_j cà-mâj-tòò samaachík hâj
Hon-uncle say COMP co-op FUT-NEG-renew membership to
tuaʔeen_{j/*j} naj pii nâa
self in year next

‘Uncle said that the co-op would not renew membership for him next year.’

Considering referential patterns of *tua-eng* proposed by Hoonchamlong (1991) and the display of the locality bias effect in comprehension found in Supwatanapaisan and Ratitamkul (2022), it is interesting to observe the use of the reflexive in naturally occurring language. By looking at *tua-eng* in a corpus, we will have a better view of the patterns of the reflexive in relation to its antecedent as well as its frequency of use in different constructions.

3 Semantic and Syntactic Properties of *Tua-eng* ‘Self’ in the Thai National Corpus (TNC)

3.1 Methodology

The current study uses data from the Thai National Corpus (TNC), which can be accessed at <https://www.arts.chula.ac.th/ling/tnc/searchtnc/>. The TNC is a large corpus of 33 million words and contains written texts from different genres including academic, semi-academic, fiction and others. In order to see the distribution and characteristics of *tua-eng* in actual usage, 500 instances of *tua-eng* were randomly collected. Each instance of *tua-eng* along with its antecedent was examined in terms of their semantic and syntactic properties. It should be noted that for 59 instances (11.80%) of *tua-eng*, the antecedents are unidentifiable or unclear. Those are instances in which *tua-eng* appears in a nominalized /kaan/ or /khwaam/⁹ construction and other NP constructions, and possibly has a generic interpretation (see section 4.5 for details). In such

9 The prefixes /kaan/ and /khwaam/ are considered nominalizers in Thai and can be added to a verb rendering an NP (Prasithrathsint 2005). For example, /kaan/ can be prefixed to /phùt kâp tuaʔeen/ ‘talk to self’ to make /kaan phùt kâp tuaʔeen/ ‘talking to self/ a talk to self’.

cases, the antecedents are not included in the analysis. This results in 441 antecedents and 500 *tua-eng* reflexives.

The data is coded for the following aspects: 1) animacy of referents, 2) proximity of *tua-eng* and its antecedent, 3) grammatical positions of *tua-eng* and its antecedent, and 4) constructions containing *tua-eng*. Descriptive results of the first three aspects are given in Sections 3.2, 3.3, and 3.4, respectively and reflexive constructions with *tua-eng* are elucidated under the framework of Cognitive Grammar in Section 4.

3.2 Animacy of Referents

When the referents of *tua-eng* are examined with regard to animacy, it has been discovered that Thai is, to a certain degree, different from East Asian languages such as Chinese, Japanese and Korean. Reflexive pronouns in those languages (*ziji* in Chinese, *zibun* in Japanese and *casin* in Korean) can only be employed when the referents are animate. Thai, on the other hand, permits the use of the reflexive pronoun *tua-eng* for both animate and inanimate referents. Example (22) shows that *tua-eng* refers to an inanimate object, the Earth. It should be noted that /mŭn/ ‘spin’ can have both animate and inanimate subject arguments.

(22)	lé	sâap	khwaamrew	thîi	lòok	mŭn	rôɔp
	and	know	speed	that	earth	spin	around
	tuaʔeeŋ	ná	láticùut	thîi	51		
	self	at	latitude	at	51		
	‘... and knows the speed that the Earth spins around self (= itself) at the 51st latitude.’						

Table 1 displays the frequency of referents categorized according to animacy (human, animal and inanimate referents). It can be observed that animate referents, humans in particular, are ubiquitous; inanimate antecedents, though permissible, are infrequent. Since a reflexive construction commonly involves a transitive verb with an agent, it follows that the agent (the antecedent) is conceived as an animate being, particularly a human, who is aware of his role in an event.

In addition, since *tua-eng* is morphologically unmarked, it can refer to 1st person, 2nd person and 3rd person antecedents. The antecedents, nonetheless, can be overtly expressed as a lexical noun phrase or a pronoun or they can take a null form. This follows from the fact that Thai allows arguments to be omitted when they are recoverable from a situational and/or linguistic context. The 1st person and 2nd person antecedents of *tua-eng* are often, then, unexpressed

TABLE 1 Animacy of referents

Animacy	Frequency
Human referents	473 (94.60%)
Animal referents	5 (1.00%)
Inanimate referents	22 (4.40%)
Total	500 (100%)

because the speaker and the addressee are salient participants in a situational context. In (23), since the narrator is talking about himself, the omitted subject antecedent of the reflexive is a 1st person referent, the narrator. In this study, identifiable antecedents, though unexpressed or omitted, are included in the analysis.

(23) ø khít wâa tuaʔeeŋ kèn
ø think COMP self smart
'(I) thought that self (= I) was smart.'

3.3 Proximity of Tua-eng ‘Self’ and its Antecedent

Structural distance between two entities that corefer has an effect on referential choices (e.g., Clancy 1980, Li & Thompson 1979, Ratitamkul 2007, among others). While a personal pronoun is used in English when the two entities are in different clauses (*He_i thought that he/*himself_i was smart.*), a reflexive form is required when they are in the same clause (*He loved himself/*him_i.*). In order to observe whether the use of the reflexive form in the data set is dependent on structural distance, each instance of *tua-eng* is coded for structural distance, which can be one of the following: 1) the reflexive is in the same clause as the antecedent, 2) the reflexive and the antecedent are not in the same clause but are still in the same sentence, 3) the reflexive and antecedent are in two separate but adjacent sentences, and 4) the antecedent is not in a sentence adjacent to the reflexive. Table 2 shows the frequency of *tua-eng* according to structural distance. Note that the 59 instances of *tua-eng* with no clear or identifiable antecedent are not included.

First of all, it can be observed that a majority of instances of the reflexive form *tua-eng* corefer with an antecedent within the same clause (340 instances, 77.10%). An example from the corpus is in (24). For those instances in which the antecedent and reflexive are not in the same clause, 81 (18.37%) are in the same sentence, e.g., the antecedent is a subject of the main clause while the

TABLE 2 Frequency of *tua-eng* ‘self’ categorized by structural distance between the reflexive and its antecedent

Structural distance	Frequency
The reflexive and antecedent are in the same clause.	340 (77.10%)
The reflexive and antecedent are not in the same clause but are still in the same sentence.	81 (18.37%)
The reflexive and antecedent are in two separate but adjacent sentences.	12 (2.72%)
The antecedent is identifiable but is not in an adjacent sentence to the reflexive.	8 (1.81%)
Total	441 (100%)

reflexive functions as a subordinate clause subject as in (25). Situations where *tua-eng* occurs far apart from its antecedent are in fact rare. An example of an antecedent and a reflexive being in separate sentences is presented in (26). In this case, although the antecedent and the reflexive are not in the same sentence, the two sentences are semantically close as can be seen from the fact that they have the same subject referent.

- (24)

kɛɛ khít thǎam tuaʔeeŋ

he think ask self

‘He thought and asked self (= himself).’
- (25)

tèe chǎn mǎj rúu ciŋciŋ wǎa tuaʔeeŋ cà dǎaj kòɿt

but I NEG know really COMP self MOD get be.born

maa ʔiik

come again

‘But I really didn’t know that self (= I) would get to be reborn again.’
- (26)

phráphoothísàt hǎj phôwmêe sǒɯntua wáj

Bodhisattvas let parents hide keep

sùan tuaʔeeŋ salàchîip pen thaan kèe phôwmêe

as.for self sacrifice. be alms to parents

life

‘Bodhisattvas let (his) parents hide. As for self (= himself), (he) sacrificed (his) life as alms to (his) parents.’

The fact that a reflexive commonly occurs within the same sentence as its antecedent affirms a close connection between the two entities. The reflexive, receiving its interpretation from the antecedent, appears in close proximity to the latter. This is actually an example in which structural distance and semantic tie go hand in hand.

Interestingly, 18.37% or approximately one fifth of *tua-eng* appear in the same sentence as their antecedents but in a different clause as seen earlier in (25). An antecedent commonly resides in the main clause and is linearly before a reflexive in an embedded clause. Hence, the preceding antecedent can be linked to a non-local reflexive form and contribute to its interpretation. While this type of construction is not allowed in English, it can be found in several languages such as in Chinese and Japanese, in addition to Thai.

3.4 Grammatical Positions of Antecedents and Tua-eng ‘Self’

To see how the antecedents and *tua-eng* are distributed in the corpus, their grammatical positions are examined. For the antecedents, grammatical positions are classified into five categories: subject, direct object, object of a preposition, complement and others (including an antecedent which is part of a subject, part of a direct object, or part of an object of a preposition, a noun phrase (NP) that stands on its own, an antecedent that is not in the previous clause and a covert antecedent). Results are shown in Table 3. It is conspicuous that the antecedents frequently occupy the subject position (377 out of

TABLE 3 Antecedents in different grammatical positions

Grammatical positions of antecedents	Frequency
Subject	377 (85.49%)
Direct object	45 (10.20%)
Object of a preposition	2 (0.45%)
Complement	2 (0.45%)
Others	15 (3.40%)
Total	441 (100%)

441 instances, 85.49%). Examples can be seen in (24) – (26) presented earlier, where the antecedents are all in the subject position of the sentence.

There are 45 instances (10.20%) of antecedents in the direct object position. In fact, all of these antecedents serve as both a direct object and also a subject in a serial verb construction. An example is given in (27) in which the 2nd-person antecedent of *tua-eng*, /khun/ ‘you’, appears as an object of /tham hâj/ ‘make’ and, at the same time, it is the subject of the predicate headed by the verb /rúusùk/ ‘feel’. Example (27) is what Pothipath (1999) calls an analytic causative construction. He analyzes the second NP in the construction as a subject but also notes that it simultaneously functions as an object of the first verb and a subject of the second verb. The fact that all of the direct object antecedents in the data are also subjects of the following predicates helps strengthen the point that antecedents are often subjects.

- (27) khăw ʔaat tham hâj khun rúusùk wâa tuaʔeenj mii khâa
he may make you feel COMP Self have value
‘He may make you feel that self (= you) are valuable.’

That antecedents take the grammatical role of subject in a large number of sentences is not surprising. This in fact corresponds to a number of studies claiming that subjecthood plays an important role in the interpretation of subsequent pronominal forms (e.g., Chafe 1976; Givón 1983; Gordon, Grosz, & Gilliom 1993). We can see that reflexive pronouns as well rely on salient arguments in a subject position for interpretation.

Possible grammatical positions of *tua-eng* are subject, direct object, object of a preposition, complement, and part of a possessive NP. Table 4 displays the

TABLE 4 *tua-eng* in different grammatical positions

Grammatical positions of <i>tua-eng</i>	Frequency
Subject	67 (19.20%)
Direct object	178 (51.00%)
Object of a preposition	82 (23.50%)
Complement	22 (6.30%)
Part of a possessive NP	151 (30.20%)
Total	500 (100%)

frequency of *tua-eng* according to grammatical positions. Approximately half of the reflexives occupy a direct object position (178 instances, 51%), followed by those in the position of an object of a preposition (82 instances, 23.5%). This means that almost three fourths of *tua-eng* occur in an object position, either as a direct object or an object of a preposition.

It should also be pointed out that quite a few instances of *tua-eng* are part of a possessive NP (151 instances, 30.20%). While it is possible to use a personal pronoun in a possessive construction in Thai, it is preferable to use *tua-eng* than a personal pronoun when there is an accessible antecedent. An example of *tua-eng* in a possessive NP is presented in (28) where *tua-eng* in /ɲaw khǎw tuaʔeeŋ/ 'reflection of self' ('his reflection') corefers with the subject /khǎw/ 'he'. It should be noted that here the use of a personal pronoun (/ɲaw khǎw khǎw/ 'reflection of he', that is, 'his reflection') is also acceptable, though yielding a different semantic import. This will be discussed in more detail in a subsequent section.

- (28) khǎw sǎamâat mǎwŋ hǎn ɲaw khǎwŋ tuaʔeeŋ naj
 he can look see reflection of self in
 duanʔtaa khǎwŋ thɔ̌
 eye of she
 'He can see a reflection of self (= his reflection) in her eyes.'

Furthermore, unlike English, which does not allow a reflexive pronoun in the subject position, reflexive subjects in Thai are not infrequent (67 instances, 19.20%). Most of them (56 instances) are subjects in an embedded clause with antecedents in the main clause as seen earlier in (25) and (27), while only 11 have antecedents elsewhere. (An example is in (26).) This shows that having an antecedent in close proximity, preferably in the same sentence as a reference point, is possible for a reflexive subject in Thai.

4 A Cognitive Grammar Account of Constructions Containing *Tua-eng* 'Self'

According to van Hoek (1997), the primary reflexive construction in English is the one in which the agent or experiencer corefers with the patient of the predicate, for example, *John cut himself*. The canonical grammatical position for an antecedent is therefore the subject and that for a reflexive is the direct object. If this is also the case in Thai, we would expect to encounter a large number of sentences with a coreferential subject and object of the same predicate in

TABLE 5 Different reflexive constructions

Constructions containing <i>tua-eng</i>	Frequency
A subject antecedent with a direct object reflexive <i>He secretly blamed tua-eng.</i>	136 (27.20%)
A subject antecedent with a reflexive as part of a possessive NP serving as a direct object <i>Itsara carried a pillow and a blanket of tua-eng and walked into his sister's room.</i>	72 (14.40%)
A subject antecedent in the main clause and a subject reflexive in a subordinate clause <i>Marisa just realized what tua-eng had said.</i>	52 (10.40%)
A subject antecedent with an object of a preposition reflexive <i>Noy faced difficulties by tua-eng all this time.</i>	45 (9.00%)
A subject antecedent with a reflexive as part of a possessive NP serving as an object of a preposition <i>My children and grandchildren will probably go their separate ways and stay with families of tua-eng.</i>	29 (5.80%)

the corpus data. When the data was further investigated, it was found that the three most frequent reflexive constructions are 1) A subject antecedent with a direct object reflexive (*He secretly blamed tua-eng.*), 2) A subject antecedent with a reflexive that is part of a possessive NP functioning as a direct object (*Itsara carried a pillow and a blanket of tua-eng and walked into his sister's room.*), and 3) A subject antecedent in the main clause and a subject reflexive in a subordinate clause (*Marisa just realized what tua-eng had said.*). For ease of presentation, Table 5 shows only constructions whose frequency of occurrence is above 5%. The following sections elaborate on these constructions along with some other constructions found in the corpus.

4.1 *Prototypical Reflexive Construction in Thai*

The corpus data reveal that the most frequent reflexive construction in Thai is the one in which a subject and a direct object of the same clause corefer. Similar to English, this construction is considered the prototypical reflexive construction in Thai. As van Hoek (1997) noted, the reflexive prototype is highly entrenched; a reflexive schema is chosen when the landmark of a

relation (i.e., the direct object) matches with the trajector of that relation (i.e., the subject). In the prototypical reflexive construction, an agent, which is generally animate, is the viewer of his own action and the referent of the reflexive (namely, himself) is viewed semisubjectively within the onstage region. The construal is illustrated in (29) where the two arguments /khǎw/ 'he' and *tua-eng* 'self' correspond. The use of the reflexive *tua-eng* implies that the agent is viewing himself.

- (29) khǎw ʔɛɛp tamnì tuaʔeɛŋ
 he hide blame self
 'He secretly blamed himself.'

The prototype schema intrinsically involves an implicit POV and can be extended into other schemas. A near extension is observed when the antecedent is the subject but *tua-eng* is the object of a preposition, not a direct object. In other words, the reflexive is a secondary landmark, not a primary one. Closely connected with the prototype, the configuration maintains an implicit viewing relation. An example is given in (30); the reflexive in the position of a prepositional object is perceived by the subject *Noy* himself.

- (30) nój phacon khwaamjâaklambàak dûaj tuaʔeɛŋ talòɔt weelaa nī
 Noy face difficulty with self all time this
 'Noy faced difficulties by self (= himself) all this time.'

4.2 *Tua-eng in a Possessive NP*

Another construction that is commonly observable is the reflexive possessive NP construction of the form NP (/khǎwŋ/) *tua-eng* 'NP (of) self'. In this configuration, the possessor is the subject that corresponds with the reflexive *tua-eng*. Comparable to the picture-noun phrases in English, the possessor is conceived as the viewer of the possessed, thus licensing the use of the reflexive form. Example (31a) involves the possessor *Itsara* perceiving the noun /mǎɔn kàp pháahòm/ 'pillow and blanket' as belonging to himself. The conceptualizer, that is, the speaker of the utterance, is aware of this viewing relationship between the possessor and the possessed. It should be noted that a personal pronoun can also be used in a possessive NP in Thai. For example, (31b), a constructed sentence from (31a), has a personal pronoun /khǎw/ 'he' in place of *tua-eng*. This, nonetheless, conveys a nuance in meaning in that it no longer implies a viewing relation between the possessor and the possessed. Instead, the referent is being viewed from the offstage region from the point of view of a discourse participant. The discourse participant or the conceptualizer conceives that the possessed belongs to the possessor.

- (31a) ʔitsaraa hòɔp mǎɔn kàp pháahòm khǎɔŋ tuaʔeen dʁɔn khâw
 Itsara carry pillow and blanket of self walk enter
 hòŋ nóɔŋsǎaw
 room sister
 'Itsara carried a pillow and a blanket of self (= his pillow and blanket)
 and walked into his sister's room.'

- (31b) ʔitsaraa hòɔp mǎɔn kàp pháahòm khǎɔŋ khǎw dʁɔn khâw
 Itsara carry pillow and blanket of he walk enter
 hòŋ nóɔŋsǎaw
 room sister
 'Itsara carried a pillow and a blanket of he (= his pillow and blanket)
 and walked into his sister's room.'

Interestingly, the corpus data contain several instances of body part NPs that occur with *tua-eng* as seen in (32a). Since body parts are biological parts of a participant, it follows naturally that the participant perceives them from his own perspective. In (32a), Saiji serves as the POV of the event touching the forehead. In such a case, the use of a personal pronoun rather than a reflexive can seem somewhat peculiar, if not unacceptable. This is seen in a constructed sentence with a personal pronoun /khǎw/ 'he' in (32b) which can be ambiguous. The first interpretation is that Saiji touched his own forehead, as viewed by another person. The second interpretation, on the other hand, is that Saiji touched someone else's forehead, not his own. This is because if it were his own forehead, Saiji would intrinsically be a POV, sanctioning the use of *tua-eng*. For the reflexive possessive NP construction in Thai, it follows that when there is a viewing relation, i.e., the antecedent's viewing of the possessed, *tua-eng* is commonly selected.

- (32a) saicì càp nâaphàak tuaʔeen
 Saiji touch forehead self
 'Saiji touched forehead (of) self (= his own forehead).'

- (32b) saicì càp nâaphàak (khǎɔŋ) khǎw
 Saiji touch forehead (of) he
 'Saiji touched forehead (of) he (= his own forehead or somebody else's forehead).'

4.4 *Tua-eng and Discourse Participants*

In certain contexts, it is appropriate to use *tua-eng* to talk about the speaker and addressee in Thai. In (35), *tua-eng* denotes the speaker when she talks about herself, a context in which the personal pronoun *I* would be used in English. Similarly, in (36), *tua-eng* is used for the addressee comparable to the personal pronoun *you* in English. The referents of *tua-eng*, namely the speaker and addressee, are context dependent and serve as the antecedents whose points of view are adopted. Instances such as these are infrequent and sporadic but when they occur, they emphasize the speaker or the addressee as a reference point anchoring the reflexive form.

- (35) tuaʔeen pen khon thîi mǔan
 self be person that like
 khàat khwaamrúusùkrák càak khonʔùuunʔùuun
 lack feeling.of.love from other.people
 ‘Self (= I) am the type of person that lacks the feeling of being loved
 from other people.’

- (36) thánʔthîi tuaʔeen thùuk thîj jaŋ mii nâa maa huaŋ
 though self PASS dump still have face come concern
 phûaknán ʔiik
 them again
 ‘Though self (= you) were dumped, (you) still dare to feel concerned
 for them.’

4.5 *Reflexive in a Nominalized /kaan/ or /khwaam/ Construction and Other NP Constructions*

There exist a number of instances in which *tua-eng* occurs in NP constructions and it is unclear whether there is a specific antecedent. In other words, the interpretation of *tua-eng* is ambiguous; in certain cases, both generic and specific interpretations are plausible. Firstly, *tua-eng* can take place in a nominalized construction with /kaan/ or /khwaam/ prefixation (42 instances, 8.4%) (see Footnote 8). In (37), it can be observed that *tua-eng* can have a generic meaning comparable to *oneself* in English or it could refer to the speaker of the utterance in this context. It should also be noted that a nominalized expression with *tua-eng* is in a way reminiscent of an English compound containing *self*, e.g., /khwaam chûamân naj tuaʔeen/ ‘NMLZ confide in self, self-confidence’ and /kaan páttana tuaʔeen/ ‘NMLZ develop self, self-development.’ Next, *tua-eng* can also occur in other types of NP, yielding a generic import (17 instances, 3.4%). An example is given in (38).

- (37) kaan tamráaj tuaʔeenʔ ʔaat chûaj ráakróŋ hâj khăw klàp
 NMLZ harm self may help call.for give he return
 maa sǒnjaj
 come pay.attention
 'Harming self (self-harm) may help calling for him to pay attention again.'

- (38) kooken wâat phâapmũan tuaʔeen chûu leemíseeráp khûn taam
 Gaugin paint portrait self name Les Misérables up follow
 khamkhǎw khǎw wɛɛnkó
 request of van Gogh
 'Gauguin painted a portrait (of) self (self-portrait) named Les Misérables, follow-
 ing van Gogh's request.'

5 Conclusion

Based on the data gathered from the TNC, the current study explores the characteristics and distributional patterns of the reflexive form *tua-eng* in Thai. In terms of semantic properties, referents of *tua-eng* are often animate, although an inanimate referent is not prohibited. It can be seen that Thai resembles English in this respect and is less constrained than the reflexive form *ziji* in Chinese and *zibun* in Japanese, both of which only refer to animate entities. Besides, being morphologically unmarked for person and gender, *tua-eng* can be used when an antecedent is the speaker, the addressee or a third person. As for its distribution, the data reveal that the majority of *tua-eng* occur in the same clause as its antecedent. If not in the same clause, the reflexive and the antecedent still cooccur in the same sentence. Only a small number of reflexives are linked with antecedents outside an immediate sentence. Hence, *tua-eng* is likely to stay in close proximity with its antecedents. Furthermore, when the grammatical positions are inspected, we can see that the canonical position for an antecedent is a subject while that for *tua-eng* is a direct object. Having said that, it can be observed that quite a few reflexives appear in a prepositional object position and a subject position as well as in a possessive NP.

To understand the construal of *tua-eng*, it is important also to look at reflexive constructions in the language. The most frequent construction is the one in which the direct object reflexive corefers with the subject antecedent of the same predicate. The second most frequent is the one with a subject antecedent and *tua-eng* as part of a possessive NP functioning as a direct object, followed by a construction containing a subject antecedent in the main clause and a reflexive subject in an embedded clause. These constructions as well as a few

others are explained using the framework of Cognitive Grammar as proposed by van Hoek (1995, 1997). This study claims that the prototype reflexive in Thai is a construction in which a subject and a direct object of the same clause correspond. This construction intrinsically involves an implicit POV and can extend to other schemas. For instance, a possessive NP containing *tua-eng* is possible when the subject antecedent is the perceiver of the object and recognizes that it belongs to him. On the other hand, for the construction of the main clause subject antecedent and the embedded clause subject reflexive, the main clause subject acts like a POV who views the event represented by the embedded clause with a reflexive as a main participant. In this manner, we can then conclude that reflexive constructions in Thai are a network of schemas which are organized around the prototype.

The current study provides a detailed description of the reflexive form *tua-eng* as observed in a corpus and explicates the reflexive constructions in Thai within the Cognitive Grammar framework. The findings shed light on similarities and differences between *tua-eng* and reflexives in other languages such as English and Japanese. Moreover, preliminary inspection of the compound reflexive *tua* pronoun *eng* has revealed that the bare and compound reflexive forms are disparate in terms of their distributional patterns. Future work comparing the two reflexive forms is needed to yield a more complete picture of reflexives in Thai.

Acknowledgements

This work was partly supported by the Applied Linguistics for Language Education Research Unit at the Faculty of Arts at Chulalongkorn University. The author would like to thank two anonymous reviewers for their insightful comments and suggestions.

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