Research on the Relationship between Tasks and Strategies in Reading Japanese

Kanako Kudo

(Minnesota State University-Akita)

1. Background

Recently, Japanese reading research has focused on reading strategies and as a result, reading classes have begun to teach strategies to improve comprehension. However, strategy research in Japanese has just begun and the word "strategies" is used without clear definition (Ito, 1991).

"Reading strategies" refers to "actions that readers select and control to achieve desired goals or objectives " and emphasizes "the reader's active participation and actual way of doing something, or the reader's performance, whereas the term "skills" may suggest the reader's competence or only passive abilities (Carrell, 1991; p.3)." "Reading strategies" refers to activities like skimming, scanning, rereading, skipping unknown words, making inference from the context, making predictions, using background knowledge, recognizing text structure, underlining, outlining, note taking, summarizing, and imaging. Readers select strategies flexibly according to reading tasks, text conditions, and their knowledge.

Levin (1982 in Fischer and Mandl, 1984) states that learning tasks define learning (or reading) process and categorizes learning strategies into the four groups: (1)macro-reading strategies for comprehension (e.g. skimming); (2)macro-reading strategies for memorization (e.g. writing of summaries, answering of higher-order questions); (3)micro-reading strategies for comprehension (analogies, concretizations); (4)micro-reading strategies for memorization (rereading of details, answering of lower-order questions). Although this theory is fascinating in that it focuses on the relationship between objectives and strategies, actual reading process seems to involve more dynamic and complicated interaction of strategies. This research aims at clarifying the reading strategies employed to achieve different tasks.

The previous research suggests that good readers use strategies more flexibly and effectively according to reading tasks and they use different strategies from those which poor readers do (Alvermann and Ratekin, 1982; O'Mally et al., 1985; Wade et al., 1990). It is also suggested that using appropriate strategies improves comprehension and that teaching strategies under different tasks might be helpful. This research is designed to determine the efficient strategies for a specific task through comparison of the strategies employed by good readers and poor readers.

2. Objectives

The objective of this study is to explore the relationship between reading tasks and strategies in reading Japanese as a foreign language. The research hypotheses are as follows:

(1) The strategies used during reading differs depending on the two tasks (multiple-choice test vs. summary writing);

(2) The strategies used by good readers differ from those which poor readers use.

3. Method

3-1   Subjects

45 students of Tokai University participated in this study. After eliminating 10 students who did not complete two tasks, 35 students were employed as subjects. 13 students were from mainland China, 12 from Taiwan, 7 from Korea, another 3 from the Philippines, Burma, and Malaysia. Their Japanese language level ranged between upper-intermediate and lower-advanced and they had learned Japanese for 1.7 years as an average.

3-2   Survey period: Between May 17 and May 31, 1993

3-3 Reading material

"Keiei ni tsuite (On Business Administration)" by Akio Morita et al. was employed as the reading material. This text was used in the Intermediate 3 of ICU Summer Program where the pilot study[1] was conducted. Although the text is about business administration at SONY, the story itself is very clear and requires little expert knowledge on business administration. The text was divided into 4 parts and 2 of them were used for this study (text 1 and text 2). The length of the text was 1,302 letters for text 1 and 838 for text 2. Text 1 was used for task 1 (multiple-choice) and text 2 was for task 2 (summary writing). A vocabulary list with Chinese and Korean translation was attached to each text.

3-4 Reading tasks

Both multiple-choice and summary writing tasks were variables in this study. In actual reading classes, answering content questions and oral summarization are frequently used to confirm the comprehension of a text. The reading processes under these two tasks, however, are different in terms of the strategy used. The reading for answering questions on the content involves seeking specific information from the text, while reading for summarizing involves focusing on main ideas and reconstructing the important information. As for the multiple-choice task, since readers are required to answer the questions without the text, it can be predicted that they will try to remember details, main ideas, at the same time, predict the questions given later . Despite the fact that the two tasks in this study were written tasks, they were considered to be basically the same as answering questions and summarizing in a classroom in terms of their nature.

Both tasks require not only comprehension, but also memorization of information. However, the multiple-choice task requires memorization of both main ideas and details, while the summarization task requires memorization of only main ideas. Moreover, multiple-choice is a recognition task and summarization is a recalling task.

The multiple-choice test consisted of 20 factual questions and the

summary writing task was to write a summary in 200 letters. Summaries were scored based on the following criteria ranging from 0 to 10: 3 points for main ideas, 3 for supporting ideas, 2 for relating information, 1 for no irrelevant information, and 1 for no redundancy (Kudo, 1992a).

Prior to reading, the subjects were informed about the task and instructed to complete the task without referring to the text.
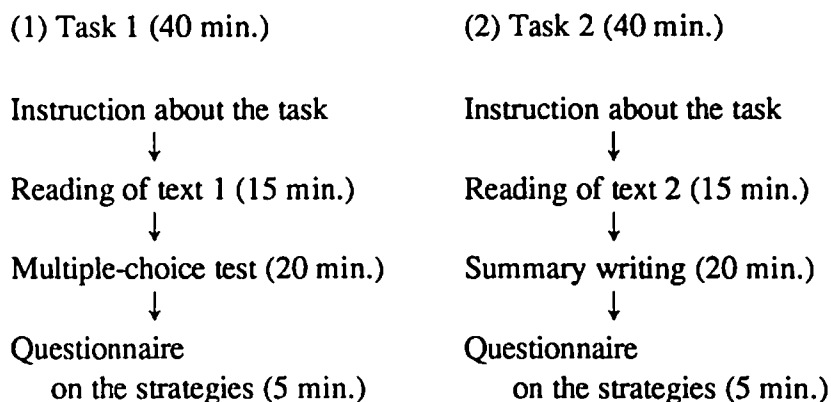
3-5 Questionnaire

A questionnaire was used to analyze strategies since the survey period and the administrative conditions were restricted. The questionnaire consisted of 23 strategies and the subjects were asked to select all the strategies they have used during reading to complete each task. Twenty-three(23) strategies were mainly from the research on the study strategies of college students conducted by Wade, Trathen, and Schraw (1990). They were as follows:

*a. skimming	m. using analogies
*b. rereading	n. thinking of concrete examples
c. checking new words	*o. using the background knowledge
d. skipping unknown words	p. summarizing the text
*e. finding keywords	*q. imaging/visualizing
*f. finding main ideas	r. making inference
g. focusing on details	*s. self-questioning of main ideas
*h. underlining	*t. self-questioning of details
*i. note-taking	*u. memorizing important
*j. outlining	words/sentences
k. paraphrasing of large units	v. relating to one's experience
l. paraphrasing of small units	w. translating into one's mother tongue

* : strategies in Wade et al.

The questionnaire also included questions for students' self-evaluation on the comprehension of the text and the performance on the task. The questionnaire was made in Japanese. Prior to the survey, each strategy was explained to the students.

3-6   Procedure

The study was conducted according to the following procedure:

(1) Task 1 (40 min.)   (2) Task 2 (40 min.)

Instruction about the task   Instruction about the task
            ↓   ↓
Reading of text 1 (15 min.)   Reading of text 2 (15 min.)
            ↓   ↓
Multiple-choice test (20 min.)   Summary writing (20 min.)
            ↓   ↓
Questionnaire   Questionnaire
    on the strategies (5 min.)   on the strategies (5 min.)

The students were instructed that they could underline and take notes while reading and were provided with a sheet of blank paper for note-taking. The paper was used for analysis of strategies.

4. Results and Discussion

4-1   Scores on two tasks

The scores on task 1 (multiple-choice test: 20 points) and task 2 (summary: 10 points) are as shown in Table 1.

Table 1   Means and standard deviations for task 1 and task 2

	n	M	SD
Task 1 (multiple-choice)	35	13.74	3.39
Task 2 (summary)	35	6.31	1.98

There was a significant correlation between the scores for task 1 and task 2 (r=.57).

4-2 Strategies reported under two tasks

The incidence of strategies reported by students reading under two task conditions appears in Table 2.

Table 2   Frequency of strategies reported under two tasks

Reading strategies	multiple-choice (n=35)	summary (n=35)
a. skimming	21	25
b. rereading	15	15
c. checking of new words	13	7
d. skipping unknown words	27	21
e. finding keywords	21	18
f. finding main ideas	19	19
g. focusing on details	9	11
h. underlining[2]	18	15
i. taking notes[3]	9	14
j. outlining/structuring of ideas[4]	7	12
k. paraphrasing of large units	5	8
l. paraphrasing of small units	4	4
m. using analogies	1	0
n. thinking of concrete examples	6	8
o. using background knowledge	6	6
p. summarizing	17	11
q. imaging/visualizing	16	14
r. making inference	4	2
s. self-questioning of main ideas	10	10
t. self-questioning of details	1	2
u. memorizing important words	24	15*
v. relating to one's experience	6	4
w. translating into one's tongue	8	2
x. others	0	1
means for number of strategies	7.62	6.97

$*p<.05$ (χ^2 test)

χ^2 test was used to determine the significance of differences. The strategy "memorizing important words or sentences" yielded a significant

difference between two task conditions. This strategy was used more frequently in reading for the multiple-choice test. This may suggest that reading to answer multiple-choice test questions requires more memorization of important words or sentences than reading for summarization.

All students reported multiple strategies under both tasks. The number of strategies reported was 7.62 under multiple-choice test and 6.97 under summarization.

4-3   Strategies reported by good and poor readers

14 good readers (multiple-choice: M=16.71, SD=1.44; summary: M=7.9, SD=0.90) and 11 poor readers (multiple-choice: M=10.64, SD=2.01; summary: M=4.4, SD=1.70) were selected for comparison according to the scores for two tasks.

Firstly, strategies used by good readers and poor readers under two tasks were compared to see the flexibility in the strategy use of both groups. (See Table 3)

Fisher's exact probability test showed two significant differences in the group of good readers, while no significant difference was found in poor readers. Firstly, the reported frequency of "outlining" was significantly higher for good readers reading for summary than for multiple-choice test questions (Fisher's exact, p=.03). Secondly, "paraphrasing of large units" was also used significantly more often by good readers reading for summary (Fisher's exact, p=.09). This may suggest that "outlining" and "paraphrasing of large units" are efficient strategies for reading for summary. The fact that significant differences were found only in the group of good readers may also support the idea that good readers use strategies more flexibly according to tasks than poor readers.

The comparison between the total strategy use under two tasks in both groups showed that good readers used more strategies for summary than for multiple-choice test while poor readers used more strategies for multiple-choice test. What this result suggests is that summary task requires more active involvement during reading and that good readers can control

strategy use under different tasks.

Table 3   Frequency of strategies reported by good and poor students 1

Reading strategies	good (n=14)		poor (n=11)	
	m-c	sum.	m-c	sum.
a. skimming	9	13	7	6
b. rereading	4	8	5	3
c. checking of new words	4	1	5	3
d. skipping unknown words	10	9	9	6
e. finding keywords	10	8	4	2
f. finding main ideas	5	10	6	3
g. focusing on details	5	5	3	2
h. underlining	7	6	5	2
i. taking notes	3	6	2	2
j. outlining/structuring of ideas	1	7*	2	2
k. paraphrasing of large units	0	4 †	2	3
l. paraphrasing of small units	1	0	2	2
m. using analogies	1	0	0	0
n. thinking of concrete examples	2	2	3	2
o. using background knowledge	3	3	1	1
p. summarizing	8	4	4	2
q. imaging/visualizing	6	7	4	2
r. making inference	1	0	1	1
s. self-questioning of main ideas	4	4	4	3
t. self-questioning of details	0	1	0	0
u. memorizing important words	10	8	8	4
v. relating to one's experience	3	2	0	2
w. translating into one's tongue	1	0	5	2
x. others	0	1	0	0
means for number of strategies	7.0	7.79	7.45	5.0

† p<.10   *p<.05   (Fisher's exact)

Secondly, to determine efficient strategies for both tasks, the strategies used by good readers and poor readers were again compared. (See Table 4).

As for multiple-choice task, "finding keywords (Fisher's exact, p=.08)" and "translating into one's mother tongue (Fisher's exact, p=.08) were the strategies which yielded a significant difference. Good readers used "finding keywords" more often than poor readers, which suggests that "finding keywords" is an efficient strategy for multiple-choice test. On the other hand, "translating into one's mother tongue" was used more often by

poor readers. From this, it may be inferred that "translating into one's mother tongue" disturbs reading for multiple-choice tests.

"Skimming (Fisher's exact, p=.08)" and "finding main ideas (Fisher's exact, p=.07)" were reported significantly more often by good readers during reading for summary tasks. These two strategies are considered to be efficient for summary tasks.

Table 4   Frequency of strategies reported by good and poor students 2

Reading strategies	multiple-choice		summary	
	good n=14	poor n=11	good n=14	poor n=11
a. skimming	9	7	13	6†
b. rereading	4	5	8	3
c. checking of new words	4	5	1	3
d. skipping unknown words	10	9	9	6
e. finding keywords	10	4†	8	2
f. finding main ideas	5	6	10	3†
g. focusing on details	5	3	5	2
h. underlining	7	5	6	2
i. taking notes	3	2	6	2
j. outlining/structuring of ideas	1	2	7	2
k. paraphrasing of large units	0	2	4	3
l. paraphrasing of small units	1	2	0	2
m. using analogies	1	0	0	0
n. thinking of concrete examples	2	3	2	2
o. using background knowledge	3	1	3	1
p. summarizing	8	4	4	2
q. imaging/visualizing	6	4	7	2
r. making inference	1	1	0	1
s. self-questioning of main ideas	4	4	4	3
t. self-questioning of details	0	0	1	0
u. memorizing important words	10	8	8	4
v. relating to one's experience	3	0	2	2
w. translating into one's tongue	1	5†	0	2
x. others	0	0	1	0

†p<.10 (Fisher's exact)

5. Conclusion

This research aimed at clarifying the reading strategy use under two tasks; multiple-choice test and summary writing, and exploring efficient reading strategies for each task through the comparison of the strategies used by good readers and poor readers.

Firstly, the analysis of the strategy use of all the subjects showed that "memorizing important words or sentences" was significantly more often used during reading for a multiple-choice test. Under a recognition task like a multiple-choice test, readers may try to memorize important words or sentences as retrieval cues.

Next, the relationship between tasks and strategies were examined for both good readers and poor readers. Good readers used "outlining" and "paraphrasing of large units" more for the summary task than for the multiple-choice task. On the other hand, there were no significant differences in the strategies used by poor readers for these two tasks. This may indicate that good readers use different strategies for different tasks while poor readers do not.

The comparison between good readers and poor readers also showed that for multiple-choice tasks, good readers used "finding keywords" more frequently than poor readers, while poor readers used "translating into one's mother tongue" more often. As for summary tasks, good readers used "skimming" and "finding main ideas" more often than poor readers.

As a conclusion, "memorizing important words or sentences" and "finding keywords" are predicted to be efficient strategies for a multiple-choice test and "outlining", "paraphrasing of large units", "skimming", and "finding main ideas" are efficient strategies for a summary writing task. In the pilot study, "finding keywords" for a multiple-choice test and "outlining" for a summary writing task were used only by good readers.

The necessity and the effectiveness of teaching these strategies and efficient methods of instruction should be explored in the future. However, it can be said based on the previous studies that teaching strategies can improve comprehension of poor readers who lack strategies. For instance, when a

reader cannot grasp the main idea of a text even if he has enough linguistic knowledge and background knowledge about the topic, he might have problems in his way of reading. In such a case, teaching efficient strategies will be help the reader. The future problem is how to apply the results obtained in this research to diagnosis and instruction for those who have reading problems.

Notes

(1) The pilot study was conducted prior to this study with the cooperation of 12 students enrolled in Intermediate 3 of ICU Summer Program in July, 1993. The results of the pilot study are in "Bulletin of the ICU Summer Courses in Japanese Language, Vol.9" (pp.136-144).

(2) The frequency of underlining, note-taking, and outlining was obtained according to the texts and the notes collected from students. Students underlined main ideas, keywords, or where they did not understand.

(3) According to the notes taken by students while reading, many students copied words or the text for memorization. Copying text was not used by western students who participated in the pilot study. Copying text for memorization might be a study method commonly used by Asian students.

(4) Outlining refers to written keywords or sentences with some conceptual structures or a conceptual tree/picture. Therefore, the notes without structure were counted as "taking-notes" even if the students reported it as "outlining".

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