

# A Differentiated/Integrated Approach to Shadowing and Repeating

(Accepted on Mar. 31, 2000)

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**Key words** : shadowing, repeating, interpreter training (IT)

## Abstract

Research into interpretation is in the pioneer period in Japan. In the early 1990's, empirical and theoretical research on interpretation was initiated. The research then went on to the stage of exploring the applicability of interpreter training techniques (ITT) to second language acquisition (SLA).

This paper addresses a typical interpreting training skill of "shadowing" and tries to differentiate the skill from another skill of "repeating." It attempts to discuss the applicability of these skills to enhance language skills. Discussion will lead to what may be an effective approach for the skills to be applied to enhancing language skills: a differentiated approach or an integrated approach.

## 1. Introduction

First, history of interpreting research in Japan will be briefly reviewed, then interpreter training and SLA will be discussed, placing specific emphasis on the application of ITT to language enhancement.

Shadowing and repeating, among various ITT, will be spotlighted from various spheres involving such concepts as order of acquisition, motivation, consciousness raising, neurolinguistics.

Lastly, we will examine what may be an effective approach of the relevant skills to enhance language skills: a differentiated approach or an integrated approach.

## 2. History of interpretation research in Japan

Research into interpretation in Japan, in contrast to that in Europe, is still in the pioneer period.

Mizuno (1999) says that by the end of the 1980's, a handful number of researchers wrote some papers on interpretation. But they did not include theoretical or empirical research carried out overseas. Earlier literature on interpretation includes works done by interpreter-researchers based mainly on communication theory. Empirical research began to emerge in the 1980's. Some of the research involved such aspects as human memory, neurophysiology, neurolinguistics, the role of anticipation, the ear-voice span (the time lag between the onset of original speech and the onset of its oral rendition), syntactical deviation between the source and target languages, and socio-cultural aspects.

In the early 1990's, empirical and theoretical research began to be facilitated along with the establishment of the Interpreting Research Association of Japan in 1990. Kondo (1997) reports on the increasing publication of papers and essays on interpretation since the early 1990's. In line with the increasing interaction between Japanese researchers and their overseas counterparts, interpretation research in Japan is expected to develop its own unique characteristics. Even though researchers may not be able to conduct scientifically valid controlled studies, they can accumulate much more observational studies, case studies, and small-scale empirical studies.

### **3. Interpreter training (IT) and second language acquisition (SLA)**

#### **3.1. Taxonomy of ITT**

The following is an excerpt from ITT taxonomy by Hiramatsu (1999a) relevant to this paper.

shadowing

to perform listening and speaking simultaneously without language conversion.

repeating

sentence-level repeating during a pause after the original utterance.

reproduction

discoursal-level repeating as reproduced by the paragraph unit.

#### **3.2. ITT and SLA**

With the development of interpretation research in Japan, the interface between interpretation and SLA has also been explored. Another practical reason for attention being paid to IT is attributed to the fact that learners successfully achieved language development regardless of whether they actually became professional interpreters or not. Torikai (1997) notes that what is conspicuous is the tendency of offering IT at universities as part of language teaching rather than training prospective interpreters. Based on Mizuno (2000) and other sources, there are now about 50

universities offering interpretation-related courses. About a decade ago, there were only a handful of universities which offered interpretation courses. The ideal situation may be that students enrolling in interpreter training courses are equipped with adequate and sufficient language proficiency and that interpreter training should not be blended with language teaching, as Ilg (1999) appropriately points out. Hiramatsu (1999b) stressed the dynamism of applying Japanese-English interpreting techniques to English language acquisition with an eye to the unique grammatical features and disparity that lie between the two languages. Komatsu (1999) maintains that though blending of interpreter training and language teaching is generally shunned, especially in Europe, whereas it is a reality in Japan. This requires researchers and practitioners to pay attention to those learners whose primary need is to improve language proficiency. The interpreter training program contains many elements that are conducive to effective language acquisition especially for intermediate and advanced learners.

#### **4. The roles of applying ITT to language enhancement**

Torikai (1997) lists eight reasons for IT application to English language teaching; three of them having the potentiality to support English acquisition, which can be used in actual working communication; five for compensating weak points inherent in the “communicative approach.”

The former three reasons are: top-down processing, listening strategies, and output skills. The five reasons of the latter are: vocabulary, prosody, accuracy, critical-thinking (logical analysis), and intercultural communication.

Interpreters use the utmost of top-down processing at the time of interpreting and even before making preparations for actual jobs. When they try to obtain background knowledge, they read materials extensively through 1) getting the main idea, 2) skimming/scanning, and 3) internalizing knowledge. Listening strategies are employed for inferencing unknown words and comprehending information in the order of how the original utterance is perceived by the interpreter. The practice of shadowing is expected to nurture active listening. The primary effects which are brought out through the practice of shadowing are reported by some researchers including Tamai (1998) are claimed to enhance listening comprehension. It is worth mentioning that Torikai (1997) asserts the effects of shadowing in the development of productive skills as well. The practice of shadowing has the possibility of converting the receptive skill of listening to the productive skill of speaking since instantaneous oral repetition and reproduction are carried out. Output skills are improved in interpreting especially in the training of consecutive interpretation. Some of the relevant ITT are “paraphrasing,” “summarization,” and “reproduction.” Interpreters try to expand their vocabulary tenaciously as a daily practice and intensively before carrying out actual jobs. Contrary to random

memorization on the word level, interpreters try to grasp word meanings in contextual situations through extensive prior research and reading. They also try to activate and internalize those words through the practice like “quick response.” According to the taxonomy by Hiramatsu (1999a), quick response is defined as “word or phrase-level conversion between the source and the target languages.” Someya (1996) emphasizes the role of shadowing as a means to strengthen the prosodic sense. Prosody includes such factors as accent, intonation, how to place a pause between sense groups, sentence stress, and linkage/assimilation of sounds.

The communicative approach primarily aims at “fluency rather than accuracy.” When precise reading comprehension is required, the ITT called “sight translation,” “sense group reading,” and “slash reading” are effective. Hiramatsu (1999a) defines these ITT as follows. Sight translation means “to translate orally while seeing the script.” Sense group reading means “to comprehend the message by the unit of sense groups.” And slash reading refers to “marking sense groups clearly through slashes to facilitate the sense group reading.” Regarding critical thinking (logical analysis), it is often said that Japanese learners of foreign languages are poor at logical thinking such as communicating analytically. Interpreters get engaged in critical thinking even subconsciously during their jobs, especially at the time of consecutive interpretation. The last one among the eight reasons is intercultural communication. The teaching of intercultural communication, both as a part of language pedagogy and as an independent sphere of its own right, will serve a vital role in the years to come.

## 5. Shadowing and repeating

### 5.1. Shadowing

#### 5.1.1. The nature of shadowing

The word shadowing originally comes from psychology. Lambert (1988:381) defines shadowing as “a paced, auditory tracking task which involves the immediate vocalization of auditorily presented stimuli, i.e. word-for-word repetition in the same language, parrot-style, of a message presented through headphones.” This is one of the most frequently employed skills in the training of simultaneous interpretation. As Yashima (1988) admits, there was no established terminology for this skill in the 1980’s. For this reason, it is also called “repeating / follow-up / following / simultaneous repeating.” The classification by Someya (1996) provided momentum for Hiramatsu (1997) to develop a distinction between shadowing and repeating. Miura (1997) also differentiated between these two concepts. Someya classifies the skills into two types: shadowing (= simultaneous repeating) and retention (= consecutive repeating). “Retention” corresponds to repeating. Someya puts emphasis on the function of repeating in that the skill aims at the retention practice. Shadowing

contributes to improving accent, pronunciation, stress, etc. Of course, it serves to enhance so-called active listening. Repeating, as will be discussed in the next section, serves to automatize the working knowledge of language as well as to strengthen retention of information in short-term memory (STM). A neurolinguistic explanation of this skill is simple yet convincing. Two primary areas in the left hemisphere of the human brain are Wernicke's area and Broca's area. The former is involved in understanding language (receptive functions), and the latter in speech (productive functions). Therefore, aphasia, a pathological condition of losing the ability to use and understand language, takes place when either of these areas is damaged. Shadowing activates these two major language areas because listening and speaking take place simultaneously. As Uemura (1995) emphasizes, it is vital to be geared to a holistic approach to language learning, i.e. activating and exploiting as many parts of the brain as possible.

It is beneficial to take up some discussions about the merits and demerits of shadowing. Magoshi (1993) quotes the view of Weber at the Monterey Institute of International Studies (MIIS). Weber holds the view that there are no merits in the practice of shadowing in that essential properties of simultaneous interpretation do not start with mechanical repetition of information. For this reason, the practice of shadowing is confined to the first several hours of simultaneous interpretation training at that institution. Magoshi raises an objection to Weber's view on the grounds that shadowing is effective where there is great disparity between two languages like Japanese and English. Magoshi continues that Weber's opinion may hold true for similar European languages. Yonehara (1994) holds a neutral standpoint on shadowing. She introduces the basis of the negative opinion that shadowing will not cultivate the skill or habit of grasping the "information core." Nevertheless, she maintains that shadowing is an important training for the purpose of acquiring pronunciation, intonation and natural sentence patterns and expressions.

### 5.1.2. Modes of shadowing

Someya (1996) classifies shadowing into three types: prosody shadowing, content shadowing, and silent shadowing. In a sense, prosody shadowing is a mechanical repetition without paying full attention to the content. Its primary purpose is to imitate exactly accent, stress, intonation, and even emotions. This contributes to active listening and improving pronunciation. The second type, content shadowing, needs close attention to the content as well as to prosodic features. The third type called silent shadowing is applied when the original speech is delivered at the speed of 180 words per minute or more.

Hiramatsu (1997) added another type of shadowing to Someya's classification, i.e. conversion shadowing. This seems to be the most difficult type of shadowing. What we are supposed to do is to listen, to repeat, and to convert the message silently in the brain. This is more difficult than

performing actual simultaneous interpretation. To put it roughly, simultaneous interpretation is accompanied by two kinds of stimuli: listening and speaking. On the other hand, conversion shadowing imposes three kinds of stimuli on the brain: listening, vocal repeating, and silent language conversion. Conversion shadowing may be envisioned as an acoustic image in the brain. Even professional interpreters are not always accustomed to this type of shadowing. Based on the reasoning that the introduction of more stimuli accelerates activation of the brain and the memory system, this mode is challenging to practice.

As can be inferred from the theory depicted in 5.3. (Working memory and the articulatory loop), another type of shadowing is put into practice, i.e. varied speed shadowing. Using the speed control gain of audio-players, this mode of shadowing is practiced to facilitate fast language processing in the brain.

### 5.1.3. Shadowing with speed variables

As will be mentioned in 5.3. (Working memory and the articulatory loop), the speed involved in processing language plays a vital role in enhancing language skills. Speed variables are always taken into account when practicing shadowing with the use of the speed control gain of audio players. The normal or slow speed is used for the practice of precise shadowing, and the fast speed is employed with an eye to improving language processing.

## 5.2. Repeating

### 5.2.1. The nature of repeating

There is no uniform or conventional way to distinguish repeating from shadowing. From both theoretical and pedagogical viewpoints, Hiramatsu (1997) made a distinction between these two skills. While shadowing is practiced with a time lag of a few seconds, repeating needs a "pause" after the utterance. The information bit of this utterance is usually confined to a single sentence. Repeating more than two sentences, preferably by the unit of paragraphs, falls under a different category, i.e. "reproduction." Repeating or repetition in the traditional language class is, in many cases, carried out while seeing the written text. As Miura (1997) appropriately points out, repeating should be practiced without referring to the text. This mode gives greater load to the brain, resulting in enhanced STM retention and accelerating automatized language use. It is interesting to note that this skill is inseparably related to the term "elicited imitation" used in SLA. When learners are instructed to repeat a sentence which they see or hear, they often make changes in the sentence so that it becomes more like their own utterance. This takes place due their insufficient knowledge of linguistic rules. Therefore, elicited imitation can be employed as a grammaticality judgment test to measure the learners' knowledge of a language. Someya (1996) asserts that the average limit of

“exact” repeating is a sentence consisting of about 20 words. In terms of training interpreters, the value of exact repeating is questionable. This is because the nature of interpreting is not the conversion of the “superficial structure,” but what counts most may be the notion of “deverbalization,” which had been predominantly advocated until the middle of the 1980’s. The notion of deverbalization, in other words, means that the “meaning” should surpass the “form.” But from the point of SLA, as the notion of elicited imitation shows, trying to repeat as precisely as the original carries significance in acquiring language proficiency. In a nutshell, shadowing nurtures flex and response, whereas repeating serves to enhance automatized or working knowledge of the target language. Since IT does not include language training in Europe, the practice of repeating was not regarded as an ITT.

### 5.2.2. Modes of repeating

The taxonomy by Hiramatsu (1999a) defines repeating as “sentence-level repeating during a pause after the original utterance.” Repeating by the sense group rather than by the sentence is employed for novices and for a sentence consisting of many words. This way of the repeating practice is advocated by Uemura (1998). Speed-controlled practice for repeating, as well as for shadowing, is recommended with an eye to enhancing the memory span.

### 5.3. Working memory and the articulatory loop

Bell (1991) explains that the STM possesses active characteristics consisting of three components: articulatory loop, visuo-spatial scratch pad, and central executive.

Cook (1996) quotes a theory put forward by Gathercole and Baddeley in 1993 which accounts for an aspect of STM called “working memory.” Working memory refers to the memory system used for holding and manipulating information while various mental tasks are carried out. This consists of a “central executive,” which controls how information is passed around the memory system in the mind, and visual and phonological “slave systems” controlled by the executive. Working memory is used for processing information while the mind works on various tasks. The phonological system has a phonological store from which information tends to fade within a second or two. To extend its life, people repeat things over and over, whether aloud or silently. To comprehend this in more detail, let us review the explanation by Crystal (1997) on the function of the human brain associated with speech production. The basic structure of the utterance is thought to be generated in Wernicke’s area and is sent to Broca’s area for encoding. The motor program is then passed on to the adjacent motor area, which governs the articulatory organs. From this mechanism, it can be understood that even silent repeating activates Broca’s area, meaning that both Wernicke’s area and Broca’s area are activated by silent shadowing. Incidentally, silent shadowing is a representation of subvocalization.

By repeating, people are articulating the sounds of the words, even if they do not say them. To keep the information in working memory from fading, it must be constantly repeated. This continual repetition is called the articulatory loop; information is recycled back through the store to extend its life. Whatever we try to remember circulates round this loop. Interestingly, the speed with which information travels round the loop governs how much can be remembered. That is to say, the faster people can repeat things, the more they can remember. Memory span is restricted by the speed of articulation. This has several beneficial consequences to language processing. Fast speakers have better spans than slow speakers, everything else being equal.

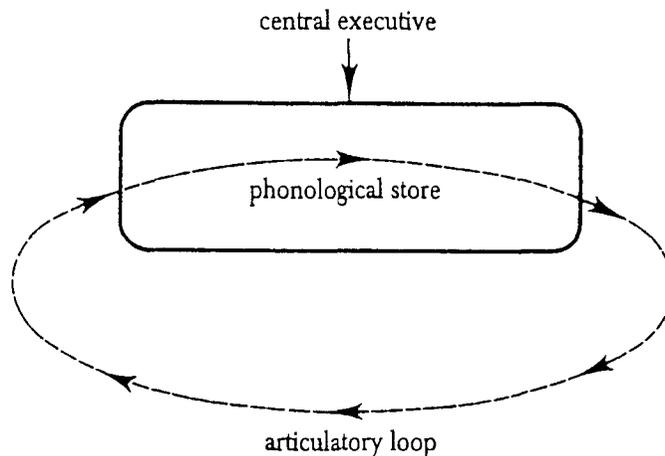


Figure 1. Articulatory loop theory of working memory (based on Cook 1996:68)

## 6. Order of IT

### 6.1. Order of acquisition

The term "order of acquisition" means the order in which linguistic forms, rules, and items are acquired in first or second language learning.

Researchers chose a number of grammatical structures (for example, progressive -ing, auxiliary be, and plural -s) to investigate the order of acquisition. They then collect samples of learner language and identify how accurately each feature is used by different learners. This enables them to arrive at an accuracy order. That is, they rank the features according to how accurately each feature is used by the learners. Some researchers then argue that the accuracy order must be the same as that of acquisition on the grounds that the more accurately learners are able to use a particular feature the more likely they are to have acquired that feature early.

Researchers have shown that there is a definite accuracy order and that this remains more or less the same irrespective of the learners' mother tongues, their age, and whether or not they have

received formal language instruction.

## 6.2. Two modes of interpretation

There are two modes of interpretation: consecutive and simultaneous. Komatsu (1999) argues that consecutive interpretation is the mother of all interpreting. He also says that once consecutive interpretation skills are acquired, simultaneous is a matter of practice. Most researchers and practitioners believe that consecutive interpretation should be trained first, then learners should work on simultaneous interpretation. There are two reported cases concerning the instruction order of consecutive and simultaneous interpretation.

One is reported by Uda and Tokunaga (1978) regarding the instruction of the Russian language in Hungary to beginners by applying the method of simultaneous interpretation between the two languages. This case is interesting for two reasons. One is the application of ITT as early as in the 1970's. The other point is that without abiding by the conventional instruction order of consecutive to simultaneous interpretation, the Hungarian researcher employed simultaneous interpretation techniques from the beginning.

The other case is reported by Mizuno (2000). He introduces a paper by Rejskova (1999) titled "Establishing a correlation between performance in consecutive interpreting and potentially good performance in simultaneous interpreting." This paper explores the relationship between consecutive and simultaneous interpretation. He examined two tests: an aptitude test for simultaneous interpreting and a consecutive test. He found a weak correlation between the two tests, coming to the tentative conclusion that consecutive performance does not sufficiently evaluate the aptitude for simultaneous interpretation.

It may be said from this research that a strict instruction order of consecutive and simultaneous interpreting does not exist.

## 6.3. Instruction order of ITT

Reported empirical studies on the instruction order of IT cannot be found. This area needs to be explored, but tentative benefits can be gained by practicing it irrespective of plausible instruction orders.

# 7. Motivation and the integration of skills

## 7.1. Motivation

One of the more complicated problems of SLA has been defining and applying the components of motivation. Motivation is, in a sense, the difference between success and failure. If people are

motivated, they will learn, and if not, they will not. Motivation is generally defined as the extent to which people make choices about goals to pursue and the effort they will devote to that pursuit.

There are two types of motivation: intrinsic and extrinsic. Intrinsic motivation is more important in education. The nature of intrinsic motivation can be depicted as follows. Intrinsically motivated activities are ones for which there are no apparent rewards except the activity itself. People seem to engage in the activities for their own sake and not because the activities lead to an extrinsic reward. Intrinsically motivated behavior is aimed at bringing about certain internally rewarding consequences, i.e. feeling of competence and self-determination.

Another factor which contributes to the enhancement of motivation is consciousness raising. Ellis (1994: 698) explains that the term consciousness raising is used by some researchers with much the same meaning as “formal instruction” (i.e. an attempt to focus the learner’s attention on the formal properties of the language). He contrasts “consciousness raising” with “practice,” the former term referring to attempts to help learners comprehend a grammatical structure and employ explicit knowledge to learn it. So, an alternative term for consciousness raising could be “intake enhancement.”

The way the term consciousness raising is used in this paper is a little different from the above view, in that learners’ motivation is enhanced by becoming conscious of what they are doing and what benefits can be gained from that practice.

## 7.2. Integration of skills

For almost six decades now research and practice in language teaching has identified the “four skills” —listening, speaking, reading, and writing— as of paramount significance.

The integration of the four skills is the only plausible approach to take within a communicative, interactive framework. The following observations by Brown (1994:219) support the integration techniques.

- 1) Production and reception are simply two sides of the same coin.
- 2) Interaction means sending and receiving messages.
- 3) Written and spoken language often bear a relationship to each other; to ignore that relationship is to ignore the abundance of language.
- 4) For literate learners, the interrelationship of written and spoken language is an intrinsically motivating reflection of language and culture and society.
- 5) By attending primarily to what learners can do with language, and only secondarily to the forms of language, we invite any or all of the four skills that are relevant into the actual situations.
- 6) Often one skill will reinforce another; we learn to speak, for example, in part by modeling

what we hear, and we learn to write by examining what we can read.

## 8. Conclusion

As we have seen, it is advantageous to take both a differentiated and an integrated approach at the same time in addressing shadowing and repeating. The differentiated part contributes to raising consciousness and motivation. The integrated part yields synergetic and reinforcement effects. A neurolingusitic explanation asserts that shadowing nurtures the holistic activation of the brain, and repeating improves memory span.

In actual practice, the author employs shadowing and repeating alternately in a session using the same teaching material.

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