On Some Aspects of Bilingualism and Second Language Learning

Mitsuko TAKAHASHI

1. Introduction

In this paper, we will discuss some aspects of bilingualism and second language learning. We will see what kinds of bilingualism there are in the world in section 2. We will classify bilingualism in terms of age in section 3. And we will examine the kinds of bilingualism most generally seen in Japanese students in section 4. In section 5, we will take up critical age hypothesis and point out some possible problems. In section 6, we will look at two kinds of skills in acquiring a second language, and touch on interdependency theory. In section 7, we will consider the importance of a second culture in bilingual competence. And in section 8, we will discuss schema theory in detail, and see the significance of experiencing a second culture in acquiring lexicon.

2. Varieties of Bilingualism

The literature on bilingualism most frequently takes up individual bilingualism, which refers to the linguistic abilities of an individual. Although the term 'bilingual' generally refers to people who have a high level of proficiency in two languages, there is no agreement in the literature on who should be called 'bilingual' or how to measure the degree of 'bilingualism'. Hamers & Blanc (2000:49) wrote that there are "difficulties inherent in the attempt to define and quantify languages in contact at all levels of analysis as well as to the absence of adequate measures and the lack of refinement of existing ones." As Hakuta (2005) stated, no single definition of individual bilingualism is broad enough to cover all instances of individuals who are called 'bilingual'.

On the other hand, the term 'bilingualism' can be applied as a wider concept, incorporating

social aspects of 'bilinguality' in various communities and societies. This societal bilingualism is parallel to the another term 'territorial bilingualism'. Territorial bilingualism refers to the societal state in which two or more languages have official status in their own territory. According to Hamers & Blanc (2000:31), examples of territorial bilingualism can be found in Belgium, Switzerland, Spain, Canada and India, each country applying the principle of territorial bilingualism in its own way.

Territorial bilingualism could be a lingua franca, when, beside the native languages of indigenous ethnic groups or nations, one or more languages of wider communication exist cutting across these groups and nations native to none or few of them (Hamers & Blanc 2000:31). Examples of territorial bilingualism are Swahili in Eastern and Central Africa, Tok Pisin in Papua New Guinea, and French or English in several African countries. The main characteristic of territorial bilingualism as a lingua franca is that it is "a superposed language imposed by political decision-making which introduces an exogenous language, normally inherited from a colonial past and used only in certain official domains (Hamers & Blanc 2000:31)". Now, the terms 'endogenous' bilinguality and 'exogenous' bilinguality need an explanation here. According to whether the speech communities of both languages are present or not in the social environment, the term 'endogenous' or 'exogenous' bilinguality is used respectively. Hamers & Blanc (2000:29) discussed on this point:

> An endogenous language is one that is used as a mother tongue in a community and may or may not be used for institutional purposes, whereas an exogenous language is one that is used as an official, institutionalised language but has no speech community in the political entity using it officially. Examples of exogenous languages are English or French in West, Central and East African countries; a Benin child from Cotonou, speaking Fon at home and going to a school where French is the exclusive language of instruction develops an exogenous bilinguality in Fon and French.

Bilinguals are also classified as elective and circumstantial bilingualism. Baker (2001:3) discussed that:

> Elective bilingualism is a characteristic of individuals who choose to learn a language, for example in the classroom. Elective bilinguals come from majority language groups (e. g. English-speaking Americans who learn Spanish or French). They add a second-language without losing their first language.

Thus, elective bilingualism is about choice. On the other hand, circumstantial bilingualism is often about survival with little or no choice. On this point, Baker (2001:3-4) wrote that:

> Circumstantial bilinguals learn another language to survive. Because of their circumstances (e. g. as immigrants), they need another language to function effectively (for example, Latinos in the United States). Consequently, their first language is in danger of being replaced by the second language. Their first language is insufficient to meet the educational, political and employment demands and communicative needs of the society in which they are placed. Circumstantial bilinguals are groups of individuals who must become bilingual to operate in the majority language society that surrounds them.

Another dichotomy of types of bilingualism is made according to the relative status of the two languages in the community; 'additive bilinguality' is the type of bilingualism which will act as an enriching stimulation for learners, whereas 'subtractive bilinguality' will occur when the second language is socially valued and the mother tongue is devalued in the learners' linguistic environment. In such a sociocultural context, their mother tongue will become 'subtracted' from their cognitive development (cf. Hamers & Blanc 2000: 29).

There are two extreme ends for the categorization of bilingualism. One extreme to defining bilinguality is so-called 'maximalist' approach. This approach is well described in Skutnabb-Kangas (1984). She maintains that a person is called bilingual when s/he becomes so proficient in the two languages that s/he is indistinguishable from the native speakers of the two languages. Such a case seems to happen when the parents are of different speech. According to Baker (2001:7), someone who is approximately equally fluent in two languages across various contexts are termed an equilingual or ambilingual or, more commonly, a balanced bilingual. However, the idea of balanced bilingualism should be only an idealized concept. As Fishman (1971; cited in Baker 2001:7) has argued, rarely will anyone be equally competent across all situations. In most cases bilinguals usually use their two languages for different purposes and with different people. For instance, a person may use one language at work and the other language at home and in the local community (Baker 2001: 7).

It may be said in this connection that someone who has two relatively undeveloped languages (nevertheless approximately equal in proficiency) should be called 'semilingual (Baker 2001:9)'. This term is given to describe people who do not have sufficient competence in either language.

Another extreme of bilingualism is so-called 'minimalist view'. This view requires a relatively low language proficiency, and "allows people with minimal competence in a second language to squeeze into the bilingual category (Baker 2001:6)". Tourists with a few phrases and

business people with a few greetings in a second language would be put into this extreme case. According to Hornberger (1989; cited in Hakuta 2005), most experts in the field prefer the latter as the beginning point from which a variety of bilingual skills can develop, including biliteracy.

3. Distinction of Bilingualism in Terms of Age

Age is one of the main dimensions of bilingualism. We can classify types of bilingualism in terms of age. The simplest classification is the distinction between early bilingualism and late bilingualism. According to Adler (1977; cited in Hoffman 1991:33), the former is called 'ascribed bilingualism', and the latter 'achieved bilingualism'. While the former is thought of as having acquired a second language under natural conditions, the latter is thought of as having learned it. Late bilingualism is often considered to be the result of second language learning. The person may study the second language for years, attending second language courses, and using other language-study materials.

Another distinction of bilingualism or bilinguality is made in terms of the following ages:

under 3 years of age → infant bilingualism or infancy bilinguality

between 3 years old to puberty → child bilingualism or child bilinguality

from puberty onwards → adult bilingualism or adult bilinguality

Age of acquisition of two languages is considered to lead to differences in cognitive functioning (Hamers & Blanc 2000:27). And age of acquisition tells us the context of acquisition of two languages.

Firstly, for example, infant bilinguals are most likely considered as having learned two languages simultaneously. This is also called 'simultaneous bilingualism (Hamers & Blanc 2000:26)'. Children who are infant bilinguals usually learn the two languages in the family context. Their father and mother might speak two different languages (or both languages) at home, which is also considered as 'natural' or 'primary' bilingualism (Hoffman 1991:33). In such an environment children will have opportunity to use both languages regularly at home and receive education in both languages, and will develop a balanced and compound bilinguality.

In connection with a balanced and compound bilinguality, the contrary idea of coordinate bilinguality is noted below.

a bilingual whose mother tongue is a foreign language in the society where he lives, who has been educated in a language other than his mother tongue, who used his first language

only with his family, but has never learned to read or write in it and has ceased to use it altogether, is likely to be a coordinate bilingual, dominant in his second language (Hamers & Blanc 2000:40).

Such cases as described above will happen to immigrant children. They will develop a coordinate bilinguality.

Secondly, child bilinguals and adult bilinguals are considered as having learned their mother tongue first and their second language later, which is referred to 'sequential bilingualism, or successive bilingualism (McLaughlin 1984; cited in Hakuta 2005)'. Later acquisition of the second language often takes place in a school context distinct from a family context for the first language (Hamers & Blanc 2000:28), which is also termed artificial or secondary kind of bilingualism.

Thus, age and the context of acquisition are considered to go together.

4. Kinds of Bilingualism in Japan

It is said that monolinguality is more commonly found in economically dominant groups, while the members of minority or subordinate groups tend to be bilingual or multilingual (Hamers & Blanc 2000:32). From this point of view, Japan is a monolingual country. Except for the children from bilingual families and the returnees from other countries, etc., most students in Japan have Japanese as their mother tongue, and they begin to learn English as a foreign language at school.

The kinds of bilingualism most generally seen in Japanese students at school are the following:

1) Elective bilingualism: Japanese students chose to learn foreign language in classroom, adding it without losing their first language. Their mother tongue enjoys a firm and stable position. The attempt to establish the foreign language will be quite voluntary, and failure to attain a higher level of proficiency will carry no serious consequences, as contrasted with students who live temporarily in a foreign country, feeling a greater need to learn the language of the host country in order to make social contacts or be able to follow the school curriculum.

2) Additive bilingualism: The two languages are both socially valued and students who learn the foreign language are expected to develop greater cognitive flexibility compared to monolingual counterparts, and enjoy the maximum benefits from learning it. It is clear that this is an additive language learning situation and the purposes of learning the foreign

language in schools are very positive ones, such as gaining knowledge of more than one language to respect other's points of view, broadening employment opportunities, and getting a bigger freedom by becoming able to communicate with a greater number of people in this world, etc..

3) Sequential or successive bilingualism: Japanese students learn their mother tongue first, and a foreign language later. Japanese is acquired first from one's birth, and foreign language learning starts afterwards.

4) Late or achieved bilingualism: Most of them begin to learn a foreign language from school age. The foreign language is 'learned' in education by attending the classes, using language-teaching materials.

5) Artificial or secondary bilingualism: Their mother tongue of Japanese is acquired first at home, and the foreign language is artificially or secondary learned in educational institution.

6) Child or adult bilingualism: The foreign language learning may start from childhood, puberty, or afterwards.

Skutnabb-Kangas (1984) identified four groups of the worlds' bilinguals. That is, 1) Elite bilinguals, 2) Children from linguistic majorities, 3) Children from bilingual families, and 4) Children from linguistic minorities. Among them, most Japanese students fall under the group of children from linguistic majorities. She characterized this group as follows:

These are children who learn another language at school, such as in foreign language classes. The learning of the second language may, for example, be considered advantageous because it is believed to be of wider educational or vocational benefit (for instance, English as a foreign language in the Netherlands or in many other countries). Usually majority children experience little or no pressure (from family or society) to become bilingual; a variety of well-prepared materials, designed especially for them, will facilitate the learning; and the risk involved in failing to achieve the learning objectives tends to be relatively small. (Skutnabb-Kangas 1984; cited in Hoffmann 1991:46-47).

5. Critical Age Hypothesis

The Critical Period Hypothesis states that there is a 'critical period' during which children are particularly adept at acquiring language, and this period is supposed to last from about the second year to the age of puberty (Hoffmann 1991:36). According to Hoffmann (1991:36-37),

There was said to be a biological link to the development of the brain's dominance

of language function through lateralization, i.e. the specializing of one side of the brain (usually the left) in dealing with language. Before the age of two language acquisition is not possible, it was thought, because of maturational factors, and after puberty the brain loses its plasticity, i.e. is no longer particularly receptive for the task.

It is considered that there is a period during which a child has a special facility for neuro-muscular patterns, i.e. during which s/he finds it particularly easy to acquire any pronunciation features (Hoffmann 1991:37). Hoffman (1991:35-36) insisted that:

> Children are believed to have greater phonetic-auditory ability, which enables them to distinguish and reproduce new sounds quite easily, whereas adults may experience some degree of interference from their L1.

The Critical Age Hypothesis implies that there is a biologically determined division between older and younger learners, which causes the difference of potentiality for acquiring a second language. However, except for the difficulties of acquiring native-like pronunciation, there is no physiological or biological reasons that adults cannot acquire a second language and be bilingual.

It is discussed in the literature that, except for the problem of pronunciation, there is not enough evidence to prove that people who start learning foreign language from puberty cannot reach the level of high bilingulility. Concerning this point, Hoffmann (1991:35) insists, 'It is not possible to find solid proof that children are better than adults at acquiring a second language'.

As Bialystok (2001:87) rightly pointed out, it may be that first-language acquisition is biologically restricted by a critical period, but evidence for such a restriction on second language acquisition is not convincing. In fact, we cannot prove anything about the nature of the relationship that may exist between the specialization of the human brain and the ending of its special capacity.

Younger children tend to have the chance to be exposed by a second language for a long period of time, which results in achieving higher proficiencies. However, if they stopped being exposed to the second language and ceased to learn it, their proficiencies would also decrease. In the same way, even if they start to learn a second language from puberty, their proficiencies would increase depending on how long they are exposed to it and how much effort they spared in learning it. As Hoffmann (1991:38) states, the successful establishment of bilingualism may well depend on psychological factors (such as attitudes, motivation and willingness to identify with the speakers of the second language), rather than physiological or biological ones, and this will apply to adults as well as younger children. What is more, adults possess a number of

analytical skills that can stand them in good stead when learning a second language. The question of a critical period seems to lead a misconception about the nature of language learning. That is, continuous and gradual improvement in cognitive abilities of second language would require many years. As Aitchison (1996; cited in Bialystok 2001:88) argued, language actually takes twenty years to develop.

For instance, we need to make much effort to improve our cognitive abilities to read such newspapers and magazines as *TIME, Washington Post, Newsweek,* and *Wall Street Journal,* etc., and establishing such a rich vocabulary would require many years of time. It is this intrinsic language ability that adults can continue to develop throughout their lifetimes.

6. Two Kinds of Skills and Interdependency theory

Cummins (1979; cited in Cummins 2003:322) made the distinction between basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP). Also, Gee (1990) gave the terms, primary and secondary discourses, which are parallel to Cummins' BICS and CALP respectively.

According to Gee (1990; cited in Cummins 2003:323), primary discourses are acquired through face-to-face interactions in the home and represent the language of initial socialization, whereas secondary discourses are acquired in social institutions beyond the family (e.g. school, business, religious and cultural contexts) and involve acquisition of specialized vocabulary and functions of language appropriate to those settings.

Interdependency theory states that the development of second language, to some extent, is dependent on the development of first language, and that the development of the two languages are considered to be closely interrelated. However, it is said that it only applies to CALP. Since the language skills of first language are considered to transfer to their second language in CALP, we can expect that cognitively demanding language processing to do academic tasks can be transferred across the two languages (USQ 2005:2.29).

7. Acculturation

Cultural identity is one of the important dimensions of binguality. A balanced binguality often goes hand in hand with a balanced biculturalism.

Lado (1957; cited in Hatoss 2005:4.2) even asserted that the acquisition of a second language is also the acquisition of a second culture. Since we live in a society and the language is used within the society with its culture, it is quite natural that mastering a second language entails

acquiring a second culture. As to the importance of culture in learning a second language, Brown (1994:165) insisted that:

> It is apparent that culture, as an ingrained set of behaviours and models of perception becomes highly important in the learning of a second language. A language is a part of a culture and a culture is a part of a language, the two are intricately interwoven so that one cannot separate the two without losing the significance of either language or culture.

Many other scholars admit the important, close relationship between language and culture. For instance, Lambert (1987:56, 58; cited in Gumperz 1996:470) said that culture is integrated with the language, and that the culture of the speaker is inextricably woven into the language.

Thus, it is important to experience the target culture to internalize the concepts of its lexicon, and to become a second language acculturated bilingual. Acculturation is considered to occur when an individual contacts with other cultures. Sometimes a person may become bilingual while remaining monocultural. However, a high bilingual competence should entail a better understanding of the target culture.

8. Schema Theory

There are abundant lexicon that we cannot really understand until we see them used in some actual scene. We will look at an example from an American man's experience in the following (cf. Sagawa 1989). The concept of 'garden' in Japanese is quite different from that of Westerners. The word garden may remind you of the place where flowers are blooming, and bushes and trees are arranged in a design. On the other hand, there is another kind of garden in Japan. It is a simple sand garden with large stones placed here and there. This kind of garden is sometimes a part of a temple. Even if it does not have colorful flowers, it is abstractly beautiful, and its atmosphere is peaceful and tranquil. The sojourner, who visited the stone garden in Ryoanji, had the following comment:

> The Japanese idea of a garden was quite different from the Western idea. If the flowers are blooming, they distract from the rocks, pond and hills, so the Japanese idea of a garden is a place without flowers. We can't think of a garden without flowers and perhaps the most important element in a garden is the flowers. (Sagawa 1989:7-8)

> I could understand and feel that this was a masterpiece of a garden. In Europe and

America there are no church gardens, so this sand and rock garden made me feel that the
Japanese garden had developed to a high and serious level. Japanese culture, tradition and
history developed a different idea of a garden. The Japanese have their own ideas about what
a garden should be and what a good garden is. When they look at a garden, they keep these
ideas in mind. (Sagawa 1989:9-10)

Now, we will discuss about what happened to this American tourist, when he rediscovered
the new meaning of the word garden by 'schema theory'. 'Schema' is considered as "packets
of information stored in memory representing general knowledge about objects, situations,
events, or actions (Cohen et al. 1993:28; cited in Nishida 1999:755)". Or, schemas are
regarded as "generalized collections of knowledge of past experiences which are organized into
related knowledge groups and are used to guide our behaviors in familiar situations (Nishida
1999:755)". Nishida (1999:754) explains this term further that:

> It is said that when a person enters a familiar situation, a stock of knowledge of
> appropriate behavior and an appropriate role he/she should play in the situation is retrieved.
> In other words, every interactant's social world is usually constituted within a framework
> of familiar and pre-acquainted knowledge about various situations. This familiar and pre-
> acquainted knowledge is called schemas (or schemata).

She (1999:756) says that people develop schemas by their direct experience and also by
taking about schema-related information, and that, when schemas become tightly organized,
the information the schemas contain becomes more usable. And she (1999:759) extracted the
following eight primary types of schemas for generating human behavior for social interactions:
Fact-and-concept schemas, Person schemas, Self schemas, Role schemas, Context schemas,
Procedure schemas, Strategy schemas, and Emotion schemas. These eight schemas are called
'primary social interaction schemas (PSI schemas hereafter)' by Nishida (1999:760). She
(1999:764) argues that acquisition of the PSI schemas of the host culture is a necessary condition
for sojourners' cross-cultural adaptation to the culture.

Then, what roles do schemas play in an actual situation? One of the characteristics of schemas,
according to Chase and Ericsson (1982: cited in Nishida 1999:764), is to guide the encoding
of information into meaningful chunks. And schemas are considered to provide a meaningful
context for the new information.

Among the eight PSI schemas above, fact-and concept schemas, context schemas, and
procedure schemas seem to be related to the American man's experience of seeing the new type

of garden in Japan.

Fact-and-concept schemas are concerned with general knowledge for concepts such as "bicycles are those vehicles that have two wheels, a seat, and handle-bars".

Context schemas, according to Turner (1994:37-39; cited in Nishida 1999:758), include predictions about appropriate actions to take. And procedure schemas are knowledge about the appropriate sequence of events in common situations (Nishida 1999:758).

When the American man encountered the unfamiliar situations at the stone garden in Ryoanji, he lacked appropriate schemas for this new situation because his fact-and-concept schema of garden had not included this type of garden yet. He needed to somehow integrate this new situation into the related schemas he already had before. What he did for this first was that he retrieved the fact-and-concept schemas of garden of his native-culture. He needed adjustments of fact-and-concept schema of garden of his native-culture to make sense of this new type of garden. What is usually done for adjustments is just elaborate his fact-and-concept schema of garden so that it stretches and includes the new type of garden. During the process of adjustment, he might feel stressed because he had to abandon the old schema of his native-culture and reconstruct the new schema, which is modified.

The example below also illustrates how fact-and-concept schemas are accommodated to a novel object.

> For example, an American who is visiting Australia would tune his/her schema for the wolf or the rabbit familiar to North Americans in order to understand a Tasmanian wolf or a rabbit bandicoot. His/her perception and memory of these animals would depend on simply fine-tuning pre-existing schemas. Accretion refers to a gradual and permanent modification of a schema. Each time a schema accommodates to a novel object, event, or situation, it registers the results. Slowly, the shape and complexity of the schema modify itself to the requirements of the environment. (Nishida 1999:767-768)

In the above case, only slight adjustments in schemas are made on a temporary basis to meet a transient problem, which is called 'tuning' schemas. The schemas metaphorically stretch and shape themselves for a moment to accommodate to the novel situation (Nishida, 1999:767).

The American man who saw the Japanese garden had to change his context schema, too. Context schema is related to such matters as behavioral parameters and predictions about appropriate actions to take in order to achieve goals in the context.

Usually, a garden is considered as being walked around in, or as the place to enjoy the views with flowers and trees. On the other hand, appropriate actions to take in stone garden in Ryoanji

would be: not to walk around in the garden; but to view the garden from the house which is facing the garden; to refrain from food; and to spend time quietly.

The foreign visitor to Ryoanji must have fallen into the psychological states of uncertainty and anxiety because he did not have appropriate schemas for this type of Japanese garden. His context schemas have disintegrated, and he should change his context schema from his native-culture to achieve some integration in its internal structure. The process of achieving integration can be called 'homeostasis' or 'self-regulation'. Concerning this point, Nishida (1999:767) states that:

> What they usually do is that they selectively direct their attention, through the attention-focusing function of their context schemas (Turner, 1994, 53, 57), trying to provide integration of information using their native-culture schemas. This is an example of homeostasis or self-regulation. However, people are subject not only to self-regulation or homeostasis, but also to self-direction to a changing environment, so that they may change or elaborate their internal structures.

Now, procedure schemas are concerned with knowledge about the appropriate sequence of events in common situations. And they include specific steps to take and behavioral rules for the events (Nishida 1999:758).

The proper sequential step to take in Japanese stone garden would be to: 1) enter the house that has the garden, 2) take off shoes at the entrance, 3) tour the house, and 4) view the garden quietly, while (perhaps) sitting in the open corridor.

Modification and elaboration of fact-and-concept schemas, context schemas, procedure schemas, and other kinds of schemas (=PSI schemas) take place at the same time through the experience of new situations or novel objects in the host culture. The native culture schemas are used as the basis to understand and "make sense of the new experience (Lakoff 1987)" in the host culture.

After learning and experiencing the host culture of the Japanese garden, Sagawa (1989:9) said that he could better understand the new ideas and could better view the gardens, and that he began to look at them from the Japanese point, a new and different point of view for him. From his comment, it is clear that he has acquired new schemas in the host culture. Because his new schemas are based on his experience, they will be stored in his long-term memory. It is expected that having such an experience is of much help to attain a higher level of bilingual competence.

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