CHAPTER 3

METHODOLOGY

The aims of this study are: a) to investigate the metacognitive strategies used by Thai university learners while reading an English text, and b) to determine the frequency of the metacognitive strategies used.

This chapter explains the key elements of the research methodology of this study: a) the subjects, b) the selection of the reading text, c) the instruments, d) the procedures for data collection, and e) data analysis (see Figure 3.1).
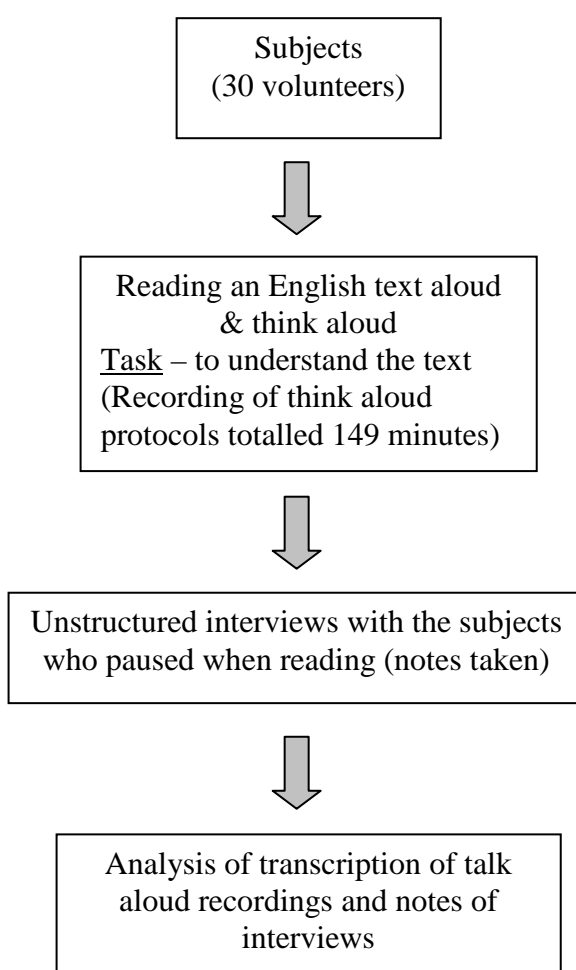
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┌─────────────────────────┐
│        Subjects         │
│     (30 volunteers)     │
└─────────────────────────┘
             ⇓
┌─────────────────────────────────┐
│  Reading an English text aloud  │
│          & think aloud          │
│  Task – to understand the text  │
│   (Recording of think aloud     │
│   protocols totalled 149 minutes)│
└─────────────────────────────────┘
             ⇓
┌──────────────────────────────────────┐
│ Unstructured interviews with the subjects │
│  who paused when reading (notes taken)  │
└──────────────────────────────────────┘
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┌─────────────────────────────┐
│  Analysis of transcription of talk │
│   aloud recordings and notes of   │
│            interviews             │
└─────────────────────────────┘
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Figure 3.1 Methodology used

3.1 Subjects

The subjects were 30 first-year Thai students from the Faculty of Education, Prince of Songkla University, Pattani Campus, Thailand. They volunteered to take part in this study therefore the researcher had no control over the subjects' proficiency level. A description of the subjects is provided in Appendix 3. There were 25 female subjects and 5 male subjects. They were between 18 to 20 years old. Fifteen of them scored D and D+ for English I which is a compulsory subject for all students. Six of them scored C and C+. There were five subjects who received B and B+. Only one student obtained A and one had E.

As mentioned earlier, since proficiency was not the focus of this study, the English language proficiency levels of the subjects varied. All subjects were volunteers, and the researcher did not try to correlate language proficiency with the types of metacognitive strategies used as the aim of this study was to investigate the metacognitive strategies used by the subjects regardless of language proficiency.

3.1.1 Description of the Students at the Faculty of Education, Pattani Campus

In academic year 2007, 508 students were admitted to the Faculty of Education, Prince of Songkla University. 411 students or 80.9 % of them were from the Southern border provinces; 192 students were from Pattani, 134 students were from Narathiwat, 70 students were from Yala and 15 of them were from Satun (Registration Office of Prince of Songkla University, Pattani Campus 2007).

Figure 3.2 The map of Thailand

Source: Adapted from www.guidetothailand.com

Most of the students were from the southern border provinces and were Muslim.
Southern border provinces of Thailand, which comprise Pattani, Yala, Narathiwat,
Satun and Songkla, are located in the Malay Peninsula on the southernmost part
bordering northern Malaysia (see Figure 3.2), east to the Gulf of Thailand, west to the
Indian Ocean and Malaysia, and to the north bordering Nakhon Srithammarat, Pattalung
and Trang provinces (the Administrative Centre for Southern border provinces in Yala,
1988). Although similar to Yala, Narathiwat and Satun, Pattani is not situated near the
border of Malaysia but as the majority of people are predominantly Malay-ethnic

Muslims; therefore, Pattani, Yala, Narathiwat and Satun are referred to as Southern border provinces of Thailand. The total area of these provinces is approximately 13,711 square kilometers (Department of Provincial Administration, 1993).

There are *some features* which differentiate Southern border provinces from other provinces in Thailand. First, 80 % of the population is Muslim. Second, the majority of the population's mother tongue, as well as being the most common medium of communication, is a local dialect of the Malay language which is similar to that in Malaysia's Kelantan State (the Administrative Centre for Southern border provinces in Yala, 1988). Thus, two languages are used in these areas: Thai and Malay languages (Department of Provincial Administration, 1993; Tipyarat et al., 1994).

Although the students who made up the subjects in this study were from the southern border provinces and were Muslim, they could communicate in Thai well because the students who enter the university are also proficient in Thai as the entrance exams are in Thai, except for some subjects which require English, French, Japanese, Korean etc. In addition, the students have to use the Thai language in the school context. This is because Thai language is the national language.

As mentioned earlier in Chapter 1, given that there are no studies investigating the metacognitive reading strategies of Thai university students in southern Thailand, particularly in Prince of Songkla University (PSU), Pattani Campus, this study is conducted in this university with a group of first year students.

The researcher met the Head of Department of Education at PSU and asked permission to conduct the study with the students. Permission was granted. The researcher consulted the Head of Department about the subjects who could participate in the study and was allowed to meet the first year students majoring in Elementary Education. The researcher met the students and informed them that the researcher wanted to access the students' thoughts when reading a text in English. Volunteers were invited to take part in the research. The researcher informed the volunteers that the data collected would be confidential. 30 students volunteered to participate. The date and time for data collection was fixed. The researcher invited the other students who had not volunteered to be the subjects for the pilot test to determine the text to be used in the think-aloud protocols.

3.2 Instruments

The research instruments used in the study consisted of the following: a) the reading text, b) think-aloud protocols, and c) unstructured interviews.

3.2.1 Reading Text

The reading passage was selected from the reading text *Password 1:A Reading and Vocabulary Text* (See Appendix 1.4). The story provided background information of Mount Fuji.

3.2.1.1 The Pilot Test

In order to select an appropriate reading text, the researcher conducted a pilot test with two subjects. They were first year undergraduates from the Faculty of Education at Prince of Songkla University. The researcher met each subject separately but on the same day. Thai was used to communicate with them and to explain the study.

First, the researcher introduced herself and made some phatic talk so that the students would feel at ease. The researcher informed them that the researcher wanted to study what the subjects thought when reading English texts and ensured them that all data would be confidential. The task was to comprehend the reading text. The subjects had to speak aloud when they faced problems understanding the text. The researcher then introduced them to the think-aloud protocol and enquired if they were clear about the process. Then they were asked to return at a different time to read the text.

Each subject was informed that they would be given four reading texts and whatever they did not understand, they were to speak their thoughts aloud. They were allowed to use the Thai language when talking aloud as they were more comfortable in Thai and this would enable them to provide more information during the think-aloud protocol session. Chamot et al (1999:79) suggest that the think-aloud protocol can be done in the students' native language, specifically in this study – the national language. Then, the subjects were told that they would be recorded during reading the texts.

There were four reading texts as listed below:

a) A Holiday Horror Story : 229 words

b) Was Uncle Sam a real person? : 162 words

c) Global Pizza : 266 words

d) Mount Fuji : 281 words

Three reading stories (a-c) were selected from the textbook, *New Headway: Intermediate Student's Book*, which was used by the first year university students, Prince of Songkla University for the academic year 2007 (see Appendix 1.1-1.3). The text was selected because the level of proficiency of the population was indeterminate; so, it was believed that using texts which were from their textbook would probably help reveal their learning processes as such texts were in their known schema. The forth story (d) was from another source, *Password 1:A Reading and Vocabulary Text*, which was not used in the classroom. The researcher chose this text because in Thailand, the influence of Japanese culture on teenagers is high. Japanese fashion, food, and lifestyle make media news. Thus, it was assumed that the subjects would have heard something about Japan and so the story of Mount Fuji would facilitate the reading process because such knowledge would be in their known schema (see Chapter 2 section 2.2.1 for schema theory). Then, each subject was asked to read the four reading texts aloud and had to verbalize their problems in understanding the text whilst reading.

The first subject took about ten minutes to read each text, whereas the second subject took about five minutes for each text. Once each subject finished her readings, they were asked which text should be used as a stimulus for the reading protocols for the 30 subjects. Notes of the discussion were made. Both students chose the reading

text, Mount Fuji, explaining that they had heard this name earlier. The details of the subjects in the pilot test are shown in Appendix 2.

Three hours were spent on the pilot test and the researcher agreed with the selection of 'Mount Fuji' as the reading text for the 30 subjects. This was because both subjects preferred this text and the researcher was also of the view that this text facilitated the learning process as some of the background knowledge was in the known schema of the students.

3.2.2 Think-Aloud Protocol

The think-aloud protocol was used as a research tool because it helps the researcher identify what learners do when they face difficult words and it reveals their thinking process when faced with a reading text.

Normally, studying learning processes is difficult as it cannot be observed. One of the methodologies used to examine what goes on in a reader's mind or to understand their difficulties and strategies is the "Thinking-aloud protocol". Learners are asked to read aloud and think aloud. Chamot et al. (1999:68) mention that the think-aloud can reveal how one processes language. In terms of reading, when learners are confronted with difficult words or texts, they have to verbalize their thoughts on how they can decode such words (Goodman &. Burke, 1972; Goh, 2004). Thus, the researcher applied this technique to investigate the subjects' reading process and the use of metacognitive strategies when reading.

The think-aloud sessions lasted about 149 minutes. All think-aloud sessions were audio-recorded and the recording was transcribed (see Appendix 5 for transcripts).

3.2.3 Unstructured Interviews

Unstructured interview sessions were conducted with all of the subjects after they completed reading the text. The researcher wanted to find out why they paused and laughed during reading, especially the subjects who did not speak much in the think-aloud sessions (see Subjects 4, 5, 7, 8, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, & 30 in Appendix 5). The researcher took notes of the responses of the subjects. The interview questions were asked in Thai.

3.3 Data Collection Procedures

Data for this study was collected at different points of time (4 days) in the beginning of November 2007. Five groups of subjects came to read the text at different times. They were informed that all information they provided would be kept confidential. Their names and personal data would not appear in the study.

Thinking aloud protocol is chosen as a tool to investigate the strategies used by the subjects in the reading task. Chamot et al. (1999:68) define think-aloud as a technique where one verbalizes his/her thought processes while working on a task. The task in this study was to read aloud the text and say aloud any problems they faced in understanding the text and how they overcame these problems. The verbal reports produced by thinking-aloud protocols were transcribed and analyzed in order to determine the thinking processes of the subjects while reading the text.

3.3.1 Introduction of Think-Aloud Protocol

After meeting the subjects, the researcher explained in Thai what thinking-aloud protocol was. The word "Kid Dang Dang" (kid= think, dang= aloud) was used to refer to 'think- aloud' in Thai. They were told that they would read an English text and had to think-aloud or verbalize their thoughts or whatever went through their minds while reading the text. They were allowed to think-aloud in Thai as they read the text.

3.3.2 Think-Aloud Session and the Reading Task

After the introduction session, the researcher asked the subjects to read the text individually in a room while the rest of the subjects waited for their turn outside the room. Once again when the researcher met each subject, there was small talk to get to know each other in order to reduce the tension. Words such as "Pi" or older sister and "Nong" or younger sister/brother were used to address each other.

The think-aloud procedure was reviewed again in order to reinforce the subject's comprehension of the process. Then the reading text was given. The tasks were to comprehend the text and to verbalize their problems in understanding the text during the think-aloud session to the researcher. Besides, the subjects had to inform the researcher of the difficult words they faced.

The subjects first read the text and were asked to think-aloud or verbalize their thoughts when they encountered any difficulties in understanding the text. All sessions were recorded and late transcribed. The think aloud sessions lasted about 149 minutes.

The reading task in this study differs from the tasks in previous studies such as Paribakht (2005) who asked the subjects to guess the meaning of unfamiliar target words from the given reading text, and Rosli Talif & Ting (2001) who asked the subjects to retell the story after reading. But it was similar to one of Aegpongpaow's (2008) tasks. Aegpongpaow applied the think-aloud technique to investigate the participants' (in central Thailand) reading process and to identify their use of metacognitive strategies during the think-aloud session.

Although this study was similar to Aegpongpaow's study which investigated metacognitive strategies used by the subjects when reading, there is a major difference, i.e. the data presented. While the current research transcribes all the recordings and analyzes the metacognitive strategies used by the subjects, questions were not asked of the subjects while they were reading the text. Thus, the analysis was based on an analysis of the transcripts and the strategies used while reading. On the other hand, Aegpongpaow's study was based on answers obtained when she prompted her subjects by asking them questions so as to identify the use of strategies. The data and analysis was therefore based only on 'the question-answer'.

3.3.3 Unstructured Interview Session

After completing their think-aloud sessions, the researcher conducted unstructured interview sessions with all of the subjects so as to uncover their reasons for pausing/ laughing, or remaining silent in order to trace their comprehension of the reading text (see Subjects 4, 5, 7, 8, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, & 30 in Appendix 5). Notes were taken of all the interview sessions. The interview questions were:

- What did you think when you were reading the text silently?

- What are the words you did not understand in the text?

- Did you understand the story?

- Why did you laugh/ pause?

3.4 Data Analysis

This study adopts a qualitative approach to analyze the data. The researcher transcribed each interview verbatim (see Appendix 5). A detailed analysis was carried out on the transcripts. The data collected was coded so as to address the research question: - What are the metacognitive strategies used by Thai university students while reading an English text?

The data were then coded into the kinds of metacognitive strategies used. The researcher identified and labeled the various metacogntive strategies used by the subjects. The Thai transcription of the data was translated into English. Some examples of transcriptions from the think aloud sessions are provided in Chapter 4.

3.5 Conceptual Framework of the study

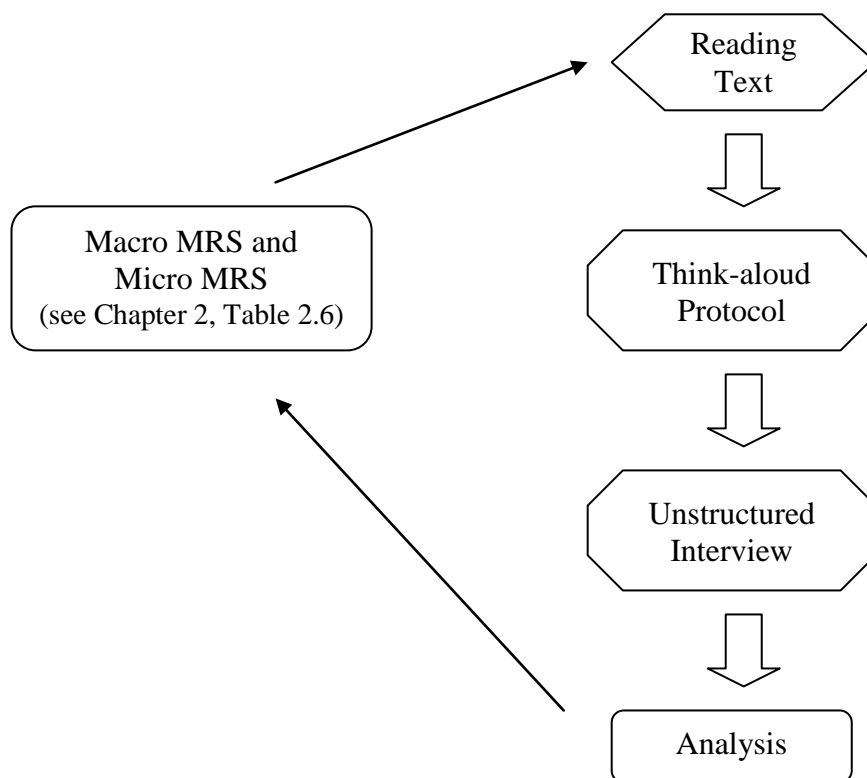In conclusion, the conceptual framework of this study was presented in Figure 3.3.

Figure 3.3 Conceptual Framework

3.6 Key to Transcription Conventions

In this study, the researcher used the following notational conventions for the

transcripts.

a)   /   Short pause (1 second)

b)   //   Longer pause

c)   words (L2)   Words (L2) means the English language which the

                                    subjects read

d)   *word(L1)*   Words in italics means the Thai language which

                                    the subjects spoke

| e) | *(words) (L2)* | Words in parenthesis indicates the English words which was translated from *word(L1)* |
| f) | *[= words (L2a)]* | Words (L2a) after equal sign indicates the English words which was rearranged in grammar |

a-b were from Baljit Kaur (1994:174) who adopted these conventions from Sacks, Schegloff, and Jefferson's (1974) and Levinson's (1989) notation conventions systems. The rest (c-f) were invented by the researcher. These conventions were used to produce the transcripts of this study.

This chapter reported on the methodology used in the present study. The following chapter will present the results of the study based on the analyses of the data obtained.