

The Development of Narrative Macrostructure of Thai Children

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Article Information	Abstract
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Received: May 17, 2019	<i>The present article aims to examine the development of storytelling ability of Thai children. The Thai Frog Story corpus, consisting of a total of 50 narratives by 4-, 6-, 9-, 11- and 20-year-old participants, is used as data for this study. Three main components of narrative macrostructure are employed as the framework for analysis: onset, problem and resolution. Results find that elementary children have shown significant acquisition of narrative macrostructure since the age of 9. In relation to percentage of acquisition, it is found that 'problem' is the easiest component to be recognized, followed by 'onset' and 'resolution', respectively. More specifically, it is found that 4- to 6-year-old children tend to rely on immediate contexts and existing components in particular pictures. Accordingly, they fail to recognize the relationship among the protagonists and settings of the story. Moreover, they cannot keep the main plot along continuously until the end.</i>
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INTRODUCTION

Narrative competence is said to be the end product of the abilities to construe and construct a multi-event story. It is not a preprogrammed but learned ability, gradually developed in children. According to Labov and Waletzky (1967), narrative is defined as two clauses about past events joined by a temporal juncture. Carmiol and Sparks (2014) asserted that children need to learn how to construct their narrative informatively to their listeners. In addition, they have to know how to provide sufficient and appropriate contextual information about the events and provide their own evaluative comments on some particular parts of narratives in order to engage listeners in their stories. As far as studies in narratives are concerned, such information is not explicitly taught in school or by parents, but naturally and gradually learned by children through observation and experience while listening to stories.

According to Reese, Sparks and Suggate (2012, p. 133-134), the study of children's narratives provides researchers with how children master story structure, construe and connect events using different relational linguistic devices, and grasp characters' motivation and reactions. In addition, researchers could gain developmental information in vocabulary, morphological, and syntactic levels. Because narrative is what children usually engage with in their educational contexts—both at home and school—, children from as young as 2 or 3 years would be happy and participate well as research participants. As a consequence, their narratives are reliable sources of data for the analysis of their linguistic development.



In relation to narrative components, Labov and Waletsky (1967) classified how to view narratives into two levels: coherence and cohesion. Coherence—sometimes called ‘macrostructure’ (Justice, Bowles, Pence & Gosse, 2010; Kelly & Bailey, 2012; Stein & Glenn, 1982) or ‘global structure’ (Berman & Slobin, 1994)—refers to the macro-level organization of narratives. It deals with a schematic organization of the story and how to relate events in the story in a meaningful way. On the other hand, cohesion—sometimes known as ‘microstructure’ or ‘local structure’—refers to the micro-level organization of the text. It usually deals with the analysis of linguistic devices used to create a text. Studies on cohesion postulate various criteria to assess the narrative ability of children. For example, Justice et al. (2010) postulated ‘Narrative Assessment Protocol’ or NAP including sentence structure, phrase structure, modifier, nouns and verbs. The application of NAP was also done in Spanish by Gorman, Bingham, Fiestas & Terry (2016). Halliday & Hasan (1976) proposed five cohesive devices: referencing, conjunction, lexical cohesion, substitution and ellipsis. It can be observed that conjunctions are the most focused linguistic devices cohesively. Pinto, Tarchi and Bigozzi (2016) stressed on the two types of linguistic connectives—or conjunctions—showing causal and temporal event relations. Besides, Bliss, McCabe & Miranda (1998) included conjunction as one component in ‘narrative assessment profile’ and divided ‘conjunctive cohesion’ into five subtypes: coordination, temporal links, causality, enabling and disjunction.

In relation to coherence, in a literature sense, coherence is what is known as ‘plot structure’. As proposed by Freytag (1894), there are five basic plot components: Exposition, Rising Action, Climax, Falling Action and Denouement. Exposition is the beginning of the story where characters, background and setting appear. Rising Action is when the story is becoming complicated because of the internal conflict of the protagonist or the external conflict between characters or character and nature or society. Climax, the turning point of the story, is the transition from the rising to the falling action. Falling Action deals with the situation when the problem is solved. Lastly, Denouement is the resolution, conclusion, or the final outcome of the story. However, in literature, the occurrence of all five plot components is not actually strict. For example, some story might just end with climax—lacking falling action and denouement.

It is noted that the analysis of narrative coherence or macrostructure focuses on the semantic and pragmatic interpretation of the narrative discourse rather than the micro-level of linguistic forms. Studies on narrative coherence employ different sets of macrostructure components, as shown in Table 1.

Table 1
Plot components proposed in narrative studies

Plot components	Studies
Structure: title, opening, character/s, setting, problem, central event, resolution, and story closing	Pinto <i>et al.</i> (2016)
Macrostructure: orientation, complicating action, and evaluation	Kelly & Bailey (2012)
Global structure: the onset of the plot, unfolding of the plot, and resolution of the plot	Berman & Slobin (1994)
Macrostructure: orientation, complicating action, evaluation, resolution, and coda	Labov & Waletzky (1967)

From Table 1, it can be seen that the intersection of plot components in the four studies are of three main components. The first one is the beginning part of the story—or opening, orientation or onset. This part usually includes characters, setting, background and context of the story introducing listeners to the story. Secondly, the story regularly introduces a problem—or conflict, complicating action, unfolding—which is said to be the starting point of the development of the whole story. Without problem, the story would not have a clear direction and the character development could not be seen. In addition, problem helps make the story interesting and attracts listeners' attention. The last obligatory plot component in narrative is resolution. It deals with how the problem is solved and might also include story closing or a coda.

In relation to methodology, Reese, Sparks and Suggate (2012, p.135-136) classified how researchers assess children's narratives into two methods: story retelling and story production. Story retelling is a technique used to elicit children's narratives by having them retell the story they remember/heard from researchers. The second method, story production, can be either the children telling their stories of personal experience or narrating stories from a stimulus picture/set of pictures. One of the most well-known narratives of this type is the narratives of Frog Stories. Berman and Slobin (1994) compiled narratives of children in different age groups from researchers of different languages as a corpus (<http://CHILDES.psy.edu>). The narratives were constructed from children and adults of different languages who produced the stories from the wordless picture book 'Frog, where are you' (Mayer, 1967). The corpus is freely accessible and a number of literatures in narrative development employing these data have been published. Although it seems that the limitation in terms of the stimulus picture book might affect the freedom of participants to create the stories and possibly produce insufficient data (Reese *et al.*, 2012, p.136), a rich literature using data from this project indicates that the corpus, to some extent, could reflect children's development in many aspects.

In Thai language, the study of narrative development is not only rare, but it is also focused solely on some particular micro-level of linguistic devices. Ratitamkul (2010) worked on referential choices in narratives of 4-year-old Thai children. Using data of the Thai Frog Story, she focused her study only on the animated entities in the story. In relation to syntax, Yangklang



(2003) examined the development of serial verb construction, while Piyapasuntra (2009) studied the development of syntactic complexity in Thai children's narratives. Phrases and clauses are basic units of these two studies. In addition, Zlatev and Yangklang (2004) conducted a typological study of motion verbs by making use of serial verb constructions found in the Thai narrative corpus to test whether the Thai language is a verb-framed or satellite-framed language. They proposed that Thai language is on a cline of the two types of language.

From universal perspective, Brooks (2014, p.394) said that children as young as two to three years old start to combine clauses in order to talk about their past experiences. At four years of age, they can combine more than two clauses, but their narratives are still short and independent. In other words, the combined clauses are not semantically related. Narrative coherence or macrostructure can be clearly seen around the age of 5-6. Children tend to acquire main components of the story. They seem to construe the orientation, complication and resolution of the story. It can be observed that the acquisition of narrative components explicitly emerged during school age. Moreover, Berman and Slobin (1994, p.48) reported narrative 'global structure' acquisition of children from five languages including English, German, Hebrew, Spanish and Turkish. From the elicitation of children's production of narratives from the wordless picture book 'Frog, Where Are You?' (Mayer, 1967), they found that only about 10% and 25% of children at preschool age—3 and 4 years of age—could perceive all three plot components of the story—onset, unfolding (or complication) and resolution. The percentage tends to increase across ages at 41% and 62% in school age children—5 and 9 years old. It should be noted that the first component of the plot—the onset—is most expressed explicitly at all ages. The percentage seems to be decreased continuously for the second component—unfolding or problem—and the third—resolution, respectively. Berman and Slobin also explained significant characteristics of children's narratives in each age group as 'narrative profile'. Especially between children at preschool VS school age, their narrative structure development is significantly different. At age 3, or preschool age, children tend to fail to demonstrate knowledge of narrative structure. By this, they put themselves and their experience in the story and cannot completely describe all components in the pictures and relate those components reasonably. In addition, they usually mix grammatical tenses and shift from one tense to another without thematic motivation. Narrative structure seems to be clear and explicitly expressed in 5-year-old children who start school. Children at this age show a clear sign of temporal anchoring when they have stable use of tenses and express sequential temporal relation via the use of conjunctions such as 'and', 'then' or 'and then'.

Regardless of linguistic characteristics, the investigation of coherence development in Thai narratives would make a crucial contribution to the universal findings in child language development, especially in the cases of preschool and school-age children. The present study is then conducted to explore two major questions related to the past research:

1) To what extent that Thai children in different ages could perceive the related events in a picture book and express them in the form of narrative?

2) In relation to order of acquisition, which section of the plot is the earliest and the latest acquired and what is the possible factor/s for such order?

Therefore, the present study aims at examining the development of storytelling ability of Thai children, according to the three core components of macrostructure, namely onset, problem and resolution.

METHODS

Data

Data used in this study were retrieved from the Thai Frog Story corpus (Zlatev & Yangklang 2018), a Thai storytelling database freely accessible via the Child Language Data Exchange System (CHILDES), <https://childe.talkbank.org/browser/index.php?url=Frogs/Thai-Zlatev/>.

The corpus consists of 50 narratives of 4-, 6-, 9-, 11- and 20-year-old native Thai participants, with 10 participants and 10 narratives in each age group. In relation to Thai education context, it is noted that Thai children at the age of 4 are either taken care of at home or have just started kindergarten. First grade students are admitted at the age of 7. This means that 6-year-old children are still in the last year of kindergarten. At 9 and 11 years old, children are normally in the third and the fifth grade, respectively. Therefore, it can be said that the groups of 9 and 11 years old are engaged in formal education. In order to see either the developmental path of children's narratives gears toward that of the adults or it varies individually, data of the 20-year-old groups are compared.

In relation to the picture book *Frog, Where Are You?*, as can be seen in Appendix, the main plot of the story is about a frog caught by a boy and a dog. One day, the frog escaped from the house. The boy and the dog kept searching for the frog in different places. Finally, they found the frog in the pond with his family and brought the frog back home. The picture book of *Frog, Where Are You?* consists of 24 pictures. For the purpose of analysis, Zlatev and Yangklang (2018) grouped them into 15 sub-scenes. In the narratives, the number of each sub-scene is also marked in order for the researcher to keep track of related pictures corresponding to the narratives.

Analytical framework

The concept of macrostructure used in this study is synthesized from past studies of narrative coherence. In relation to the story *Frog, Where Are You?* it is proposed in this study that macrostructure deals with abilities to relate events in the story, according to three main plot components: onset, problem and resolution. In order to analyze the data, the three plot components are elaborated in relation to the pictures in the storybook as follows.

1. Onset

'Onset' covers the beginning part of the story. It includes two subcomponents: the introduction of three main protagonists and the settings. The explicit production of the onset is expected in Picture 1 of the story.



2. Problem

‘Problem’ is related to the events where the boy realizes that the frog is missing and his search for the missing frog in different places. This component is divided into seven subcomponents: 1) the frog is missing (Picture 2b), 2) the boys’ searching for the frog in the room/house (Picture 3a), 3) outside the house (Picture 3b and 5), 4) in the hole and the beehive (Picture 6a and 6b), 5) in the nest (Picture 7), 6) on the rock (Picture 9b) and 7) in the pond behind the log (Picture 12b, 13a and 13b). It is expected from these seven pictures—in which some of them do not have the picture of the frog—that narrators could explicitly talk about it.

3. Resolution

‘Resolution’ deals with two subcomponents: the situation where the boy finds the missing frog (Picture 14a and 14b) and takes the missing or substituting frog back home (Picture 15).

The participants’ recognition of the three plot components will be judged from explicit expressions found in their narratives. Supported by empirical data, findings of each component will then be reported according to age group. Examples are retrieved from the corpus and presented in phonetic transcription, word-by-word gloss and meaning in English. Age and number of each participant are marked at the end of each example in the following format: (age-no. of participant) such as (4-01) means the example is from the first participant of the 4-year-old group.

In addition, some grammatical elements are also marked as shown in the following abbreviation.

CAUSE	Causative marker	POSS	Possessive marker
CLF	Classifier	PROG	Progressive aspect marker
COMP	Complementizer	QUES	Question marker
PART	Particle	STAT	Stative aspect marker
PAST	Past tense marker	TOP	Topic marker
PERF	Perfective aspect marker		

Quantitatively, children’s production for each plot component will be counted. Then, the frequency of occurrences will be calculated into percentage.

FINDINGS

The Development of macrostructure in Thai narratives

This section reports how participants in the five age groups expressed the three main plot components of the story. Both qualitative and quantitative findings are presented for each component. In addition, the overall picture of narrative development is also reported in the last section.

1. Onset

The examination of onset is divided into two parts: 1) the introduction of the three main protagonists: the boy, the dog and the frog and 2) the setting or situation at the beginning of the story that all three protagonists are in the room.

In order to introduce the protagonists, a narrator has to explicitly describe the relationship among the three main characters: the boy, the dog and the frog.

Results found that all children in 4-year-old group did not recognize the relationship between the three protagonists. There was no explicit description indicating relationship between the boy, the dog and the frog, as shown in (1).

- (1) *mii dèk / mii mǎa / mii kòp / mii pʰrácan / mii faj / mii tian*
 have child / have dog / have frog / have moon / have light / have bed
 ‘*There was a boy. / There was a dog. / There was a frog. / There was the moon. / There was light. / There was a bed.*’ (4-02)

Similar to the 4-year-old group, nearly half of six years old children (4 out of 10) failed to illustrate the protagonist component. They separately addressed the boy, the dog and the frog, as shown in (2).

- (2) *dèk kamlan̄ nāŋ mɔɔŋ sùnák / sunák kamlan̄ dʰim náam naj kʰùat*
 child PROG sit look dog / dog PROG drink water in bottle
 ‘*The boy was sitting and looking at the dog. / The dog was drinking some water in the bottle.*’ (6-01)

Four children in this age group expressed relationship between the two of the protagonists—the boy and the frog—but not all, as shown in (3).

- (3) *mii dèk jìu kʰon nìŋ / càp kòp dâaj lǽæw / tɔɔnmít kʰǎo kɔɔ maa duu /*
 have child be CLF one / catch frog PERF PAST / at night he then come look /
pʰɔɔ maa duu sèt
 when come look PERF
 ‘*There was a boy. / caught a frog and then / at night, he came to see / after seeing.*’ (6-03)

Onset has been significantly found in 9-, 11- and 20-year-old groups. All participants in these age groups successfully expressed the three main protagonists and their relationship, as shown in (4)-(6).

- (4) *mii pʰûuch'aaj kʰon mii dèk pʰûuch'aaj kʰon nìŋ / líaŋ mǎa læ? kòp wáj / kòp khǎw*
 have male CLF have child male / CLF one feed dog and frog STAT frog he
?aw wáj naj kʰùatlǒo
 take STAT in jar
 ‘*There is man. There is a boy / feeding the dog and frog. / He put the frog in the jar.*’ (9-01)



- (5) *kaan la kʰráŋ nìŋ / mii dèkpʰúucʰaaaj kàp sùnák kʰjɔŋ kʰǎw dâaj càp kòp wáj*
once upon the time/have boy with dog POSS he PAST catch frog keep
naj lõo kʰùat nìŋ
in jar bottle one
'Once upon a time / there were a child and his dog. (They) caught a frog in a jar.' (11-01)

- (6) *kaanlakʰráŋnìŋnaanmaaléæw mii dèk nój kʰon nìŋ cʰû tɔmmiî / wan nìŋ tɔmmiî*
once upon the time have child small CLF one name Tommy / day one Tommy
paj càp lûk kòp maa dâaj tua nìŋ / kʰáw kʰáw sõncaj man mâak / tɔmmiî
go catch child frog come PAST CLF one / he he interested it much /Tommy
?aw lûuk kòp nój sàj wáj naj lõo / tɔmmiî mii mǎa tua nìŋ / cʰû cʰû ?araj
get child frog small put keep in jar / Tommy have dog CLF one / name name what
dii là? cʰû bóbbiî / bóbbiî kàp tɔm tɔmmiî kàp bóbbiî nîi sõncaj
good PART name Bobby / Bobby and Tom Tommy with Bobby TOP interested
lûuk kòp tua níi mâak
child frog CLF this much
'Once upon a time, there was a little boy named Tommy. / One day, Tommy caught a frog. /
He, he was very interested in it. / Tommy put the little frog in a jar. / Tommy had got a dog. /
Name, What should it be named? Named Bobby. / Bobby and Tom...Tommy and Bobby
were very interested in this baby frog.' (20-02)

In relation to setting, the participants had to talk about the setting in the room and/or described that the protagonists were doing something in the room as an introduction. This seems easy but it was found that small children, especially those who are in 4- and 6-year-old groups, either ignored the settings (7) and (8) or could not relate the setting with the event (9) and (10).

- (7) *mii kòp jùu naj níi / lææw mǎa kàp dèk kô cʰɔp duu*
have frog be in here / then dog with boy also like see
'*There was a frog in here. / Then the dog and the boy loved to see (it).*' (4-08)
- (8) *dèk kamlaŋ nâŋ mɔŋ sùnák / sùnák kamlaŋ d̥im náam naj kâæw naj kʰuàt*
child PROG sit see dog / dog PROG drink water in glass in bottle
'*The boy was sitting and looking at the dog. / The dog was drinking some water in the bottle.*' (6-01)
- (9) *mii dèk / mii mǎa / mii kòp / mii pʰrácan / mii faj / mii tiaŋ mii pʰâacʰétnâa*
have child / have dog / have frog / have moon / have light /have bed have handkerchief
'*There was a boy. / There was a dog. / There was a frog. / There was the moon. /*
There was light. / There was a bed.' (4-02)
- (10) *mǎa duu kòp kʰà? / dèk duu kòp lææw kòp kô mɔŋ dèk / lææw man mii*
dog look frog PART / child look frog then frog also look child / then it have
rɔŋtʰáaw / mii sâa / mii pʰâa / mii tiaŋ / mii duançcan / kʰɔp nâatâan / kracòk

shoes / have shirt / have cloth / have bed / have moon / have window / glass
k^hoomfaj
 lamp

'The dog looked at the frog. / The boy looked at the frog. Then the frog looked at the boy. / Then there was a pair of shoes. / There was a shirt. / There was some clothes. / There was a bed. / There was the moon, / window, frame / glass, lamp.' (6-05)

After analyzing the percentage of acquisition of the two subcomponents of the onset, it was found that children at the age of 4 failed to construe both the relationship among the three protagonists and the setting of the story, while almost half of the 6-year-old children seemed to comprehend the onset component. On the other hand, 9- and 11-year-old children could obviously describe a link between the protagonists and the setting and developing toward the adults, as shown in Table 2.

Table 2
Percentage of children able to express the two subcomponents
in the onset: 1) protagonists and 2) setting

ONSET \ AGE	4	6	9	11	20
1) PROTAGONISTS	0	40	100	100	100
2) SETTING	20	40	90	90	100

2. Problem

The problem component consists of two subcomponents: a) the realization about the missing of the frog and b) the search for the missing frog in different locations. Starting from the scene where the boy realized that the frog is missing (Picture 2b), it was found that the majority of 4- and 6-year-old children (8 and 7 out of 10) were able to recognize the missing of the frog, as shown in (11) and (12).

(11) *lææw mii dèk kamlaq nɔɔn mii kòp wâajnáam jùu / dèk t̄in k^hn maa*
 then have child PROG sleep have frog swim PROG / child wake up come
mâj mii kòp
 not have frog

'The boy was sleeping. The frog is swimming. / When the boy woke up, there was no frog.'
 (4-09)

(12) *k^haw dèk kàp sùnák kôj nɔɔn lææw kòp kôj n̄i / p^hɔɔ dèk t̄in nɔɔn maa*
 he child with dog then sleep then frog then flee / when child wake sleep come
dèk kôj mâj hén kòp
 child then not see frog

'He..The boy and the dog slept and the frog escaped. / When the boy woke up, the boy did not see the frog.' (6-03)



However, some failed to imply that the empty jar was the place where the frog had been. They did not refer to frog in this scene, as in (13) and (14).

- (13) *kòp man ?óp ?óp ?óp / man kôj loj náam tòk náam*
 frog it oh oh oh / it then down water fall water
 'The frog cried oh oh oh. / It got into the water..fell into the water.' (4-05)
- (14) *dèk nɔɔn lèp / kòp kʰîn maa / mǎa kʰîn maa bon dèk / dèk nɔɔn jùu*
 child sleep / frog up come / dog up come on child / child sleep PROG
 'The boy slept. / The frog climbed up. / The dog moved up onto the boy. / The boy was sleeping.' (6-06)

All 9- and 11-year-old children recognized the problem and explicitly expressed the missing of the frog, the same as the adults. This is clearly evident that children at age 9 can see the relationship between scenes, as in (15)-(17).

- (15) *pʰɔɔ dèk cɔɔn tìn kʰîn maa / kôj hěn wǎa kòp nán hǎaj paj lææw /*
 when child John wake up come / so see COMP frog TOP disappear go PAST /
lææw hěn wāa nâatâaŋ kamlaj pàet jùu / dépbii dâaj sǐacaj wāa pʰan rák
 then find COMP window PROG open PROG Debby PAST sad COMP friend love
kʰɔɔŋ dépbii nán hǎajtua paj tɔɔnklaaŋkʰiin
 POSS Debby TOP disappear go night
 'When the boy John got up / (he) found that the frog was missing / then (he) saw that the window was open / Debby was sorry that his dearest friend, the frog, was missing at night.' (9-04)

- (16) *kʰǎo lǎŋcàaktʰii kʰǎo lèp / kòp kʰɔŋ kʰǎo dâaj nǐi ?òk paj*
 he after he sleep / frog POSS he PAST escape out go
 'He...After he slept, / his frog escaped.' (11-07)

- (17) *lǎŋcàaknán lǎŋcàaktʰii kʰǎo tìnnɔɔn / kʰǎo kôj pʰóp wāa kòp hǎaj paj*
 after that after he wake up / he then find COMP frog disappear go
 'After that, after he woke up, / he found that the frog was gone.' (20-07)

The second component of 'problem' is related to the search for the missing frog in the room (Picture 3a), outside the house (Picture 3b and 5), in the hole/beehive (Picture 6a and 6b), in the nest (Picture 7), on the rock (Picture 9b) and behind the log/in the pond (Picture 12b, 13a and 13b). It is observed that most of the children in 4- and 6-year-old groups failed to recognize that the actions of the boy and the frog were done upon the purpose of looking for the frog—which did not appear in the picture, as shown in (18) and (19) respectively.

(18) (Picture 3a: In the room)

kàet kàet mǎa / mǎa mǎa mǎa kamlaj kʰâw kʰâw paj naj nǐi / kʰon kôj duu nòk kàt
 born born dog / dog dog dog PROG enter enter go in here man then see bird bite
nòk
 bird

'There..there was the dog. / Dog, dog, the dog entered...was entering here. / The boy looked at the bird..bit the bird.' (4-04)

(Picture 3b and 5: Outside)

k^haw k^hɔ̄ n̄uaŋ
he then sleepy
'He felt asleep.' (4-04)

(Picture 6a and 6b: In the hole and beehive)

mii māa man kō̄ kàt cà? kàt ?anníi lāēw māa man kō̄ cà? kàt ?anníi /
have dog it then bite will bite this then dog it then will bite this

k^hon kō̄ duu kō̄p
man then see frog

'The dog..it was going to bite this. Then the dog was biting it. / The boy looked at the frog (misinterpreted the picture as the frog).' (4-04)

(Picture 7: In the nest)

lāēwkō̄ k^hīn k^hīn paj bon tōnmáaj k^hīn paj bon tōnmáaj
then up up go on tree up go on tree
'Then (he) up..up to the tree..up to the tree.' (4-04)

(Picture 9b: On the rock)

NONE

(Picture 12b, 13a and 13b: In the pond and under the log)

man kō̄ jùu naj náam kō̄ jùu naj náam / tōnmáaj kō̄ lō̄n lōj maa / man kō̄
it then be in water then be in water tree then fall down come /it then
k^hīn maa / lāēwkō̄ k^hon k^hīn maa cāak náam k^hīn maa cāak náam lāēw
up come / then man up come from water up come from water PAST
'It was in the water..in the water. / The tree fell down. / It got up. / Then, he got up from the water..up from the water and then..' (4-04)

(19) (Picture 3a: In the room)

lāēw sūnák kō̄ k^hāw paj naj k^hūat
then dog then enter go in bottle
'Then the dog got into the bottle.' (6-04)

(Picture 3b and 5: Outside)

lāēw dēk kō̄ rō̄j wāa c^hūajdūaj c^hūajdūaj / kō̄ sūnák tīt hūa tīt jùu
then child then cry COMP help help / then dog stuck head stuck be
naj k^hūat / ..lāēw dēk kō̄ dāen paj paj naj pāa / lāēw dēk kō̄ cāe raj p^hīj /
in bottle / then child then walk go go in forest / then child then find hive bee /
lāēw p^hīj kō̄ dāen ?ɔ̄j kmaa
then bee then walk out come

'Then the boy cried 'help, help!' / The dog stuck..the head stuck in the bottle. /...Then the boy walked into the forest. / Then the boy found the beehive. / Then the bees came out.' (6-04)

**(Picture 6a and 6b: In the hole and beehive)**

lææw dèk kôj kôm paj duu ruu / lææw dèk kôj sõjsâj wâa ruu ?araj lææw
 then child then bend go see hole /then child then doubt COMP hole what then
 sunák kôj duu pʰñj / lææw kʰraawnii krarjôk kôj ?jôk maa lææw dèk kôj bìip
 dog then see bee / then this time squirrel then out come then child then squeeze
camòok
 nose

'Then the boy bent down to see the hole. / Then the boy wondered what was in the hole. Then the dog saw the bees. / Then..now the squirrel came out. Then the boy squeezed his nose.' (6-04)

(Picture 7: In the nest)

lææw mäa kôj jîn jùu tʰii tônmáaj tòn níi lææw dèk kôj piin kʰñn paj bon
 then dog then stand be at tree CLF this then child then climb up go on
 tônmáaj
 tree

'Then the dog was standing at this tree. Then the boy climbed up the tree.' (6-04)

(Picture 9b: On the rock)

lææw dèk kôj piin kʰñn paj bon hùpkʰaw lææwkôj / lææw takoon wâa
 then child then climb up go on valley then / then shout COMP
'Then the boy climbed up the mountain and then / Then (he) shouted...' (6-04)

(Picture 12b, 13a and 13b: In the pond and under the log)

læw pʰjô dèk tòk náam lææw / dèk kôj kʰñn maa dâaj lææw dèk kôj bôk
 then when child fall water already / child then up come able then child then tell
 wâa shú? shú? / lææw dèk kôj piin kʰñn paj bon máaj tʰii hâk
 COMP shush shush shush / then child then climb up go on log that broken
'Then..after he fell into the water, / then he came up. Then he said shhh. / Then the boy climbed up on the broken tree.' (6-04)

Nine-year-old children seem to acquire more connectivity of the story where the boy and the dog are looking for the frog. However, it can be noticed that the realization about the search for the frog tentatively lessens when the story is advanced (from Picture 3 to 5, 6, 7, 9 and 13). In other words, children can depict the events in earlier scenes (such as Picture 3 and 5) as a parting of the search for the frog, but do not consistently talk about the frog in the later scenes (such as Picture 7, 9 and 13), as in example (20).

- (20) **(Picture 3)** dèk nôj duu naj rçøjtʰáaw / kôj mât cæ cåawkòp / ...dèkpʰûucʰaaaj
 child little see in shoes / also not find frog / boy
 pàat nâatâan læ?kôj bôk / læ?kôj takoon ?jôk paj wâa cåwkòp nôj cåw jùu
 open window then say / then shout out go COMP frog little you be
 kʰâaŋnôk rí?plâao
 outside QUES
'The little boy looked in his shoes / but (he) could not find the frog. / The boy opened the window and said / and shouted that / The little frog, are you outside?' (9-07)

(Picture 5) *dékpʰūucʰaaaj ?òk paj kʰâaŋnôk láe?kôp pʰūut wâa / câwkòp nój*
 boy out go outside then say COMP /frog little
câw jùu kʰâaŋnôk r̥iplàaw
 he be outside QUES

'The boy went outside and said / "The little frog, are you outside?"' (9-07)

(Picture 9) ...lææw dèk nój kôp kʰñn paj bon kônhín / kôp hén tʰæŋ máaj
 then child little then up go on rock / then see CLF stick
sílkʰao / dèk nój kôplæej kʰñn paj càp duu / kôp bòk láekôp bòk wâa câwkòp
 white / child little so up go catch see / then tell then tell that frog
nój câw jùu tʰînăj
 little you be where

'Then the little boy climbed up the rock / saw a white stick. / The little boy touched it / and said..and said "The little Frog, Where Are You?"' (9-07)

(Picture 13) dèk nój kôplæej piin / kôp bòk wâa cú? cú? / naaj tʰam
 child little then climb / then tell COMP shush shush / you make
sian̥ bau bau ná? / sètlææw dèk nój kôp kʰâu paj duu tron̥ kʰɔnmáaj
 noise low low PART / then child little then enter go see at timber
The little boy climbed / and said shhhh. / "Lower your noise." / Then the little boy went to the log to see.' (9-07)

As those in 20-year-old group (27), almost all 11-year-old children explicitly describe the purpose of actions of the boy and the frog from Picture 3 to Picture 13, as the search for the missing frog, as shown in (21).

(21) (Picture 3) *kʰaw r̥ip plian s̥iapʰâa láe? ?òk taamhää kòp tua nán / tææ kʰaw*
 he hurry change cloth and out search frog CLF that / but he
kôp jan̥ mât pʰóp
 then yet not find

'He hurriedly changed his clothes and went out to find that frog / but he still could not find it.' (11-01)

(Picture 5) *kʰaw ?òk paj taamhää tʰii tʰûn kwâaŋ / tæækôp mât pʰóp*
 he out go search at field wide / but not find
'He went to find in the field / but did not find (it)' (11-01)

(Picture 9) *kʰaw pʰajajaam tʰii ca hää kòp kʰɔŋ kʰaw tææ kʰaw kôp jan̥*
 he try COMP will search frog POSS he but he also yet
hää mât pʰóp / kʰaw dæn paj tʰûa / tææ kôp mât pʰóp kòp kʰɔŋ kʰaw
 search not find / he walk go around / but also not find frog POSS he
'He tried to find his frog but he could not find it. / He walked around / but did not see his frog.' (11-01)

(Picture 12) *kʰaw hén tʰɔnmáaj tʰñn nìŋ kʰaw dâajjin sian̥ kòp kʰɔŋ kʰaw*
 he see log CLF one he hear voice frog POSS he
'He saw a log. He heard his frog.' (11-01)

(Picture 13) *k^hǎw ciŋ p^hajajaam t^hii cà? b^òok hâj p^hajajaam t^hii cà?*
 he then try COMP will tell CAUSE try COMP will
hǎa kòp k^hǒŋ k^hǎw / l^æ? k^hǎw k^òo m^oŋ paj t^hii t^hnmáaj
 search frog POSS he / and he then look go at tree
'So he tried to say...tried to find his frog / and he looked at the tree (log).' (11-01)

In conclusion, Table 3 illustrates the percentage of acquisition of the two sub-components of 'Problem' in the story.

Table 3
Percentage of children who recognize two subcomponents
of 'problem':1) the frog is missing and 2) the search for the missing frog

PROBLEM \ AGE	4	6	9	11	20
PROBLEM 1					
PICTURE 2	80	70	100	100	100
PROBLEM 2					
PICTURE 3	80	50	100	100	100
PICTURE 5	30	40	90	90	100
PICTURE 6	30	20	60	100	100
PICTURE 7	20	20	60	100	60
PICTURE 9	10	20	80	90	100
PICTURE 12-13	0	20	50	70	90

From Table 3, it is observed that the onset of the problem—the frog is missing—seems to be realized by most participants in all ages. However, small children from the age of 4 to 9 years tend to miss the continuation of the problem, as seen from the drop of percentage from scenes 5, 6, 7, 9, 12 and 13, where the problem—the frog—is not shown in the pictures. This is an evidence to indicate that small children pay more attention to immediate situations/pictures rather than the continuity of the plot structure. The missing of the 'problem' plot rarely occurs with 11-year-old children and the adults.

3. Resolution

In the story, the resolution consists of two subcomponents: Picture 14a and 14b where the boy found the missing frog; and Picture 15 where he took either the missing frog or a substituted frog back home. From the data, it was found that almost all 4 and 6 years children could not realize about the missing frog at this stage, as shown in the use of the word 'frog' without any specific determiner or other types of modifiers such as 'his' or 'the missing,' as in (22)-(23).

(22) *lææwkôo mii kòp sìp tua / lææwkôo càp kòp paj tua nìŋ lææwkôo plòj*
 then have frog ten CLF / then catch frog go CLF one then flee
lææwkôo plòj plòj kòp / lææwkôo kòp tʰáŋmòt kôo díin tókkatæk mâj rɔɔ kòp tua níi
 then flee flee frog / then frog all then walk ‘toktaek’ not wait frog CLF this
 ‘Then there were 10 frogs. / Then (he) took a frog and freed..and freed..freed the frogs.
 Then not waiting for this frog, all frogs walked away.’ (4-08)

(23) *lææw dèk kôo hâj mâa jùu kʰâaŋ níi lææw dèk cà? càp kòp / lææw dèk*
 then child then CAUSE dog be side this then child will catch frog /then child
kôo joon kòp / lææw kòp kôo maa jùu bon bòk
 then throw frog / then frog then come be on ground
 ‘Then the boy let the dog sit here. Then the boy caught the frog. / Then the boy threw
 the frog. / Then the frog appeared on land.’ (6-04)

Although nearly half of children at 9 and 11 years old tended to miss the main plot at the end of the story (by not describing the missing frog), about half of 9 year-old children and more than half of the children in 11-year-old group appeared to mention the missing frog, as seen in (24) – (25).

(24) *naitʰîisùt dèkcʰaaj kôo cæa kòp tua tʰîi kʰăw càp dâaj / ciŋ bòk kàp*
 in the end boy then find frog CLF which he catch PAST / then tell with
câwkòp wâa / câwkòp kʰâa cà? mâj càp câw paj líian lææw kʰâa cà? hâj
 frog COMP frog I will not catch you go feed any more I will CAUSE
câw jùu kàp kʰrɔpkʰrua kʰrɔŋj câw
 you be with family POSS you
 ‘In the end, the boy found the frog he caught / so (he) said to the frog / “Frog, I will not take you back. I will let you stay with your family.” (9-02)

(25) *kʰăw cæa kòp... kòp tua tʰîi kʰăw líaŋ ?aw wáj / hĕn jùu kàp ?àə kòp ?iik*
 he find frog frog CLF that he feed get STAT / see be with uh frog another
tua nìŋ... / kʰăw kʰăw dâaj ?aw kòp kʰrɔŋj kʰăw paj / ?aw paj wáj tʰîi bâan...
 CLF one he he PAST get frog POSS he go get go put at home
 ‘He found the frog..the frog that he kept. / (He) found it with another frog.../ He, he took the frog / back home.’ (11-07)

Almost all adults could refer to the missing frog at the end of the story. However, interestingly, there is one case that did not mention the missing frog. He took the frog/s found in the last scene as another group of frogs, as in (26).

(26) *sìŋ tʰîi kʰăw cæa ná? kráp kʰîi kòp sçøŋ tua säämii pʰanjaa kan ná?*
 thing that he find PART PART be frog two CLF husband wife together PART
kʰráp / mii lûuk jùu lăaj tua tʰiidiaw / dûaj nisăj rák kaanpʰaconpʰaj
 PART / have child be many CLF PART / with character love adventure
jâaŋdæam là? kʰráp / tʰom pʰajajaam pʰûut kʰöo lûuk tua nìŋ càak pʰômææ kòp níi
 as usual PART PART / Tom try talk beg child CLF one from parents frog this

jàaŋdii / pʰɔmææ kòp kɔɔ cajdii kʰráp / hâj lûuk kòp dûaj kʰwaammâncaj wâa
 so well / parents frog then generous PART /give child frog with confidence that
 tʰɔm læ? tûup nîa cà? liaŋduu lûuk kòp tua nîi kʰɔŋ kʰäw jàaŋdii
 Tom and Tuup TOP will take care child frog CLF this POSS he so well
 'What he found was two frogs..husband and wife / who got many children. / With his
 adventure-loving personality, / Tom tried to negotiate with the parents asking for a little
 frog. / The parent frogs were nice / (They) gave a frog (to Tom) with confidence that Tom
 and his dog would be able to take care of his child very well.' (20-10)

Table 4 summarizes the percentage of acquisition of the ‘resolution’ plot of the story.

Table 4
Percentage of children who could acquire the two subcomponents of ‘resolution’:
1) Finding the missing frog and 2) Bringing the/a frog back

RESOLUTION \ AGE	4	6	9	11	20
1) FINDING THE MISSING FROG	20	20	50	70	90
2) BRINGING THE/A FROG BACK	10	40	60	90	
	20				

From Table 4, it is obvious that the percentage of acquisition of the last component of the story—which is ‘resolution’—develops across ages. More specifically, the first sub-component—finding the missing frog—seems to be recognized more than the second—bringing the/a frog back home. This indicates that the younger the age, the more difficult the participants are able to see the connection between protagonists in the story,— in this case it is the frog in the jar at the beginning of the story and the frog in the pond at the end of the story. Two possible factors might be involved in such failure. Firstly, children’s attention is immediate as can be found in the case of describing the main protagonists and setting. Secondly, it might be because of the length of the story which consists of 24 pictures (grouping into 15 sub-scenes). With limited memory storage and attention, the acquisition of the ‘resolution’ component is far from possible.

The acquisition of the overall macrostructure of the story

In order to see the overall picture of how much the participants in different ages acquire plot structure of the story, the area chart (Figure 1) is created. It illustrates the mean percentages of acquisition of the three main plot components—onset, problem and resolution—of the five groups of participants.

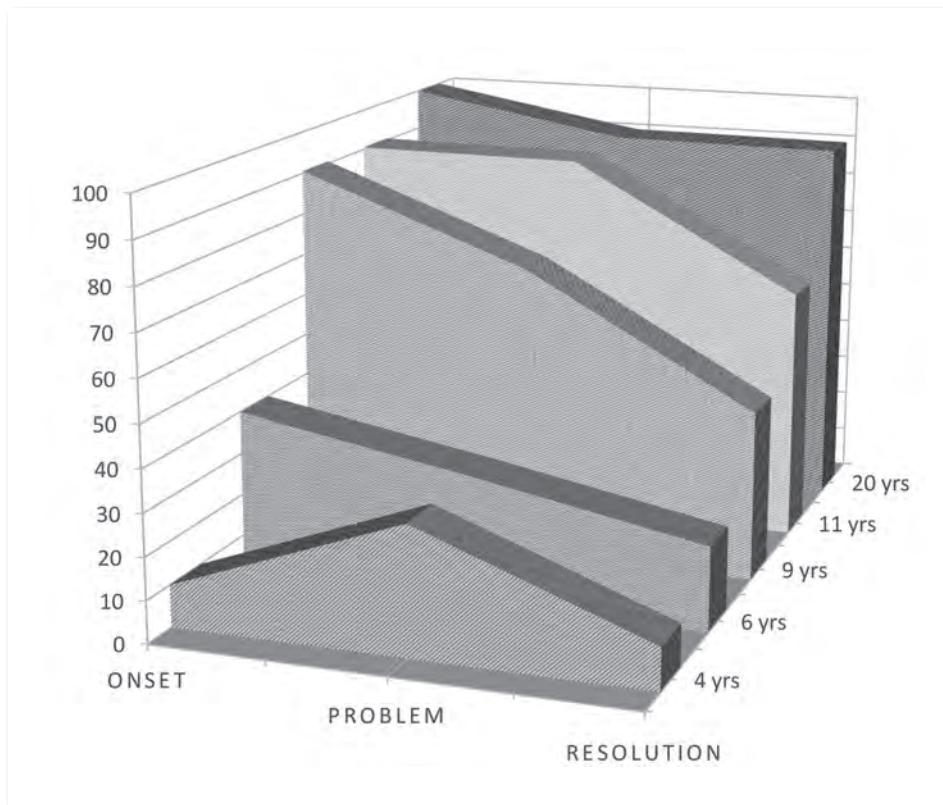


Figure 1 Levels of acquisition of the three main plot components of Thai narratives
at 4, 6, 9, 11 and 20 years of age

Figure 1 obviously illustrates developmental increase of plot compositions from 4 years to 20 years. This, basically, indicates that narrative competence is a type of linguistic-related skills developed through age. The older one gets, the more understanding about the relation of events in narratives can be achieved. In addition, it is also found that 'problem' seems to be the first and the easiest plot component that children could recognize, as the percentage of acquisition is the highest across all ages— 30.57% (4 yrs) $> 30.43\%$ (6 yrs) $> 70.57\%$ (9 yrs) $> 90.14\%$ (11 yrs) $> 90.43\%$ (20 yrs). Comparing the beginning and the end of the story, it is found that small children (aged 4 and 6 years) found 'onset' and 'resolution' unrelated to the main plot of the story. They could not relate all main characters and settings introduced at the beginning of the story; rather, they depicted each protagonist and setting component separately. Moreover, at the end of the story, they could not link the resolution—the finding of the missing frog—with the problem. What small children usually do when telling a story is describing each picture in isolation and naming all entities in each picture in an unpredictable manner. Accordingly, the end product of narrative for young children is just an arrangement of unrelated components. It can be observed that they usually use some particular words, mostly conjunctions such as lææw or lææwkô 'then', to link nouns, phrases and clauses not actually coordinated or sequentially linked, as in (27).

(27) *mii kòp jùu naj níi / lææw mǎa kàp dèk kô c'hɔp duu / lææw kòp ca ?òok have frog be in here /then dog and child also love see / then frog will out maa caak lõo /lææw p'õo t̄iinii lææw dèk kô hää kòp māj cæ /lææwkô hää come from jar / then when now then child also search frog not find /then search kòp māj cæ /lææwkô mǎa sàj naj lõo /... /lææw nókhûuk kô bin bin bin bin män frog not find /then dog put in jar then owl then fly fly fly like ?iikaa /lææw dèk lææw dèk kô takoon rîak mǎa /lææw dèk kô kô / dèk t̄am crow / then child then child then shout call dog / then child then then /child do ?araj /lææw kwaan kô maa /lææw wîñ wîñ wîñ /lææw dèk kàp mâa kô tòk / what / then deer then come / then run run run / then child and dog then fall / tòk paj tòk naam... fall go fall water*

'There was a frog in here. / Then the dog and the boy liked to see (it). / Then the frog came out from the jar. / Then now..then the boy could not see the frog. / Then (he) could not see the frog / Then put the dog in the jar. /.../ Then the owl flew flew, flew like the crow. / Then the boy.. then the boy shouted at the dog. / Then the boy / what was the boy doing? / Then the deer came. / Then ran, ran, ran / Then the boy and the dog fell / fell into.. fell into the water.' (4-08)

CONCLUSION AND DISCUSSION

From the examination of explicit expressions related to the three main plot components/macrostructure—onset, problem and resolution—of Thai children's productive narrative of Frog Stories, it is found that children develop their narrative skills across ages. In other words, the older they get, the more they can construe and transfer their recognition of the story's components in narratives. Overall, the problem component tends to be most expressed explicitly in all ages, followed by the onset and the resolution components. This finding might imply the degree of simplicity of the problem component over the others.

In relation to the onset component, 4 and 6-year-old children are unable to fully acquire both characters and settings of the story in narrative fashion. Although they talked about the boy, the dog, the frog and other elements in the room in Picture 1, their narratives do not demonstrate the relationship between those characters and setting. Children express these basic elements separately such as, *there is a boy, there is a dog or the boy is looking at the frog* without talking about their relationship. This is a finding against the universal view of narrative plot component acquisition (Brook, 2014) that children acquire macrostructure at 5 years of age. Taking age and education background into account, in Thai context, children at 4 years either do not enter school yet or have just started kindergarten, whereas 6-year-old children are in their 3 years of kindergarten. It should be noted that in Thailand children under 6 years of age are said to be under childhood education system. According to Childhood Education Curriculum 2017 (2017: 6), issued by Thai Ministry of Education, childhood education focuses its attention on physical, emotional, psychological, social and intellectual development of children. Kindergartens set up education including with much emphasis on activities to encourage children to be ready for higher levels of education. At school, they engage in various

nonacademic activities, enabling them to develop their sensorimotor and general cognitive skills. Playing is said to be the basic type of activities widely used during this period. In addition, it might be possible that storytelling is not basically used as a tool to attract children's attention when caretakers or teachers do activities with children. Schools in Thailand neither educate students about the importance of reading nor encourage students to develop their habits as avid readers as reported in A Survey on Reading of Thai Population (2017: 3) by National Statistic Office of Thailand that Thai children under 6 years of age spend only 42 minutes per day for reading and nearly 40% have not yet developed the reading habit. As a consequence, this might affect children's language developmental delay compared to what proposed by Brook (2014) that at 5 years children should be able to acquire plot components. In addition to this, according to Piagetian cognitive development, children between 2-6 years old are in the 'preoperational stage'. At this stage, they can use language or symbols to represent or talk about their surrounding concrete entities. However, they still lack logical thinking and reasoning. As a consequence, they could not imagine how characters and settings in the picture are linked logically.

On the other hand, children in 9 and 11-year-old group significantly perceive the existence and the relationship between characters and settings. Through imagination, they, for example, deliver that the dog belonged to the boy, the frog was caught and fed by the boy and the dog, and etc. It is noted that children at 9 and 11 are in the third and the fifth grade of elementary school. Accordingly, it might be assumed that formal education seems, to some extent, to be the marking period of narrative acquisition.

Considering in details, although the problem component has the highest percentage of acquisition, the two subcomponents of the problem component—1) the missing of the frog and 2) the search for the missing frog—receive different results. As young as 4 and 6 years old, the majority of children—70-80%—could perceive and express about the missing of the frog from the jar explicitly. However, once the frog went missing and the boy and his dog were in search for the missing frog, the majority of children in these age groups could not continuously maintain the thematic motivation of the two characters successfully. They rarely mentioned the frog. It should be noted that in search-for-the-frog scenes, the frog had disappeared from the pictures. This might be one possible reason that makes young children ignore or forget to talk about the frog, but shifted their attention to the existing components in the pictures, which included the boy, the dog, the rat, the bee, the owl and the deer. It is considered that cognitive development might play an important role in this part. The 4 and 6-year-old children are said to be in the 'preoperational stage' of cognitive development. Without logical thinking and reason, they could not find a reason why they had to talk about the frog in the scenes where there was no frog. Consequently, children paid more attention to the immediate context—only what they saw in the pictures.

Similar to the case of the onset component, it is found that children at 9 and 11 could significantly recognize the thematic motivation of the boy and the dog's actions—which were under the process of finding the missing frog—in the scenes where there was no frog. Such consistent percentage of acquisition of the plot components suggests and confirms that pre-formal education Thai children have not yet acquired narrative competence.



Lastly, the resolution component is found to be the most difficult and the last narrative macrostructure component children acquire. Not only children in kindergarten—4 and 6 years old—but 9 and 11-year-old children also find it difficult to recognize. About half of them could explicitly express either the finding of the missing frog or the boy's taking the missing or substituting frog back home. Although this finding seems to contradict the universal claim about the age of plot acquisition, it should be noted that the result in this study conforms to crosslinguistic study of Berman and Slobin (1994, p.49) which found that only 66% of children as old as 9 years of age could acquire all plot components of the frog story. In relation to this, there might be two possible explanations dealing with the use of the Frog Story. Firstly, the narratives used in these studies are productive narratives collected from a selected story by researchers. Participants have no prior experience about the story. Compared to retelling narrative and story of personal experience, children would at least know about the story before narrating it to the researchers. According to Reese, et al. (2012), retelling narratives is a method that researcher tells the children the story before having the children repeat what they heard, while telling a story from ones' own experience is a method of having children deliver a story about their past experience. Accordingly, thematic motivation of the story and characters are comprehended before the children narrate or repeat the story. As a consequence, they are said to be able to acquire all plot components as early as 5 years of age. On the other hand, in *Frog, Where Are You?* the picture book was shown to the children on the day they had to tell the story without any guideline about the story. Accordingly, they had to create the story themselves from their own understanding by trying to relate all pictures and characters in the story. As a consequence, with limitation in terms of cognitive development, most of the children could not fully acquire all 3 plot components. It can be suggested that the study about the effect of different data collecting methods on the acquisition of narrative macrostructure should be done in order to find out the advantages and disadvantages of these methods in the study of narrative.

Secondly, it is assumed that the length of the story might be one possible factor which affect children's memory about the theme. The picture book *Frog, Where Are You?*, used as data collecting instrument for the corpus, consists of 24 pages divided into 15 sub-scenes—some sub-scenes contain two pictures: a and b. Accordingly, this might overload children's memory and make it more difficult for them to maintain the story and characters' thematic motivation until the end. In order to prove this, it is recommended that future studies might take the length of the story into consideration and a test whether the length of the story affects the way children produce their narratives might be conducted.

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Appendix
Pictures of from Frog, where are you? (Mayer, 1967)



