PARTICIPANT CONTINUITY IN THAI FICTIONAL NARRATIVE

Suda Rangkupan¹

Abstract

This paper examines participant continuity in Thai fictional narratives using the quantitative method of referential distance (RD) proposed by Givón (1983, 1995). According to Givón, referential expressions are different in terms of their RD value: average RD of full noun phrases is the highest, that of pronouns lower and that of zero anaphors the lowest. However, the result from this study shows that pronouns and zero pronouns in Thai have equal average RD value while full noun phrases have much higher average RD. Moreover, zero anaphors appear to have longer distance than expected. Considering the distribution of the long distance zero anaphors in different modes of text, we have found that they tend to refer to a character whose thought is presented as self-reflected. In this case, the reader is still able to resolve the referent of the zero anaphor. Therefore, the continuity of character is maintained. We can conclude that zero anaphors are devices for maintaining participant continuity even though the distance between the anaphor and the textual antecedent is quite long. Thus, we argue that features of the deictic center need to be taken into account in the investigation of participant continuity.

¹Ph.D., Lecturer, Department of Linguistics, Faculty of Arts, Chulalongkorn University, Bangkok, Thailand.

1. Introduction

1.1 Purpose of study

In the linguistic analysis of narratives, participant continuity is an issue that has been widely studied. Many studies focus on the component of narrative discourse that is distinguished by spatiotemporal dimension such that events in a narrative are divided into two major groups or levels such as events/non-events, macrostructures/microstructures, storylines/non-storylines (Grimes 1975; Hopper 1979; van Dijk 1980; Longacre 1983; Burusphat 1991). The part of the text that presents the psychological state of a character is considered not to pertain to the importance of the global structure of a story. However, it is shown by many studies on deixis in narrative, as in the Deictic Center Theory, that events in narrative tend to be presented as experienced by characters and that readers are often invited to experience the narrative world as a character does (Duchan et al 1995; in particular, Zubin & Hewitt 1995; Galbraith 1995; Li & Zubin 1995). Thus, in this approach, the psychological state of a character is taken into account as one of the important components in narratives.

This paper examines participant continuity in Thai narrative discourse, assuming the approach of Deictic Center Theory. Thus, the part of text that presents the psychological state of a character is identified and will be generally called "thought context." In terms of the methodology of participant continuity, this study uses the quantitative method of Referential Distance (henceforth RD) that is proposed by Givón (1983a, 1983b, 1995) to analyze the distribution pattern

of RD of referential devices, including full NPs (e.g. definite NPs, kin terms and names) personal pronouns and zero anaphors. Givón claims that there is a correlation between the phonological size of the referential coding and the degree of continuity of the participants. More specifically, full NPs are less continuous than pronouns while zero anaphors are the highest in terms of the degree of congruity.

The study shows that in the analysis of RD of the overall text, each type of referential device has a different pattern of the distribution of RD. The distribution pattern of full NPs follow Givón's prediction but the RD of zero anaphors shows some unexpected results. Investigating the thought context, we find that the unusual pattern is partly caused by the distribution of referential devices in the thought context.

The paper begins with a review of theoretical concept of narrative structure in a text-based approach and the Deictic Center Theory, and the participant continuity and referential devices. Then, the methodology of RD will be introduced, including the corpus of data that is used in the analysis. After that, the overall result of the distribution pattern of RD will be discussed. Finally, the analytical and quantitative characteristics of referential devices in thought context will be demonstrated.

1.2 Review of literature

1.2.1 Narrative structure: Text-based approach

There have been many studies on the structure of narrative discourse. In this section, I will give a brief introduction to

the theoretical concepts involving narrative structure from the approach that is mainly concerned with the organization of a narrative text (Dane 1970; Grimes 1975; Hopper 1979; van Dijk 1980; Longacre 1983; Halliday and Hassan 1976). A study of Thai narratives in this approach will also be briefly reviewed. Moreover, some disadvantages of using this approach will be discussed.

A narrative in these approaches is considered one type of text that has particular structures that contribute to global coherence. They are primarily concerned with the organization of narrative discourse, the semantic categorization of the text component and the ordering of components. According to Grimes (1975), a narrative can be analyzed into events and non-events which include setting, background, evaluations and collateral. Hopper (1979), primarily using evidence from tense-aspect marking in a discourse, proposed the notion of foregrounding and backgrounding as characteristics of actual story line and supporting material, respectively. van Dijk (1980) posited the hierarchical structure that determines the ordering of the narrative components and general rules for deriving macrostructures from microstructures. In a crime story, for example, some characters are introduced after the component of complication events such that the deletion rule is needed to rearrange the order of background and complication.

Following the text-based approach and Longacre (1983) in particular, Burusphat (1991) has divided a Thai narrative text into storyline and non-storyline events. Storyline is claimed to be the structural backbone of events that moves the text from the beginning to the end. Texts that

contain cohesion, evaluation, irrealis, setting, flashback, cognitive state and background information are considered as non-storyline categories. The distribution of referential devices is also used to determine the storyline. Noting the high frequency of zero anaphors in the backbone of the story, she suggests that the storyline can be partially detected by the occurrence of zero anaphors (Burusphat 1991: 146).

This approach focuses on the system of predicates indicating different types of states of affairs in narratives. However, the experiencer of an event is not taken as part of the system. Thus, the referential devices of participants in nonstoryline events are not accounted for in this model. To illustrate, in her account of zero anaphors, Burusphat recognizes that there are cases in which a text about one character can be interrupted by a thought of that character and continue its storyline events after the thought (Burusphat 1991: 145). The discontinuity of the event structure is accounted for but the understanding about the continuity that such a character has throughout storyline and nonstoryline events is left unexplained.

1.2.2 Deictic Center Theory

This section gives a review of Deictic Center Theory as a frame of reference for this study. Deictic Center Theory (Duchan et al 1995) proposes that deictic features of a speech situation are transferred into the narrative text. In the speech situation, deixis plays an important role in anchoring time, space, participants, and objects in a real-world situation. In narrative texts, these same features are anchored into a story-world event. Being abstract from the real-world situation, the story world is a men-

tal construct of the reader or listener. (Zubin and Hewitt 1995: 130)

There are four components in the deictic center: the WHERE, the WHEN, the WHO, and the WHAT. The WHERE and WHEN refer to the spatio-temporal location in which the story world is constructed to occur. The WHO and WHAT are participants and objects that are placed in the story world. These components are synchronized to establish a deictic center through which the reader or listener views the current story world. In the same manner, we anchor these components to the time of utterance, the spatial location of the event, the speaker and the addressee, and the object that is talked about in the real world situation.

As reviewed above, Deictic Center Theory proposes that fictional narratives import many characteristics from interactional discourse. However, narrative discourse is also different from interactional discourse. Fictional narratives have been shown to have linguistic characteristics that are distinguishable from other types of discourse such as a third-person character, parenthetical non-communicative psychological verbs and reversed verb-object word order (Galbraith 1995: 33). These linguistic devices are used cumulatively to evoke the story world in which readers are invited to observe the event from the psychological perspective of a character. Thus, the psychological perspective represents a deictic field in which a character whose perspective is taken is experiencing narrative events. The character whose perspective is taken is called the origin of perspective and characters or props that are observed in narrative events are called objects of perspective. Figure 1 illustrates a simplified

structure of psychological perspective.

Figure 1: Psychological perspective

In the psychological perspective, the thought of a character can be presented in a text in two major ways, internal monologue and private state representation. (Wiebe 1990; Zubin forthcoming).

In a psychological perspective, the stream of thought of a character can be presented in a form almost identical to direct speech, except that it is internal, i.e. not spoken in the story-world. This type of thought context is called internal monologue. The model of the speech interaction is evoked. Sometimes an imaginary addressee is also mentioned: the thought is expressed as if it were a string of speech addressed to a particular addressee. Moreover, since such an internal utterance is understood not to be heard by other characters, it often has epithets or address terms that would not be appropriate to be expressed publicly in the actual social interaction.

Thought in narratives is often found to be in the form of representation. In private state representation, feelings, emotion and thought are expressed from the experiencer, known as the origin of the psychological perspective. The interactional components of speaker and addressee are not fully evoked as in internal monologue, and yet many types of linguistic coding indicating the interac-

tion are used to evoke the presence of the experiencer.

It should be noted that feelings, emotion and the thought process of a character can also be described or summarized from a perspectival vantage outside the character. This type of thought context is called a private state report, or psychonarration.

1.2.3 Participant continuity and referential devices

The continuity of participants, or characters, in a narrative discourse has also been studied extensively. In terms of linguistic analysis, participants are studied from the distribution of the referential devices that are used to refer to them. Many studies focus on the discourse-structural conditions on each type of referential device. (Bolkestein 1985) In reaction to the text-based approach, Givón proposes a model that makes reference to the speaker and listener's mental representation. Givón (1983a) proposed to use quantitative methods to measure the notion of texture or continuity in a text. Assuming the cognitive model of speaker/hearer co-constructivism, Givón operationalized the cognitive notion of accessibility in terms of recency in a text.

Givón argued that grammatical devices can be cross-linguistically ranked in terms of the degree of participant continuity. Among these categories, zero anaphors are the highest in continuity/accessibility while full NPs are the lowest; pronouns fall in between the two devices. The scale as shown in Figure 2 is based on his studies of syntactic coding in narratives from various languages.

There are not many studies on referential distance in Thai. In her study on strategies in Thai oral narratives, Chodchoey (1986) presents the following table of referential distance.

Figure 2: Scale of continuity/accessibility and phonological size of NPs (Givón 1983a)

Referential Distance	Zero anaphor		Pronoun		Full NP		Total	
1	683	73%	150	16%	100	11%	933	100%
2-4	155	48%	77	24%	89	28%	321	100%
5-10	24	30%	8	10%	48	60%	80	100%
11-20	2	9%	0	0%	21	91%	23	100%
+21	0	0%	0	0%	22	100%	22	100%

Table 1: Distribution of referential choice for maintenance of referents (Chodchoey, 1986: 191)

Chodchoey claims that there are three factors that cause both zero anaphors and pronouns to have a distance up to the range of 11-20: 1) types of intervening clauses, e.g. elaboration clauses, 2) humanness and 3) position in a clause.² Note that except for the difference in the number of tokens used in the discourse, zero anaphors and pronouns are not significantly distinct in terms of the distribution pattern of their referential distance.

In summary, this section reviews some previous studies on participant continuity in a narrative discourse. The approach that focuses on segmenting a narrative text into units such as storyline vs. non-storyline considers characters' thought to have less relevance to the structure of discourse. Thus, only the continuity of the participant in the storyline has been seriously investigated. However, in the Deictic Center Theory, a narrative is viewed as presenting the experience of a participant such that in the context involving thought, a participant can continue to be present in the storyworld as an experiencer or origin of psychological perspective but could be absent from the text. In order to understand the participant continuity and referential devices in fictional narratives, this study will apply the quantitative approach of RD to a narrative discourse in which thought

² one problem with this study is that a clause as a unit of measurement is not clearly defined; according to her, "a clause is defined as consisting of a predicate and its associated noun phrases." (Chodchoey 1986:3)

context is recognized such that an experiencer of thought as such is taken into consideration.

2. Methodology and text preparation

This section includes the methodology of measuring referential distance. First, the method of assigning the distance value to each token of referential device is introduced. Then, the method of preparing textual data is discussed. This involves identifying thought context, segmenting a text into clauses as units of measurement and identifying referential devices. It should be noted that it is important that the criteria for identifying the categories that are involved in the measurement be clearly demonstrated in order to ensure consistent results.

2.1 Methodology of referential distance

This method, also known as ‘look-back,’ has been extensively used to study many kinds of syntactic and semantic phenomena that are involved with pragmatic factors, such as referential choice, syntactic roles, word order, animacy/humanity and voice alternation. (Givón 1983c; Myhill 1992)

The goal of the method is to measure how far one has to look back to find the NP that refers to the same participant as the current one. The clause is used as a unit of measurement. Thus, we count the number of clauses between the two consecutive mentionings of the same referent. The value is assigned according to the number of clauses between the two references. The following rules show the scope of this counting method.

1) No value of 0 is assigned. The smallest value is 1, suggesting that any NPs whose referent is bound within a clause is not counted. Therefore, this excludes bound reflexive pronouns and possessive NPs.

2) The first mention of each character is not counted as having a distance value but is used as an antecedent of the next mention.

3) Direct quotations are not counted as having a distance value. Thus, a referential device that occurs immediately after a direct quotation will skip over the direct quotation, and its mention in a narration text before the quotation is taken as its antecedent.

Givón (1983b: 350) limited the scope of his study by making it clear that only subject participants would be counted and that reference terms inside direct quotation would not be studied. However, this limited scope has shortcomings for Thai data. In the following section, I will illustrate problematic cases and suggest a modification to Givón’s methods in this study.

1) Non-subject references: Body part metaphor

One phenomenon that might cause problems with this count is the use of body part terms in Thai. Consider the following example,

[301]
ใจ ไป อยู่ ที่ เจ้าแม่ชาม
jāy pāy jù: thî: jāomx̌:makhǎ:m
heart go live at Makham Guardian
เสีย แล้ว
sǎa lǎe:w
CMP already (CMP = Completive)

‘(Her) Heart has gone out to be with the Makham Guardian already.’ (or, She is now preoccupied by the thought of the Makham Guardian.)

The data in [301]³ shows the use of the body part term ‘heart’ which is used metaphorically to mean ‘attention’. This sentence follows [299] which reads ‘Now Son forgets all about finding her husband.’ We can infer that the metaphorical expression in [301] refers to Son’s attention. In order to understand sentence [301], we need to be able to identify whose attention is being talked about. Note that the sentence is still grammatical if we put an overt form of referential device after the head noun ‘heart’. There are more than 40 sentences of this type in each novel. Therefore, in this study, I consider the referential device used with body part terms as a part of the referential continuity that needs to be counted as well.

2) Direct quotations

From the data we find some definite NPs that refer to a character as ‘a person who spoke’ or ‘a person who listened’. In order to be able to identify the participant to which the NP refers, we need to look back inside the direct quotation. Consider the following data⁴:

³ when the data is original excerpts from the corpus, the number corresponding to the ID number in the database is used, and it is marked by square brackets.

⁴ The referential device that is used in the Thai text is given in curly brackets after the English translation; N stands for full NP, P for pronoun and Z for zero anaphors. The referent is given after the colon in the curly bracket. For example, {Z:ON} reads as the referential expression is a zero anaphor in Thai and refers to the character ON, or Oranop.

{Data from the novel LNC; Characters: Paan (PN), Son (SN), Sangworn (SW)}

[206]

ฉัน ไม่ ได้ ตาม ดู
təhǎn mǎy dāy ta:m du:
1st NEG REA follow look
พี่ วอน มัน นี่
phī: wɔ:n man nī:
brother Worn 3rd PRT
‘I am not up to keeping track of him.’
(REA=Realis marker; RT=Particle)

[207]

ตอบ คำถาม เมีย เพื่อน
tò:p khamthǎ:m mia phūan
answer question wife friend
Ø แล้ว
 láe:w
Z already
‘After answering his {Z:PN} friend’s
{N:SW} wife’s {N:SN} question,’

[208]

เจ้า ปาน ก็ หัน ไป โทก
təw pa:n kō: hǎn pay ko:hòk
Cao Paan PRT turn go lie
หน้าตาย กับ เจ้าหนี้ ทั้งหมด
nā:ta:y kàp tēa:wñī: thǎn:lǎy
face-die with creditor all
‘Cao Paan {N:PN, turned to lie with
a straight face to all those creditors’

[213]

คราวนี้ เจ้า ปาน จึง ต้อง
khra:wñī: təw pa:n tɔung tōng
this time Cao Paan thus must
ตอบ กับ สอน ต่อไป อีก ระลอก
tɔ:yæ: kàp sǒn tò:pai ĩ:k ralò:k
annoy with Son longer again time
‘Now Cao Paan {N:PN} had to deal
with Son {N:SN} one more time.’

[214]

ฉัน รู้
təhán rú:
1st know
“I know.”

[215]

คน พูด นุ่ง กางเกง
khon phû:t nûŋ ka:ŋke:ŋ
person speak wear pants
เข้าสมัย เปียม
khâw-samăy píap
fashionable very
‘The speaker {N:SN} wears pants
that are so fashionable.’

[206] “I am not up to keeping track of him.”

[207] After answering his {Z:PN} friend’s {N:SW} wife’s {N:SN} question, [208] Cao Paan {N:PN}, turned to lie with a straight face to all those creditors

[213] Now Cao Paan {N:PN} had to deal with Son {N:SN} one more time

[214] “I know.”

[215] The speaker {N:SN} wears pants that are so fashionable.

Notice that the definite NP ‘the speaker’ in [215] refers to the participant who spoke [214]. Note that the 1st person pronoun in [214] is *chán* with a high tone, as an alternate of *chăn* with a rising tone. This form identifies Son as the speaker. The form of the first person pronoun used in [214] gives the information that identifies Son as the speaker who is referred to in [215]. It is not possible to identify the referent of the defi-

nite NP ‘the speaker’ from the previous mention in the narration text in [213]. Therefore, even though direct quotes are not counted in this study, in some cases information inside direct quotations are important to the identification of the referent.

2.2 Analytical categories

This section illustrates 1) types of thought context, 2) the syntactic definition of clause, and 3) types of referential expressions in Thai.

2.2.1 Identifying thought context

By thought context, I mean a cluster of clausal units that present thoughts, perceptions, knowledge, intentions, goals and other psychological attributes.⁵ This section demonstrates characteristics of three major types of thought context, private state report, internal monologue and private state representation.

1) Private state report

The context that is a private state report presents feelings, emotion and the cognitive process of a character in the form of summary or description. The character whose private state is reported tends to be explicitly coded as an NP argument of a predicate of private state. The emotion is often lexicalized as a verbal element.

⁵ This type of context is called subjectives sentences in Bruder & Wiebe (1995). It is problematic in Thai to define sentences and this analysis requires well defined units. To avoid this confusion about sentences, this study will use the broad term of context instead of sentences.

[1093.2]

นาง แอบ คิด อย่าง หงุดหงิด

[KMS]

na:ŋ æ:p khít yà:ŋ ɲùŋɲìt

Naang Aeb think LM be annoyed

(LM = Linkage marker)

'Naang Aeb was thinking, being annoyed.'

Sentence [1093.2] shows the summary of the emotional state of *Aeb*. The experiencer, *Aeb*, is coded as a subject argument of psych-action predicate 'think.' Her emotional state, 'being annoyed,' is summarized in the modifying position.

2) Internal monologue

Internal monologue presents a stream of thought in the form of direct speech that it is spoken internally or privately. Therefore, we sometimes find it orthographically marked with a single quotation marker as '...'. However, this convention is not consistent; we often find a short internal monologue pops up among other forms of thought without orthographic marking. The following example shows the internal monologue⁶ formally presented with single quotation marks, starting at [231]⁷:

{Data from LNC; Characters: Paan (PN), Son (SN), Sangworn or Worn (SW)}

⁶ More precisely, this examples shows "internal dialogue," an internal monologue form structured with a specific addressee in mind.

⁷ Note that clause [230] is a private state report which is often used to introduce thought representation and internal monologue. (Weibe 1990)

[230]

แต่ ใจ จริง ทั้ง หุเรศ

tæ: tɕay tɕiŋ θáŋ θú?rê:t

but heart true both disgust

เวทนา

wê:tthana:

pity

'Naang Aeb was thinking, being annoyed.'

[231]

อี สอน เอ๊ย นอน รอ

ʔii: sǒn ʔá:y nɔ:n rɔ:

Eey Son VOC lie down wait

ผัว อยู่ ที่ บ้าน เหมาะ

phǔa yù: thî: bâ:n mǝ?

husband stay at house fit

ดี แล้ว

di: læw

good already

{VOC=Vocative particle}

'Eey Son, you lie down, waiting for your husband; that's better.'

[231.2]

พรุ่งนี้ ไซ้ วอน มัน ก็

phrûŋnî: ʔây wɔ:n man kô:

tomorrow Ay Worn 3rd PRT

กลับ เองแหละ

klàp ʔe:ŋ læ?

return by oneself PRT

'Tomorrow, Aye Worn is gonna be back home; no doubt about it.'

[230] But in his {Z:PN} true mind he {Z:PN} felt disgusted with and pitied her. [231] 'Eey Son, you lie down, waiting for your husband; that's better. [231.2] Tomorrow, Aye Worn is gonna be back home; no doubt about it.'

The data [231] - [231.2] shows the internal monologue presented inside single quotation marks. They exhibit linguistic

properties of actual speech but violate social norms if they are externally spoken. We can see that inside the quotation marks the vocative form Eey Son is used as an address form, evoking a speech situation. However, the title Eey is derogatory, and that the content of such thoughts as 'lie down, waiting for your husband' is socially restricted and is not acceptable to be addressed publicly to either the addressee herself or other people. Thus, besides the single quotation mark, linguistic forms and social context mark this segment as internal speech, not actual speech.

3) Private state representation

Thoughts can be presented in the form of representation, i.e. the narrative events are presented from the psychological perspective of the experiencer, or the origin of perspective. The origin of perspective tends to be suppressed in the text unless he/she is an object of her own psychological perspective. Private state representation shares substantial properties with internal monologue but exhibits linguistic modification of the subjective character and other deictic and interactional elements. The following data illustrates this type of thought context.

{Data from LNC; Characters: Son (SN)}

[1257]

แค่ ที่ ได้อิน
khæ: thî: ø dâyyin
only REL Z hear
'Just only from what she {Z:SN} heard,'

[1257.2]

ก็ ดีใจ
O kô: di:tçay
Z PRT be glad
'she {Z:SN} is so glad'

[1258]

จน เนื้อ เต้น
tçon nuúa ø tèn
until flesh Z dance
'that her {Z:SN} flesh is dancing.'

[1259]

พรุ่งนี้ หล่อน จะ รวบรวม เงิน
phrûnñi: lõn tçà? ruam ñen
tomorrow 3rdF IRR gather money
ทั้งหมด ไป วาง หวย
thânmòt pay thæ:ŋ hũay
all go play illegal lotto
'Tomorrow, she {P:SN} will bring all the money to buy lotto.'

[1260]

คราวนี้ จะ รวย ทับ
khra:wní: ø tçà? ruay tháp
this time Z IRR rich overlie
ซ้ำสอง เข้าไป อีก นะ
sámsɔ:ŋ khâw-pay ʔi:k nâ?
double go in more PRT
ไม่ว่า
mâywâ:
PRT
'This time, she {Z:SN} will be even richer.' {IRR=Irrealis}

[1257] Just only from what she {Z:SN} heard, [1257.2] she {Z:SN} is so glad [1258] that her {Z:SN} flesh is dancing. [1259] Tomorrow, she {P:SN} will bring all the money to buy illegal lotto. [1260] This time, she {Z:SN} will be even richer.

[1257] - [1260] show the private state representation of Son. They are about her feelings and thoughts about plans and speculation about her future. In this context the third person, feminine pronoun *lôn* is used in [1259] instead of the first person pronoun, thus an internal speech situation is not evoked. However, in [1260] there is an interactional particle that is usually used in actual conversation. To illustrate,

[1260]

คราวนี้	จะ	รวย	ทับ
khra:wní:	ø	tə̀a?	ruay tháp
this time	Z	IRR	rich overlie
ซ้ำสอง	เข้าไป	อีก	นะ
sámsǝ:ŋ	khâw-pay	ʔi:k	nâ?
double	go in	more	PRT
ไม่ว่า			
mâywâ:			
PRT			

'This time, she {Z} will be even much richer (than anybody might have thought).'

The data above shows the occurrence of the interactional particles *nâ?* and *mâywâ:*. In conversation, these particles are used to indicate the speaker's strong belief that contrasts with the addressee's belief.⁸

2.2.2 Identifying a clause

According to Givón (1983), a clause is taken as an objective unit to be measured for distance between two mentionings of the participant. There-

fore, in order to segment a text into valid units in a consistent way, we need explicit criteria that are also general enough to be used with problematic cases of complex construction. This study proposes to use the approach to complex constructions in Role and Reference Grammar (henceforth RRG) to define a clause (Van Valin & LaPolla 1997). It has been shown in Rangkupan (1997) that as a language that extensively uses serial verb constructions, Thai exhibits various types of complex constructions in which one form can be used to mark different types of complex units. RRG recognizes a layered structure of complex constructions and the relation between units in such a way that it is able to account for both semantic and syntactic relations of these complex constructions.

According to RRG, complex sentences contain a layered structure of sub-clausal units, called a juncture. There are three kinds of junctures, that is, nuclear, core and clause. In general, two major differences between these juncture types lie in their properties of argument taking and the scope of modifiers. A major characteristic of a nuclear juncture is the argument pooling. That is, the two verbs in the juncture act as if they are a single predicate, so that they pool all their arguments together as a single set. In core junctures, the two cores share at least one argument; and, such modifiers as modals may be allowed to have independent scope over a particular core. In clausal juncture, however, each clause is independent of the others, with respect to the argument realization, so that arguments of the clauses are not structurally shared. Rather, any missing arguments are subject to pragmatic conditions of anaphor.

⁸ Patcharin Peyasantiwong, 1981, "A study of final particles in conversational Thai," Ph. D. dissertation, University of Michigan, p. 113.

In Thai, there are two properties that differentiate juncture types, namely, the realization of arguments and the occurrence of adverbs. The realization of arguments in a non-matrix subclausal unit is an important property for distinguishing types of juncture in Thai. In nuclear and core junctures arguments that are shared by the non-matrix predicate are obligatorily omitted while in a clausal juncture the arguments are optionally omitted. The former type of the missing argument is called a linking zero while the latter is called an anaphoric zero. We will first consider the following set of examples:

(1)

นวล ผลัก โต๊ะ ตัว นั้น
 nuan phlāk tó? tua nán
 Nuan push table CL DEM
 ล้ม
 lóm
 fall down
 'Nuan pushed that table down.'

(2)

นวล ผลัก โต๊ะ ตัว นั้น จน
 nuan phlāk tó? tua nán tɔn
 Nuan push table CL DEM until
 ล้ม
 lóm
 fall down
 (a) 'Nuan pushed that table until it fell down.'
 (b) 'Nuan pushed that table until she fell down.'

There are two predicates in each of the above sentences, that is, phlāk 'push' and lóm 'fall down' and two NPs, that is, 'Nuan' and 'that table'. Sentence (1) is a juxtaposition of the two predicates without any markers or conjunctions, while sentence (2) has a conjunction

tɔn 'until' between the two predicates. Semantically, sentences (1) and (2) are very similar in terms of the description of a state of affairs. Both involve the action of 'pushing a table' indicated in the first predicate; and, the action brings about an event of 'falling down'. Note that when the two predicates are linked by a conjunction, a context-free sentence like (2) could be ambiguous. To illustrate, the participant who undergoes the event of 'falling down' could be either of the participants in the first predicate, that is, 'Nuan' or 'that table', whereas in (1) the only possible interpretation is that it is the 'table' that undergoes the event of 'falling down'.

The above semantic interpretation of the state of affairs and its participants shows the possibility for an argument to occur in the position before a verb in the second predicate, including in the form of zero anaphor. Based on the sentences above, we apply a test for the acceptability of argument realization in the construction, as follows:

(3)

*นวล ผลัก โต๊ะ ตัว นั้น
 *nuan phlāk tó? tua nán
 Nuan push table CL DEM
 มัน ล้ม
 man lóm
 3rd fall down
 'Nuan pushed that table down.'

The unacceptable sentence in (3) shows that the realization of an NP as an argument for the second predicate is not possible. A well-formed sentence for this type of construction requires the second predicate to share its argument with the preceding predicate.

Now we apply the same test to the sentence (2), in which there is a conjunction before the second predicate.

(4)

นวล ผลัก โต๊ะ ตัว นั้น จน
 nuan phlāk tó? tua nán tɕon
 Nuan push table CL DEM until
 มัน ล้ม
 man lóm
 3rd fall down
 'Nuan pushed that table until it fell down.'

(5)

นวล ผลัก โต๊ะ ตัว นั้น จน
 nuan phlāk tò? tua nán tɕon
 Nuan push table CL DEM until
 ตัวเอง ล้ม
 tua?e:ŋ lóm
 self fall down
 'Nuan pushed that table until she fell down herself.'

In these two sentences, the argument of the second predicate is overtly realized as man 'it' and tua?e:ŋ 'herself' respectively, and yet the sentences are grammatical. Thus, the non-matrix unit marked with the conjunction tɕon 'until' is a candidate for a clause.

Another test is needed to confirm the result and make sure that the omission of argument is not due to other pragmatic incompatibility. According to Rangkupan (1997), the occurrence and position of post-verbal adverbs vary among juncture types. In a core juncture, adverbs that modify only the verb in the matrix core must occur at the end of the clause, that is, they are not allowed to occur between the two cores. In a clausal juncture, adverbs that modify the matrix clause must occur at

the end of that clause. In a nuclear juncture, adverbs are not allowed to modify only the verb in the matrix nucleus. To illustrate,

(6)

นวล ทุบ แก้ว ใ้ นั้น
 nuan thúp kǎ:w bay nán
 Nuan hit glass CL that
 แรงๆ จน แตก
 ræŋræŋ tɕon tǎ:k
 hard until be broken
 'Nuan hit that glass quite hard until it was broken.'

(7)

*นวล ทุบ แก้ว ใ้ นั้น จน
 *nuan thúp kǎ:w bay nán tɕon
 Nuan hit glass CL that until
 แตก แรงๆ
 tǎ:k ræŋræŋ
 be broken hard

The above data show that an adverb ræŋræŋ 'quite hard,' which modifies the activity verb thúp 'hit' must occur at the end of the 'hit' predicate; it cannot occur at the end of the other predicate. Thus, a complex unit marked with the conjunction tɕon 'until' is a clause.

To sum up, in order to determine if a unit in a complex construction is a clause we perform these two tests, namely, the realization of arguments and the occurrence of adverbs between two units. Clauses do not have obligatorily shared arguments and require that a postverbal adverb, if any, occur at the end of the clause which contains the verb it modifies. Core junctures have obligatorily shared arguments and allow a matrix verb to be independently modified by a postverbal adverb but require that the adverb occur at the end of the juncture.

Nuclear junctures have pooled arguments and do not allow a matrix verb to be independently modified by a post-

verbal adverb. The defining properties of each juncture type in Thai are summarized below:

Juncture types	Shared arguments	Position of adverbs modifying the matrix unit
Nuclear	Required	Not applied
Core Juncture	Required	At the end of the non-matrix core
Clausal juncture	Not required	At the end of matrix clause

2.2.3 Defining referential devices

Referential devices that will be included in this study are divided into three major groups: full NPs, pronouns and zero anaphors.

2.2.3.1 Full NPs

The category of full NPs includes proper names, with or without titles, and noun phrases indicating kinship relations and a definite description of a participant.

The following examples show types of full NPs that are used to refer to the character Sangworn in the novel LNC:

1) Proper names

First name: Sangworn
Nickname: Worn

Title + Nickname: Cao Worn,
Aye Worn (showing familiarity)

2) Kinship or relationship terms

phǔa 'husband'
phûan 'friend'

3) Definite description

khon phû:t 'the speaker'

2.2.3.2 Pronouns

The system of reference terms in Thai is socio-culturally complex. They are differentiated in terms of person, sex, marital status, age, socio-economic class, profession, kin or pseudo-kin relations, intimacy levels, etc. (Palakornkul 1972; Truwichien 1986) The following table shows the third person pronouns that are used in the novel KMS:

Reference terms	Semantic components	Character
<i>lɔ̌n</i>	'female, marital status neutral, not old'	Oranop, Uea
<i>na:n</i>	'female, married, age neutral'	Uea, Aeb
<i>khǎw</i>	'male, marital status neutral, not old'	Boonsong
<i>kæ:</i>	'sex neutral, marital status neutral, old'	Aeb, Pao

Table 2: Third person pronouns used in the novel KMS

We can see that three out of five characters are referred to by two pronominal forms. For example, in some contexts Aeb is referred to as *kæ:*, reflecting her age, and in the other as *na:ŋ*, reflecting her sex and marital status.

2.2.3.3 Zero anaphors

A zero anaphor is defined as an argument that is omitted from a clause by pragmatic condition. This section shows the occurrence of zero anaphors in Thai clauses, of which definition is given in Section 2.2.2. It also illustrates the type of omitted arguments that will not be counted as zero anaphors.

The following are examples of zero anaphors in subject, object and oblique positions. Possessive zeroes are found with kin terms and body part terms as described above in section

1) Subject and object position

The data in [560] illustrate the occurrence of zero anaphors both in the subject and object positions⁹; the clause in [559] is added to provide a context that has their antecedents.

[559] Naay Boonsongi {N} then walked and stopped behind Oranopj {P}'

[560]

และ เรียกเบาๆ
læ? ø riak ø baobao
and Zi call Zj softly
'and hei {Z} called herj {Z} softly.'

⁹The canonical position for subject and object NPs is used for placing zeroes in the string.

Both subject and object arguments in clause [560] are zero anaphors, referring to *Boonsong* and *Oranop* respectively.

2) Oblique position

Clause [605] shows the occurrence of a zero anaphor in an oblique position; clause [604] in the matrix clause the antecedent of the zero anaphor can be found.

[604] Then Oranop {P} went to get the bag containing the shirt,

[605]

ที่ นาย บุญส่ง ซื้อ มา
thî: naay bunsòŋ sū: ma:
REL Naay Boonsong buy LM
ฝาก
fà:k ø
give Oranop
'that Naay Boonsong bought for her.'

Sentence [605] shows the occurrence of a zero anaphor in an oblique position. The verb *fà:k* 'give' occurs after a predicate 'buy,' adding a slot for an oblique argument with a role of a recipient. Note that clause [605] is still grammatical even if an overt form of pronoun is used.

It should be noted here that there is another type of missing argument in Thai, i.e. linking zero. A linking zero is not an entity but an absence of arguments for yielding types of relationship among units in a complex construction. Thus, a linking zero is syntactically governed and is one of the defining properties of many types of serial verb constructions in Thai. The following illustrates the occurrence of a linking zero.

[651]

หล่อน จะ เดิน ออก ไป
 lòn tɕà? dɔ:n ʔò:k pay
 3rd F IRR walk exit LM
 ขอยืม หนังสือเรื่องมยุ และ
 khǎ:yuu:m nǎŋsǔi:rə:ŋrom læ?
 borrow entertaining book and
 นิตยสาร มา อ่าน
 nítayasǎ:n ma: ʔà:n
 magazine LM read
 'She would go out to borrow entertain-
 ing books and magazines to read.'

There are three predicates in clause [651], 'walk,' 'borrow,' and 'read.' They are linked by the markers pay 'go,' and ma: 'come,' directional words that function as purposive markers. All the three predicates share the same subject argument, lòn 'she.' Using the same test proposed in section 2.2.2, we find that the actor argument of each non-matrix unit cannot be realized. We conclude that these gaps are obligatory to yield this type of purposive construction. Since they are not missing elements that are conditioned by pragmatic principles, we do not consider them as zero anaphors, and, thus, they are not units of the RD measurement.

To sum up this section describes how the distance is assigned and how a text is prepared for the distance assignment. In the next sections the results of this measurement will be presented and discussed.

3. Overall results

This section presents the overall results from the measurement of the distance of each referential device from both novels. Then two major aspects of the quantitative data, frequency distribution

and the average distance, will be discussed. The data used in this paper are excerpts from two Thai novels: Lan Nok Caak (LNC) and Koet Maa Suay (KMS). There are 11,967 words in LNC and 8,676 words in KMS.

3.1 Frequency distribution

The following table shows the distribution of referential distance within each category of referential device.

Referential distance ⁹	Full NP			Pronoun			Zero anaphor		
	Tokens	TUD ¹⁰	Percent ¹¹	Tokens	TUD	Percent	Tokens	TUD	Percent
1	166	166	34%	171	171	69%	414	414	85%
2	102	102	21%	60	60	24%	48	48	10%
3	63	63	13%	10	10	4%	13	13	3%
4-5	63	31.5	6%	7	3.5	1%	7	3.5	1%
6-7	22	11	2%	1	0.5	<1%	4	2	<1%
8-10	23	7.7	2%	0	0	0%	2	0.7	<<1%
11-20	30	3	<1%	0	0	0%	0	0	0%
21-200	25	0.14	<<<1%	0	0	0%	0	0	0%
Total of tokens	494			249			488		

Table 3: Distribution of Referential Distance within each category of referential device

From Table 3 the data show that in general the distance values of all devices densely cluster within the range of 1 to 3 clauses.¹³ We can see that most antecedents are in the immediately preceding clause (34% for full NP¹⁴, 69% for pronoun and 85% for zero anaphor). The data also show that pronouns and zero anaphors are distributed across distance in a very similar way, and that they are distinct from full NPs. That is, the occurrence of full NPs spreads extensively

through the range of 200 clauses but pronouns and zero anaphors occur within a much shorter range of 10 clauses of antecedent. Pronouns and zero anaphors are different in that the percentage of pronouns occurring at the distance of 2 is much higher than that of zero anaphor, 24% and 10% respectively, and that zero anaphors occur at a longer distance than pronouns, that is, up to 8-10 clauses. To illustrate, their distribution is plotted in a graph below.

¹⁰ In the topic continuity literature there are a variety of ways to set up the referential distance scale. The point is that referential distance is not linear. The differences in the 1-3 range are more important than in the 4-10 range, and these are more important than in the 11-20 range, and so on. A technical solution for this problem would be to use a log scale for the RD. For ease of interpretation I have used a measure analogous to this in Table 4 and elsewhere.

¹¹ TUD, or Tokens per Unit Distance, is equal to the number of tokens divided by the clause range. For example, 6 rows down there are 23 tokens divided by 3 clause distances in the clause range (8, 9, 10), giving an average of 7.7 tokens per unit distance.

¹² Based on the TUD over the total of tokens.

¹³ This cut-off point corresponds to a revised version of Givón's RD methodology (1995). In this version, only three values are assigned, the value 1 to the gap of one clause, 2/3 to that of two or three clauses and >3 to an item with the distance greater than 3 clauses. However, this study uses the cut-off point only for data presentation. It is not useful to collapse the data in the range of over 3 clauses into one category since it obscures the presence of longer distance zero anaphors and pronouns.

¹⁴ Most of the full NP tokens that have RD value of 1 clause are those which follow direct quotes, marking participants in an interactional unit. From the novel LNC alone, there are 21 out of 23 full subject NPs that are of this type.

Figure 3: Frequency distribution of full NPs, pronouns and zero anaphors

Among the three devices in Figure 3, full NPs are clearly distinct from pronouns and zero anaphors: the curve starts much lower than the other two categories but tapers off smoothly towards the end of the range. On the other hand, pronouns and zero anaphors start very high at the distance of 1 and drop sharply to the next category. The zero anaphor is different from the pronoun in that it is much steeper, as expected, but surprisingly spreads through a longer range.

In order to illuminate the distribution pattern for the referential choice, the frequencies of each type of referential device at each distance unit will be compared. Table 4 shows the percentage of the frequencies of full NP, pronoun and zero anaphor in each row. The data is also presented in a bar graph as shown in Figure 4.

Referential Distance	Full NP		Pronoun		Zero anaphor		Total	
	TUD	Percent	TUD	Percent	TUD	percent	TUD	percent
1	166	22%	171	23%	414	55%	751	100%
2	102	49%	60	28%	48	23%	210	100%
3	63	73%	10	12%	13	15%	86	100%
4-5	31.5	82%	3.5	9%	3.5	9%	38.5	100%
6-7	11	81%	0.5	4%	2	15%	13.5	100%
8-10	7.7	92%	0	0%	0.7	8%	8.4	100%
11-20	3	100%	0	0%	0	0%	3	100%
21-200	0.14	100%	0	0%	0	0%	0.14	100%
Total of TUD	384.34	40%	245	20%	481.2	40%	1110.54	100%

Table 4: Distribution of frequencies of full NP, pronoun and zero anaphor

Figure 4: Distribution of frequencies of full NPs, pronouns and zero anaphors

Figure 4 shows zero anaphors are distinctly dominant at the distance of 1 clause. At the distance of 2, pronouns and zero anaphors together dominate the choice, but among the three devices, full NPs are unexpectedly dominant. From the range of 3 up to 200 clauses full NPs distinctly dominate over pronominals. At the range of 2 to 5 clauses, pronouns and zero anaphors share approximately equal space in each distance unit. However, from 6 to 10 clauses, zero anaphors

take up the part of pronominals. Thus, it is clear that at a greater distance zero anaphors are preferred to pronouns.

3.2 Average referential distance

To calculate the average value of the referential distance, we multiply the number of tokens by its distance value, and we sum up the results and divide them by the total number of tokens. The result is shown below:

	Full NP	Pronoun	Zero anaphor
Referential Distance	6.8	1.3	1.3

Table 5: Average distance of each type of referential device

From the result of average referential distance above, full NPs show a sharp distinction from the other two types of reference. However, pronouns and zero anaphors have equal average referential distance.

In conclusion, the data analysis using Givón's methodology of referential distance (1983) shows that full NPs have a distinctive behavior in a text. That is, they tend to be used at greater distance than pronouns and zero anaphors; pronouns and zero anaphors tend to occur within the range of 1 to 2 clauses. However, this measurement fails to establish the clear distinction between pronouns and zero anaphors in Thai. On the contrary, the data analysis shows a lot of similarities between them. Firstly, most of their occurrences are within a gap of one clause. Secondly, they are also equally chosen when the gap is two clauses and sporadically used through the text within the range of 3 to 5 clauses. Thirdly, the value of their distance is almost the same. Nevertheless, at the range of more than 5 clauses, zero anaphors are dominant.

4. Referential devices in the thought context

Zero anaphors that diverge from standard RD findings in Thai are often in contexts that are coded from the psychological perspective of a character. Full NPs and pronouns also show uncharacteristic distribution in this context type. This section will discuss referential devices in a variety of psychological context types. We will first look at the referential coding for the origin and the object of perspective. Then, we will discuss the issue of RD in thought context. The last point involves the chaining of

the referential device that suggests the continuity of the psychological perspective.

4.1 Referential coding of the origin and object of perspective

In the thought context, the origin of perspective tends to get the referential form of a zero anaphor and the object of perspective a full NP. In the following, we first look at the coding of the origin of perspective in the expression of emotion using body part metaphor. Then, we consider the use of kin terms to refer to the relationship between the origin and object of perspective.

4.1.1 Body part metaphor for emotion

Expressions of thoughts and emotions in Thai are often found to be in a metaphorical form using body part terms. That is, the body part that is conceptualized as the location of the emotion is used in a sentence instead of the experiencer. The character whose emotional state is represented is often suppressed. Therefore, a zero anaphor is used to code the experiencer in the possessive position. To illustrate,

[582]

อะไร	อีก	ที่		ยัง
ʔaray	ʔi:k	thî:	ø	yan
what	again	REL	Z	still
เป็นหนี้	อยู่	ร้านเหล้าร้านกาแฟ		
pennî:	yù:	rán:lâwrá:nka:fæ:		
owe	CONT	public house		
โรงจำนำ		แขกขายผ้า		
ro:ŋtɕamnam		khæ:kkhã:yphâ:		
pawn shop		clothing salesman		

'Whom else does he {Z:SW} still owe money to, the public house, the pawn-

shop, the clothing salesman?’

[583]

นัง สอน ยัง ผ่อน ชุดเสื้อ
 nan sǒn yan phòn tchútsuā
 Nang Son still pay by installment
 shirt
 ‘Nang Son {N:SN} still has to pay the
 instalment for the shirts’

[584]

ที่ ซื้อ ใหม่ หมดๆ
 thī: ø sú: mǎy mà:tmà:t
 REL Z buy new newly
 ‘that she {Z:SN} just bought.’

[585]

คิด ไม่ ออก แล้ว ซึ่
 ø khít mǎy ?ò:k læ:w si:
 Z think NEG exit already PRT
 ‘I {Z:SW} can’t think of anything else
 now.’

[586]

เขา บอก ตัวเอง
 khǎw bò:k tua?e:ŋ
 3rd tell self
 ‘He {P:SW} told himself {P:SW}.’

[587]

สมอง หมุน ตัว
 samo:ŋ ø mǔn tīw
 brain Z spin fast
 ‘His {Z:SW} brain was spinning fast.’

[582] Whom else does he {Z} still owe money to, the public house, the pawnshop, the clothing salesman? [583] Nang Son {N} still has to pay the installment for the clothes [584] that she {Z} just bought. [585] I {Z} can’t think of anything else now [586] He {P} told himself {P}. [587] His {Z} brain was spinning.

The meaning of [587] is metaphorical. It expresses the Sangworn’s emotional state of being confused and stunned because of his preoccupation with the issue. In [587], the body part noun ‘brain’ occurs without any overt possessor. That is, the referent whose brain it [587] refers to is missing. Nevertheless, we can infer that it refers to Sangworn’s brain. Note that even though it is grammatical to refer to the possessor with an overt form, as in [587a & b], the expression evokes the brain as a physical body part, and is less compatible with the metaphorical reading, as shown below.

(587a)

?samo:ŋ khǎw mǔn tīw
 brain he spin fast

(587b)

?samo:ŋ sangworn mǔn tīw
 brain Sangworn spin fast
 ‘His/Sangworn’s brain was spinning fast.’

4.1.2 Kin relationship

In the thought context, when characters that are related by kin interact with each other, they are often referred to by kin terms, instead of names. In internal monologue, the origin of perspective always internally addresses or refers to other characters that are related to him/her by kin terms, just like in a speech situation. In private state report and representation, kin terms are also used very often. Characters who are objects of perspective get the kin form and the origin of perspective, as the ego of the relationship, tends to get a zero. That is to say, the possessor of the relationship is often suppressed. The following illustrates the private state representation in which kin terms are used to refer to the

object of perspective while the ego gets a zero anaphor, starting from [421]:

{Data from KMS; Characters: Boonsong (BS), Aeb (AB), Arthorn (AT), Uea (UA)}

[420]

นาย บุญสง ไม่ ตอบ
na:y bunsoŋ mâ:y tɔ:p ɔ
NaayBunsong NEG answer Z
'Naay Boonsong {N:BS} did not answer her {Z:AB}'

[421]

เพราะ เขา ไม่ค่อย สะดุ้ง
phrɔʔ khǎw mâ:ykhôy sadûŋ
because 3rd hardly be affected
ต่อ วาจา กระแทกกระตัน
tò: wa:tɕa: krathǎ:k-krathán
with speech be sarcastic
ของ แม่ยาย นึก
khonj mǎ:yay ɔ ná:k
POSS mother-in-law Z much
'because he {P:BS} did not feel much affected by his {Z:BS} mother-in-law's {N:AB} sarcastic words.'

[422]

ถ้า จะ ว่า
thâ: tɕàʔ wâ: ɔ
if will criticize Z
'If somebody were to criticize him {Z:BS},'

[423]

ก็ อาจ จะ ถูก
kô: ʔà:t tɕàʔ thù:k
PRT may will be right
'it might be right.'

[424]

เพราะ เขา ไม่ ชอบ
phrɔʔ khǎw mâ:y tɕhɔ:p
because he NEG like
แม่ยาย เสีย
mǎ:yay ɔ sǎa
mother-in-law Z PRT
'That's because he {P:BS} dislike his {Z:BS} mother-in-law {N:AB}'

[424.2]

เสียจนกระทั่ง ไม่ใคร่
tɕonkrathân ɔ mâ:ykhây
until Z hardly
คิด ซื้อ อะไร มา ให้ แก
khít súi: ʔaray ma: hây kǎ:
think buy what come give 3rd
'so much that he {Z:BS} never thinks of buying anything for her {P:AB}.'

[425]

ส่วน เด็กชาย อาทร นั้น
sùan dèktɕhay ʔa:tho:n nán
as for Dekchay Arthorn DEM
เขา ตั้งใจ จะ เปลี่ยน
khǎw tǎntɕay tɕàʔ plian
3rd intend IRR exchange
กระเป๋านั่งสือ ให้ ใหม่
krapǎw-nǎŋsǔi: hây ɔ mà:y
school bag give Z new
'For Dekchaay Artorn {N:AT}, he {P:BS} had planned to buy him {Z:AT} a new school bag.'

[426]

และ จะ มอบ เงิน ให้
lǎeʔ ɔ tɕàʔ mɔ:p ɲon hây
and Z IRR give money give
ภรรยา เป็น ผู้ ไป
phanraya: ɔ pen phû: pay
wife Z be person go

เลือก ซื้อ
luak suí:

choose buy

'And he {Z:BS} will give the money to his {Z:BS} wife {N:UA} to do the shopping.'

[420] Naay Boonsong {N:BS} did not answer her {Z:AB} [421] because he {P:BS} did not feel much affected by his {Z:BS} mother-in-law's {N:AB} sarcastic words. [422] If somebody were to criticize him {Z:BS}, [423] it might be right. [424] That's because he {P:BS} dislikes his {Z:BS} mother-in-law {N:AB} [424.2] so much that he {Z:BS} never thinks of buying anything for her {P:AB}. [425] For Dekchaay Artorn {N:AT}, he {P:BS} had planned to buy him {Z:AT} a new school bag. [426] And he {Z:BS} will give the money to his {Z:BS} wife {N:UA} to do the shopping.

The above example shows the private state representation in which Boonsong is set up as the origin of perspective and, thus, an ego of kin relationship. As objects of perspective, Boonsong's mother-in-law, or Aeb, and Boonsong's wife, or Uea, are referred to by their kin relations. Boonsong himself gets the zero anaphor in the possessive position. Note that in the thought context from [421] to [426], two out of three NPs that refer to Aeb are kin terms; Uea, being referred to one time in this context, gets the form of kin term.

4.2 On referential distance

From section 3, the quantitative result of RD shows the unexpected pattern of long distance zero anaphors and short distance full NPs. Considering the RD of the referential device that is used to

refer to the origin and object of perspective, we find that when the origin of perspective that is suppressed is brought back into the story, it sometimes gets a long distance zero anaphor. We also find that even though it was not the first mention in the thought context, objects of perspective are often referred to by full NPs, causing their RD being relatively short.

4.2.1 Long distance zero anaphors

The following illustrates a long distance zero anaphor that is used to refer to the origin of perspective in [654]. The relevant context that precedes the referential device in question is also given.

{Data from KMS; Characters: Aeb (AB), Oranop (ON), Uea (UA)}

[640]

อรณพ รู้สึกสบายใจ
?w:ranóp rú:suók saba:y-tçay
Oranop feel feel good

จาก นางแอบ
tçà:k na:ŋ?à:p
from Naang Aeb

'Oranop {N:ON} felt relieved about Naang Aeb {N:AB}'

[641]

แต่ กลับ มา เป็นทุกข์
tæ: ø klàp ma: pen-thúk
but Z return come be worried

เพราะ นาง เอื้อ
phró? na:ŋ ?uía
because Naang Uea

'but she {Z:ON} has become worried about Naang Uea {N:UA}.'

[642]

เนื่องจาก วันนี้ หลังจาก นาย
 nu:ŋaŋtɕà:k wanní: lǎŋtɕà:k nɔ:y
 because today after Naay
 บุญส่ง ไป แล้ว
 bunsòŋ pay læ:w
 Bunsong go already
 'That is because today, after Naay
 Boonsong {N:BS} left home.'

[643]

นาง เชื้อ ก็ เข้า ห้อง ทอด
 na:ŋ ʔu:ŋa kɔ: khâw hɔ:ŋ thɔ:t
 Naang Uea PRT 3rd room lie
 ตัว ลง นอน บน เตียง
 tua loŋ nɔ:n bon tɪaŋ
 body down lie down on bed
 'Naang Uea {N:UA} went into the
 room, lying down on the bed.'

[644]

นับว่า ผิดปกติ อีก
 nápwa: phítpòkkaŋ? ʔi:k
 consider be unusual again
 เหมือนกัน
 mu:ŋankan
 likewise
 'This is quite unusual'

[645]

เพราะ นาง ไม่เคย นอน แต่
 phrɔ: na:ŋ mây-khɔ:y nɔ:n tɛ:
 because she never sleep at
 เช้า
 tɕhɔ:w
 morning
 'because she {P:UA} never takes a
 nap in the morning.'

[646]

ปกติ นาง เชื้อ เป็น คน
 pòkkaŋ? na:ŋ ʔu:ŋa pen khon
 usually Naang Uea be person

ขยัน

khayǎn
 be diligent
 'Usually Naang Uea {N:UA} is a
 diligent person.'

[647]

ถึงแม้ จะ มี อรณพ
 thuŋmæ: ɔ tɕà? mi: ʔoranóp
 although Z IRR have Oranop
 มา ช่วย ทำงาน
 ma: tɕhúay ɔ thamŋa:n
 come help Z work
 'Even though she {Z:UA} has Oranop
 {N:ON} helping her {Z:UA} with
 housework'

[648]

หล่อน ก็ จะ หาเรื่อง รื้อ จัด
 lòn kɔ: tɕà? hǎ:-ru:ŋa tɕàt
 3rdF PRT IRR be active tidy
 สิ่ง รกๆ ใน บ้าน
 sìŋ rók-rók nay bâ:n
 thing messy in house
 'she {P:UA} usually tidies things up'

[649]

ให้ ดู เรียบร้อย แก่ สายตา
 hây du: riaprɔ:y kɛ: sǎ:ytɔ:
 so that look tidy to eye
 ขึ้น
 khú:n
 more
 'so that it looks better.'

[650]

...และ ถ้า มี เวลา
 ...lǎe? thâ: ɔ mi: we:la:
 ...and if Z have time
 '... and if she has time.'

[651]

หล่อน จะ เดิน ออก ไป
lòn tɕà? dɔ:n ʔò:k pay
3rdF IRR walk exit go
ขอยืม หนังสือเริงรมย์ และ
khǒ:yur:m nǎŋsǔn:-rə:ŋrom læ? ^{and}
borrow leisure books and
นิตยสาร มา อ่าน
nitayasǎ:n ma: ʔà:n
magazine come read
'she {P:UA} goes out to borrow some
books and magazines to read.'

[652]
แต่ วันนี้ นาง เชื้อ ชิม
tɕə: wanní: na:ŋ ʔuía sum
but today Naang Uea be dull
'But today Naang Uea {N:UA} is quiet
and dull'

[653]
เหมือน คน เป็น ไข้
muñan khon pen khây
like person be fever
'like a person who is sick.'

[654]
ซัก ผ้า เสร็จ
ɔ sák phâ: sèt
Z wash clothes finish
'She {Z:ON} finished washing clothes'

[654.2]
ก็ รีด ผ้า เสร็จ
kô: ɔ rít phâ: sèt
PRT Z iron clothes finish
'and she {Z:ON} finished ironing
clothes.'

[655]
กิน ข้าวกลางวัน
ɔ kin khâ:w-kla:ŋwan
Z eat lunch
'She {Z:ON} had lunch.'

[656]
และ เตรียมตัว ไป ตลาด
læ? ɔ triamtua pay talà:t
and Z prepare go market
'and she {Z:ON} got ready to go to
the market.'

[657]
ตลอดเวลา นางเชื้อ ยัง
talò:twel:la: na:ŋ ʔuía yan
the whole time Naang Uea still
นอน ชม
nɔ:n som
lie down quiet
'This whole time Naang Uea {N:UA}
was still lying down quietly.'

[640] Oranop {N:ON} felt relieved
about Naang Aeb {N:AB}[641] but she
{Z:ON} has become worried about
Naang Uea {N:UA}. [642] That is be-
cause today, after Naay Boonsong
{N:BS} left home, [643] Naang Uea
{N:UA} went into the room, lying down
on the bed. [644] This is quite unusual
[645] because she {P:UA} never takes
a nap in the morning. [646] Usually
Naang Uea {N:UA} is a diligent per-
son. [647] Even though she {Z:UA} has
Oranop {N:ON} helping her {Z:UA}
with housework [648] she {P:UA} usu-
ally tidies things up [649] so that it looks
better [650]...and if she {Z:UA} has
time [651] she {P:UA} goes out to bor-
row some magazines to read. [652] But
today Naang Uea {N:UA} is quiet and
dull, [653] like a person who is sick.

[654] She {Z:ON} finished washing
clothes [654.2] and she {Z:ON} finished
ironing clothes. [655] She {Z:ON} had
lunch. [656], and she {Z:ON} got ready
to go to the market. [657] This whole
time Naang Uea {N:UA} was still lying

down quietly.

The referential device in question is the zero anaphor in [654], which refers to Oranop. The most recent mention in the text is in [647], which is in a previous paragraph. The referential distance between the zero anaphor in [654] and its textual antecedent in [647] is equal to 7 clauses. These two paragraphs talk about Uea's unusual behavior as observed by Oranop, who is set up to be the origin of perspective, as seen in the private state report in [640]. We can see that the text is mostly about Uea, and that Oranop is mentioned in the text only in [647]. The text shifts to the here-and-now of the story in [654] in which Oranop's actions of doing chores are narrated. Here Oranop is the object of her own psychological perspective. She is referred to by a zero anaphor even though the textual antecedent is in the 7 clauses earlier. We can see that, by means of using zero anaphors to refer to the here-and-now actions of the origin of perspective, the psychological perspective of this character is maintained.

4.2.2 Short distance full NPs

The following illustrates the occurrence of a full NP that is used to refer to the object of perspective. The RD values of the referential devices referring to the origin and object of perspective are also given after the data are presented.

{Data from KMS; Characters: Aeb (AB), Oranop (ON), Uea (UA)}

[822]

อรณพ เฝ้า แต่ คิด ว่า
ʔoranóp fǎw tǎe: khít wā:
Oranop keep just think that
'Oranop {N:ON} kept thinking to

find out.'

[823]

นาง แอบ ขโมย เงิน ของ
na:ŋ ʔǎe:p khamo:y ŋən khǎ:ŋ
Naang Aeb steal money POS
หล่อน ไป เพื่อ อะไร?
lǒn pay phūa ʔaray
3rd go for what
'why Naang Aeb {N:AB} stole her
{P:ON} money.'

[824]

 จะ คิด ว่า
ø tǎə? khít wā:
Z IRR think LM
'She {Z:ON} could have assumed
that'

[825]

นาง แอบ เป็น ขโมย
na:ŋ ʔǎe:p pen khamo:y
Naang Aeb be thief
โดยสันดาน หรือ เพราะ
do:y-sǎnda:n rūi: phró?
by nature or because
ความจำเป็น อย่างหนึ่งอย่างใด
khwa:mtǎmpen yà:ŋday-yà:ŋnuñ
necessity one of all
'Naang Aeb {N:AB} is a thief either
by nature or by necessity.'

[827]

 ก็ นึก ไม่ ออก
ø kî: nuók mây ʔî:k
Z PRT think NEG exit
'but she {Z:ON} could not believe so.'

[828]

เพราะ ลำพัง นาง แอบ
phró? lamphan na:ŋ ʔǎe:p
because alone Naang Aeb

คน เดียว ก็ ไม่ มี ทาง
 khon diaw kô: mây mi: tha:ŋ
 CL one PRT NEG have way
 จะ ต้อง ใช้จ่าย อะไร
 tɕà? tɔŋ tɕháyɕà:y ʔaray
 IRR must spend what
 มากมาย
 mâ:kma:y
 a lot
 ‘This is because Naang Aeb {N:AB},
 herself alone, should not need too much
 money.’ {CL=Classifier}

[830]
 ข้าว ก็ มี กิน
 khâ:w ɔ kô: mi: kin
 rice Z PRT have eat
 ‘Food, she {Z:AB} has plenty to eat.’

[831]
 ขนม นมมากพลู ก็ มี ให้
 khanǒm mà:kphlu: kô: mi: hây
 snack betel nuts PRT have give
 พร้อมสรรพ
 ๐ phrómsàp
 Z enough
 ‘Snacks and betel nuts are provided for
 her {Z:AB}.’

[832]
 เพราะ นาง เชื้อ เป็น ลูก
 phró? na:ŋ ʔuía pen lú:k
 because Naang Uea be offspring
 ที่ ดี
 thî: di:
 REL good
 ‘This is because Naang Uea {N:UA}
 is a good daughter.’ {REL=Relative
 marker}

[833]
 นอกจาก นาง จะ ยอม ให้
 nô:ktɕà:k na:ŋ tɕà? yɔ:m hây
 besides 3rdF IRR allow give
 แม่ ของ นาง อยู่ เหนือ
 mæ: khǒ:ŋ na:ŋ yù: nuía
 mother POS 3rdF stay over
 ทุก วิธีทาง แล้ว
 thúk wí?thî:tha:ŋ læw
 every way already
 ‘She {P:UA} does not only let her
 {P:UA} mother {N:AB} is over her
 {Z:UA} in every way,’

[834]
 นาง ก็ ยัง อุปการะเลี้ยงดู
 na:ŋ kô: yan ʔùppaka:râ?líangdu:
 3rdF PRT still support-take care
 ๐
 Z
 ‘but she {P:UA} also take care of her
 {Z:AB}.’

[835]
 ไม่ ให้ นาง แอบ ได้รับ
 ๐ mây hây na:ŋ ʔæ:p dâyráp
 Z NEG give Naang Aeb receive
 ความเดือดร้อน อีกด้วย
 khwa:mduatrón ʔi:kdûay
 insufficiency as well
 ‘and she {Z:UA} never let Naang Aeb
 {N:AB} lack anything.’

[822] Oranop {N:ON} kept thinking to
 find out [823] why Naang Aeb {N:AB}
 stole her {P:ON} money. [824] She
 {Z:ON} could have assumed that [825]
 Naang Aeb {N:AB} is a thief either by
 nature or by necessity [827] but she
 {Z:ON} could not believe so. [828] This
 is because Naang Aeb {N:AB} should
 not need too much money. [830] Food,
 she {Z:AB} has plenty to eat. [831]
 Snacks and betel nuts are provided for

her {Z:AB}. [832] This is because Naang Uea {N:UA} is a good daughter. [833] She {P:UA} does not only let her {P:UA} mother {N:AB} is over her {Z:UA} in every way, [834] but she {P:UA} also take care of her {Z:AB} [835] and she {Z:UA} never let Naang Aeb {N:AB} lack anything.

Oranop. This text fragment is about how Oranop feels when she found out that Aeb stole her money and her how she rationalizes the situation. Here Aeb is the object of perspective. Uea is brought into the thought at [832]; still, Aeb stands out as a major object of perspective. Referential devices that are used to refer to these characters and their average RD are given in the table below.

	Full NP		Pronoun		Zero anaphor	
	Freq.	Ave. Dist	Freq.	Ave. Dist	Freq.	Ave. Dist
Aeb	5	1.8	0	-	3	1.0
Uea	1	44	3	1.0	1	1.0
Oranop		2.0	1	1.0	2	1.5

Table 6: Comparison of referential distance of the origin and object of perspective

Table 6 shows that Aeb is the character that is mentioned most frequently in this text fragment. Full NPs are used more often than other referential devices. We can see that the average RD of full NPs referring to Aeb is quite low, that is, 1.8 clause. Uea is mentioned after Aeb and is referred to by pronoun with a very low average distance of 1.0.

4.3 Continuity of psychological perspective

This section discusses the use of anaphoric devices for the continuity of psychological perspective. It is found that zero anaphors are used to maintain the psychological perspective whereas pronouns are used as an anti-shift marker.

4.3.1 Zero anaphor: Maintenance marking

The above data show the thought of

As shown above, zero anaphors are heavily used in Thai narrative discourse. The percentage of the frequencies of zero anaphors is not significantly different in the psychological neutral context and thought context. However, it is found that zero anaphors in the thought context are less structurally dependent. The following example shows the chaining of zero anaphors in the thought context.

{Data from LNC; Characters: Sangworn (SW), Son (SN)}

[895]

แต่ วันนี้ สังวร อารมณ์ รื่น
 tà: wanní: sǎŋwǎ:n ?a:rom rūn
 but today Sangworn mood good
 'But today Sangworn {N:SW} is in a good mood.'

[896]

ยัง มี อี สาม พัน
ø yaŋ mi: ʔi: sǎ:m phan
Z still have PRT three thousand
อุ่น ๆ แนบ หัวใจ
ʔùn-ʔùn næ:p hǔatɕay
quite warm close to heart
'He {Z:SW} still has the three thousand right close to his {Z:SW} heart.'

[897]

เรื่อง ที่สี ไม่ ต้อง
ruaŋ thi:wi:-sǐ: ø mâý tɔŋ
issue color TV Z NEG must
ไป คิด ใช้นี้ ให้ โง่
pay khít tɕháynî: hây ɲô:
go think pay give stupid
'For the color TV payment, he {Z:SW} need not worry about paying.'

[898]

ในเมื่อ จะ มี รายได้
naymuia ø tɕàʔ mi: ra:yda:y
when Z IRR have income
พิเศษ เพิ่ม ขึ้นมา
phíʔsɛ:t phâm khuîn-ma:
special increase come up
เรื่อย ๆ
ruia:yruia:y
continually
'since he {Z:SW} would have more and more special income.'

[899]

นี่ ถ้า นังสน รู้เรื่อง
nî: thâ: naŋ-sǒn rú:-ruiaŋ
PRT if Nang Son know
'If Nang Son {N:SN} knows about this,'

[900]

มัน คง กรีดกรีด ทำ ดี
man khon krí:tkrá:t tham di:
3rd may scream do good

เข้าใส่ ไม่ ด่าทอ
khâw-sây ø mâý dà:tho: ø
put into Z NEG scold Z

อย่างเคย

ya:ŋkhəy

as usual

'she {P:SN} must be screaming, being nice to him {Z:SW}, [900.2] not be scolding at him {Z:SW} like before.'

[895] But today Sangworn {N:SW} is in a good mood. [896] He {Z:SW} still has the three thousand right close to his {Z:SW} heart. [897] For the color TV payment, he {Z:SW} need not worry about paying [898] since he {Z:SW} would have more and more special income. [899] If Nang Son {N:SN} knows about this, [900] she {P:SN} must be screaming, being nice to him {Z:SW}, [900.2] not be scolding at him {Z:SW} like before.

The excerpt shows the use of zero anaphors in the thought context. In [895], the full NP is used to refer to Sangworn as an experiencer of the emotional predicate. The rest of this fragment presents the thought stream of Sangworn as the origin of perspective and the object of his own perspective. At [899] Son is brought into his thought as another object of perspective and interacts with him. Except for the mention in the private state report in [895], Sangworn is referred to only by a zero anaphor. Between [900] and [898] the text is interrupted by clauses about another character, Son, but the reference to Sangworn in [900] continues to be suppressed, i.e., zero anaphors are used in the non-subject position as in [900] and [900.2]. We conclude that zero anaphors are primarily used to maintain the psychological perspective.

4.3.2 Pronouns: Anti-shift marking

As shown in section 2.2.3, there are many forms for third person pronouns in Thai. They carry more information than pronouns in a language like English. According to Givón (1983), the degree of continuity implied by pronouns is lower than full NPs but higher than zero anaphors. Investigating the use of pronouns in the thought context, we find that they are often used when there is a temporal shift, from the present either to the future or to the past, but the origin of perspective is maintained. The following example shows the occurrence of pronouns in the thought context. In this passage Son, the origin of perspective, is talking with her husband. He wants to bring children to work in his factory:

{Data from LNC; Characters: Son (SN)}

[1255]
เด็ก สัก แค โหน ละ
dèk sàk khæ: nǎy lâ?
young about around which PRT
‘How young?’

[1256]
สน ตั้ง คำถาม
sǒn tân khamthǎ:m
Son put question
‘Son {N:SN} raised the question.’

[1257]
แค่ ที่ ได้ยิน
khæ: thî: ø dāyyin
only REL Z hear
‘Just only from what she {Z:SN} heard,’

[1257.2]
ก็ ดีใจ
ø kî: di:tɕay
Z PRT be glad
‘she {Z:SN} is so glad’

[1258]
จน เนื้อเต้น
tɕon nuá ø tɛn
until flesh Z dance
‘that her {Z:SN} flesh is dancing.’

[1259]
พรุ่งนี้ หล่อน จะ รวม เงิน
phrûngní: lòn tɕà? ruam ɲɛn
tomorrow 3rdF IRR gather money
ทั้งหมด ไป แทง หวย
tháŋmòt pay thæ:ŋ hǔay
all go play illegal lotto
‘Tomorrow, she {P:SN} will bring all the money to buy lotto.’

[1260]
คราวนี้ จะ รวย ทับ
khra:wní: ø tɕà? ruay tháp
this time Z IRR rich overlie
ซ้ำสอง เข้าไป อีก นะ
sámsɔ:ŋ khâw-pay ʔi:k nâ?
double go in more PRT
ไม่ว่า
mâywâ:
PRT
‘This time, she {Z:SN} will be even richer.’

[1261]
เก้า ขวบ สิบ ขวบ...
kā:w khûap sɨp khûap
nine year ten year
‘Nine or ten years old.’

[1255] ‘How young?’ [1256] Son {N:SN} raised the question. [1257] Just

only from what she {Z:SN} hears [1257.2] she {Z:SN} is so glad [1258] that her {Z:SN} flesh is dancing. [1259] Tomorrow, she {P:SN} will bring all the money to buy illegal lotto. [1260] This time, she {Z:SN} will be even richer.

[1261] "Nine or ten years old."

From the above data, a full NP is used to refer to Son in [1256] in which her action of 'asking a question' is narrated. From [1257] to [1260], her stream of thought is presented. Zero anaphors are used in [1257] to [1258]. These three clauses are about how she feels at the moment. We can see that her stream of thought continues in [1260]. In [1259] there is a shift of temporal reference, which is indicated by a temporal phrase 'tomorrow'; she was making a plan of

what to do with the money she had. Here the shift of the deictic component of time certainly causes a discontinuity. Even though an overt form of NP is expected to occur, a pronoun is used. This phenomenon follows Givón's claim about a pronoun as a device that implies more continuity than a full NP. However, a full NP, which is also claimed to show more discontinuity than a zero anaphor, is rarely used in the middle of a stream of thought. We can conclude that pronouns are used as an anti-shift marker that keeps the psychological perspective from being shifted when other deictic center components shift.

The following table shows the use of pronouns to refer to the origin of perspective in the thought context:

	Son (LNC)		Oranop (KMS)		Total	
	Narration	Thought	Narration	Thought	Narration	Thought
Frequency	12	20	14	19	26	39
Percent	37%	63%	42%	58%	40%	60%

Table 7: Frequencies of pronouns used to refer to the origin of perspective

Table 7 shows the quantitative data of pronouns that are used to refer to Son in the novel LNC and Oranop in the novel KMS. The data is drawn from the context where they are the origin of perspective. We can see that pronouns are used more often in thought context than in narration; in general, about 60% of pronouns referring to these two characters occur in the thought context. Note that thought contexts are 36.6% of the whole text excluding direct quotes. This means that pronouns are used more densely in the thought context.

It should also be noted that the high frequency of pronouns in the thought context can be explained in terms of Deictic Center Theory, which assumes that features of actual speech are imported into narrative discourse with modification in various forms. Personal pronouns in Thai hold socio-cultural indices that are important in the interaction. Zero anaphors can be used to show the continuity in the text but lacks such socio-cultural substance.

We can summarize that in the thought context, the origin of perspective tends to be referred to by a reduced form of

referential expressions; a zero anaphor is the most preferred. When other deictic factors come into play, a pronoun is used to refer to the origin of perspective. Full NPs are mainly for objects of perspective. These referential choices seem to hold regardless of the pragmatic factor of recency in the text. These findings follow Givón's scale of continuity in that reduced forms correlate with high continuity. However, the notion of continuity needs to be extended to include the continuity of deictic center components.

5. Conclusion

This paper proposes a study on participant continuity in Thai narrative discourse. Based on the Deictic Center Theory, thought context in the narrative discourse is identified. The objective method of RD proposed by Givón is used to examine the distribution pattern of referential devices that are used to refer to participants in the discourse. In order to get a valid and consistent result, the paper also emphasizes the importance of the procedure for defining the referential devices in the language and segmenting a text into proper units for measurement.

The result from applying the methodology of RD shows the distribution pattern of RD varies across types of referential devices. Full NPs are substantially distinct from pronouns and zero anaphors since the former tend to occur at a longer distance than the latter group. Zero anaphors show the highest tendency to occur immediately after the clause where their antecedent is found. They are also found to occur at greater distance than pronouns do. Pronouns in Thai rank the lowest in frequency and do not show a distinct pattern from full

NPs and zero anaphors.

In general, with respect to the distribution pattern in an overall text, the objective method of RD clearly shows the distinctive properties of full NPs and zero anaphors but does not seem to give a clear picture of the occurrence of pronouns. Moreover, zero anaphors have greater distance than they are typically expected; and, the frequency of full NPs at short distance is quite high. However, when we perform the analytical investigation on these referential devices, we find that components of deictic center play an important part in referential choice. It is found that zero anaphors are typically used to refer to the origin of perspective. When other deictic components (i.e. time and location) are shifted, pronouns are used to block the psychological perspective of the character from being shifted. Full NPs are used to refer to objects of perspective. The analysis from thought context supports Givón's prediction of the relationship between continuity and types of referential device but not in terms of textual identification.

In response to the text-based approach, this study has shown that the deictic components play an important role in narrative structure. The psychological perspective of a character is evoked by various types of linguistic devices. In general, the method of RD is a useful measurement that provides an objective tool to account for the continuity of participant in fictional narrative. However, measuring the RD of a referential expression in the thought context can be problematic since the antecedent is not merely present in the text. The continuity of participants needs to include the role of participant from a psychological perspective as well.

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