

Reading Process and Metacognition

Yumi MATSUZAWA

(Received on September 30, 1999)

I. Introduction

“Reading” is looking at the written words and understanding what they mean. Strange to say, in Japan, reading English has been thought to be translating English texts into Japanese. However, this is wrong, because translating is quite a different skill from reading. It requires a good knowledge of the native language as well as of English. Translating prevents us from grasping what is important in the text. It gives a wrong idea that the purpose of reading is translating. Therefore, in reading, rigid translating in terms of reading activity should be avoided and some right way of reading comprehension should be found.

Therefore I may notice the reading process. When we read English texts, it is important to know the reading process. It is the route that information passes through when we read. Reading has two main ways of information processing: “bottom-up processing” and “top-down processing.” Recent research suggests that both bottom-up processing and top-down processing should be used simultaneously in reading, which is called “interactive processing” of reading.

And what is important is not the ability to understand the sentence structures and content of the texts, but the ability to recognize one's own thinking process. We are likely to show no concern about how we read the English texts. We should be conscious of the reading process and strategies more. Therefore I noticed the “metacognition.”

II. Three types of reading process

First of all, I consider about the bottom-up processing. Bottom-up processing is the way of reading texts that attend to linguistic forms at the level of words or sentences. From this point of view, reading is the decoding act and passive skill by which people receive the meaning from the written words. In bottom-up processing, people think language competence, which consists of vocabulary and grammar, is almost equal to reading proficiency. They also think language competence is the basis of reading, so by gaining language competence, reading proficiency is developed. In my opinion, bottom-up processing is like building a plastic toy-model kit.

That is, we compose the words and phrases into the sentences like constructing parts of the kit. Then do the sentences and paragraphs as well.

Secondly, I consider about the top-down processing. Top-down processing has two concepts. One is the process in which we specify the meaning from passage to words of the text. The other is the process in which we guess the meaning of words and sentences using background knowledge. The former is language processing. The latter is based on schema theory. In my opinion, it is not necessary to separate these two concepts, because people go on reading using schema from larger contexts to smaller parts of the texts. Top-down processing can be compared to an autopsy. When the doctors see the body, they check the appearance first to grasp the outline, and then they use scalpel to check the cause of death.

Top-down processing dominates over bottom-

up process-ing. It is inadequate only to have language competence to read. The readers have to have enough schema and make good use of it in order to really understand the text.

Thirdly, I consider about interactive processing. Inter-active processing is proposed to supplement what both bottom-up processing and top-down processing lack. They complement each other.

Micklech (1990 : 3) explains this processing: The reader is represented at the top of the diagram. When reading the text, the reader samples the printed material and instantaneously compares the data with what is already known, trying to find a match. The textual information activates prior knowledge, and the prior knowledge, in turn, activates expectations about what is in the text. This primarily unconscious, interactive process continues until the reader is satisfied with the match between text and prior knowledge, and comprehension has occurred.

This model might have a disadvantage to the reader. The reader concentrates too much on the linguistic elements from the lack of schema, so he /she might only partially understand the text. On the other hand, the reader who concentrates too much on the schema from the lack of linguistic knowledge might make incorrect predictions.

In three types of reading process, I notice the interactive processing. So good reading processing is the kind in which top-down and bottom-up processing interact with each other. We must usually have an awareness of our own reading process to develop reading proficiency. Ur (1996 : 148) states that when good readers encounter unknown words or unknown constructions, they think ahead, hypothesize, and predict instead of looking them up at once. At this point, it might be easier for readers to predict if they have an awareness of their reading process.

In Japan, the way of traditional reading is bottom-up processing. People concentrate too

much on each element of the sentence, which is a word, phrase, or sentence structure, therefore they don't pay attention to the comprehension of the content of the whole text. So we should have the reader employ the top-down processing from now on.

However, two processings seem the two dishes of a balance, so we keep two processings well balanced, and combine processings that complement each other. Bottom-up processing is used when linguistic input from the text is mapped against the reader's previous knowledge; top-down processing is used when readers use prior knowledge to make predictions about the data they will find in a text.

When we know the reading process, we can know what is important of the teaching "reading classes." We should pay attention to the reading processings of the students. If the students use mainly the bottom-up processing, which is that the reader concentrates too much on the linguistic elements from the lack of schema, the teachers encourage them to use the top-down processing. On the other hand, the students concentrates too much on the schema from the lack of linguistic knowledge, the teachers encourage them to employ the bottom-up processing not to make incorrect predictions.

At first the teachers show the students the processings match for them. Then the teachers guide the students so that they gradually choose the processing by their own.

When we read the texts, we guess the content of the texts. And inference of the content prompts the readers to want to know the rest of the story, and it becomes the power to read the texts further. If the readers read on the texts having the interests, they can acquire the ability to read through the texts. After that they can get the motives to read other texts if they can grasp the meaning of the texts accurately. In other words, we can think the reading process as the processing of prediction.

When we mistake the predictions, we have to change them and read the text on. So we have to acquire the knowledge of metacognition. That is why I place special emphasis on metacognition.

III. Metacognition

When I found that the reading process was important for us to read the texts, I wondered whether the reading strategy, which the readers chose to grasp the meaning of the texts, would match for them, and how we would find that they match solving the problems. I thought it was not always able to read English texts even if the readers had the knowledge of the reading strategies.

Skimming and scanning are known as the reading strategies. It is important for us to use them consciously, and is effective to follow the stream of the texts. Teachers encourage the students to use reading strategies. What has to be noticed is that teachers don't make the readers who can't read English texts without teachers' assistance. The aim of the reading teachers, I think, is training the students to read English without teachers' assistance.

What is the metacognition? Originally, it is the term of cognitive psychology. It means the awareness of one's own psychological process. From the point of English teaching, *Dictionary of Language Teaching and Applied Linguistics* give us the definition of 'metacognitive knowledge' as follows:

metacognitive knowledge/ also metacognition (in cognition and learning) knowledge of the mental processes which are involved in different kinds of learning. Learners are said to be capable of becoming aware of their own mental processes. This includes recognizing which kinds of learning tasks cause difficulty, which approaches to remembering information work better than others, and how to solve different kinds of problems. Metacognitive knowledge is thought to influence the kinds of learning strategies learners choose. (1993 : 227)

Koike (1995 : 271) explain the metacognitive ability as follows :

It is the ability to recognize objectively how far one understands the reading texts, to make strategies for solving problems after monitoring the present activity.

That is, metacognition is the awareness of the one's own thinking processes. In reading, metacognition shows the ability of guessing one's own activity and the result, checking that activity, and adjusting the reading strategy.

Silberstein (1994 : 12) explains metacognitive knowledge and skills monitoring using Williams's poem:

Students were aware of their goals and their choices of strategies to achieve these. They recognized discourse patterns of poetry and adjusted their strategies when they became dissatisfied with a current interpretation.

I would like to emphasize that the instructor help the students set goals for an initial reading and called attention to the skills and strategies that might be useful for them best.

It is advantageous for the readers to have the metacognitive knowledge and strategies. If the readers can not understand the situations of their own awareness, they can not recognize whether they understand the texts or not. Moreover, they can not recognize where they have problems. On the contrast, if they can understand the situations, they can recognize whether they understand the texts or not. And they can recognize where they have problems. Then they use the appropriate strategy to solve the problems.

When we think about the way to teach the students, Richards (1990) suggests how to make use of the metacognitive knowledge. He showed several reading strategies beforehand, and had the students choose the strategies that might be available for them best. After reading texts, he had the students think whether their choices are adequate or not. He guided the students so that they have the

awareness of their own reading processes.

Carrell (1989) suggests that it is important to consider not only the knowledge of the strategies, but also that of advising and correcting the use of strategies.

IV. Conclusion

When we think about the metacognition, we should think how we connect the understanding, and how we read the texts efficiently.

People think that it seems difficult to recognize and use metacognitive knowledge. However, I emphasize that you look yourself over again with cool eyes. You should change the view. Then you can grasp the content of metacognition, and use it effectively.

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「読解過程とメタ認知能力」概要

効果的なリーディングの指導を考えたとき、読解の過程を理解することで、これからの英語教育において何を重点的に教える必要があるかを考察した。特に、メタ認知能力を十分に活性化させるようにすることが望ましいことが分かった。