UNIT 3 MULTILINGUALISM AND COGNITION

"To have another language is to possess a second soul." — Charlemagne (742/7 – 814), King of the Franks

Structure

3.0 INTRODUCTION

Multilingualism is the natural potential available to every normal human being rather than an unusual exception; it is only the environmental factors which may fail to provide the opportunity to learn another language that produce monolingual speakers: "Given the appropriate environment, two languages are as normal as two lungs" (Cook, 2002).

Every child is born with a language acquisition device having innate properties that plays a role in acquiring knowledge of language. This innateness is a biological endowment that Chomsky refers to as "Principles and Parameters". According to this theory, there is a universal grammar – where "Principles" are general features, while "parameters" are variables left open in the statement of principles that account for the diversity found in languages. Grammar is a collection of choices (example, a choice between SOV and SVO patterns of sentences). They define the limited numbers of grammatically permitted choices from the universal grammar menu of options. There are also lexical facts. Once the vocabulary is learnt and grammatical patterns are fixed, the whole system falls in its place and general principles programmed into general organ, just churns away to yield all the particulars of the language concerned (Chomsky as quoted in Jenkins, 2000).

In other words, there are different grammatical systems based on the choice of different parameters, when the child is exposed to them, his/her innate capacity

gets activated and he/she acquires knowledge of the rules of the language while using it for communication. When the child is exposed to more than one such linguistic system, he/she acquires more than one language and is known as multilingual.

3.1 OBJECTIVES

After reading this unit, you will be able to:

- Define basic concepts and structure of multilingualism;
- Explain multilingualism and cognition;
- Define acquisition of language; and
- Explain neural mechanism of multilinguals.

3.2 MULTILINGUALISM – BASIC CONCEPTS

Multilingualism is the knowledge of more than one language by a person or within a social group; it assumes the ability to switch from one language to another in speech, in writing, or in reading. Other terms describing this phenomenon include bilingualism, polylingualism, plurilingualism, diglossia, and languages-in-contact. Multilingualism may be personal, social, or intersubjective. A generic term for multilingual persons is *polyglot*. *Poly* (Greek word) means "many", *glot* (Greek) means "language"; and for the monolinguals is *monoglot*. *Personal multilingualism* refers to the knowledge and verbal behaviour of an individual, not necessarily shared by the whole community. *Social multilingualism* refers to the communicative practices of a nation, tribe, or other social group that sustains two or more languages. As in India, nearly 200 languages are spoken by its natives.

3.2.1 The Structure of Multilingualism

For many years, the popular belief was that a multilingual person should have learnt all of his or her languages simultaneously in early childhood and that he or she should have a native — like oral and written competence in all of them (Bloomfield 1933).

Today, a broader definition is more common. Accordingly, a person may be called multilingual if s/he uses his or her languages on a regular base and is able to switch from one to another where ever it is necessary, independently from the symmetry of his/her command of the languages, of the modalities of acquisition and of the distance between the varieties (Haugen 1953, Oksaar 1980 & Grosjean 1982). Thus, an Indian guest worker who learnt enough Swiss German dialect for his struggle for life in Switzerland may be considered bilingual with the same right (but not, of course, in the same way) as an interpreter working at the European Union and having systematically extended his or her 'native' French-English bilingualism.

Generally speaking, multilingualism is of two kinds: *Elite* – Language learned in a formal setting through planned and regular instruction as in a school system. *Neighborhoo*d – Here the language is acquired in a natural setting, acquired through the interaction with people speaking different languages. Theoretically

bilingualism is referred to as — *additive and subtractive bilingualism*. In *additive bilingualism*, a second language is acquired in addition to a relatively well-developed first language. In *subtractive bilingualism*, elements of a second language replace elements of the first language.

Researchers also distinguish between *simultaneous bilingualism*, which occurs when a child learns two languages from birth, and *sequential bilingualism*, which occurs when an individual first learns one language and then another (Bhatia & Ritchie, 1999). Either form of language learning can contribute to fluency. It depends on the particular circumstances in which the languages are learned (Pearson & associates, 1997).

It is known, however, that infants begin babbling at roughly the same age. This happens regardless of whether they consistently are exposed to one or two languages (Oller & associates, 1997). In the United States, many people make a big deal of bilingualism, perhaps because relatively few Americans born in the United States of nonimmigrant parents learn a second language to a high degree of fluency.

In other cultures, however, the learning of multiple languages is taken for granted. For example, in parts of India, people routinely may learn as many as four languages (Khubchandani, 1997). In Flemish-speaking Belgium, many people learn at least some French, English, and/or German. Often, they learn one or more of these other languages to a high degree of fluency.

No society or state has just one language, nor can language be isolated from culture. Societies are multilingual because of minorities that live within the dominant language group, and also because the official language itself presides over numerous dialects. In the Austro-Hungarian Empire, many linguistic and cultural communities had their own territories in a common state, dominated by German.

Language cannot be isolated from culture, because every language is a repository of values, images and memories: the semiotics of culture. The boundary between the semantics of language and the semiotics of culture is blurred, so that multilingualism shades into multiculturalism.

At the end of the 20th century, one or another form of multilingualism affect 60 per cent of the world's population. In other words, monolingualism is a boundary case of multilingualism, originated by very specific cultural conditions — and bilingualism is a particular form of multilingualism.

3.2.2 Multiligualism in India

India is said to be a socio-linguistic giant and the nerve system of this giant is multilingualism. "Indian multilingualism is huge in size, having 1620 mother tongues reduced to 200 languages….With the population of many of minorities larger than European countries"(Annamalai E. 2001).

This multilingual character of India is represented by its metropolitan cities like Mumbai and New Delhi, where people from all over come and settle down. For example, in Mumbai every child is exposed to at least four languages right from its infancy (Pai, 2005). Government of India has introduced the Three Language

Formula in its educational system, which means every child has to study two more languages other than their first language. The two languages are introduced simultaneously at upper primary level.

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What all this means is that the monolingual approach is neither appropriate nor adequate for the investigation of language use in a society where multilingualism was endemic and where, for the education at least, mono lingualism was the exception and not the norm" (Trotter, 2000).

3.3.1 Relations Between Languages and Their Users

Multilingualism is a particularly timely issue concerning language competence. A state of multilingualism may be achieved *naturally,* when a person grows up with two parents speaking different languages, or is a member of a minority, or lives in a multilingual community. In many parts of the United States, children are exposed to two or more languages as they grow up. Some children learn one language at home and another in a school setting.

Other children learn both languages at home, where, for example, the grandparents speak one language to the child, but the parents and siblings speak another. Still other children immigrate to this country speaking one language and then learn a second language in school once they are settled in their new environment. It may also be *acquired* later in life, through immigration or learning. Regardless of how one actually learns his or her languages, the result is an individual who has a greatly enhanced ability to think and communicate.

In terms of language processing, multilingualism offers a rich source of information about the organisation and use of the structure and processes of language already discussed in earlier chapter – not only concerning bilinguals or multilinguals but monolinguals as well.

Participant languages may be associated with different communicative media: conversation, writing, reading, and symbolic systems can use different, and not necessarily overlapping, languages. Three recent issues about multilingualism are briefly explored here:

1) The first concerns *"code-switching"*, the ability of multilinguals to select words from either of their languages during the course of uttering a sentence. Code switching maximizes the bilingual's ability to convey his/her intended message to another bilingual and to understand another bilingual's code-switching message.

   What is fascinating is that code-switching often requires no additional time (and may, in fact, use less time) than when words from only one language are selected or perceived. One interesting study of this ability is by Peynircioglu & Tekcan (1993). In this study monolinguals and bilinguals searched a completed crossword puzzle for words in their language (Turkish and English). The bilinguals were equivalent to the monolinguals in the time they took to locate words in only one of their languages. But bilinguals were faster than monolinguals when they collectively located words in either of their languages. This finding indicates an advantage for bilinguals over

monolinguals in word recognition, which can be demonstrated when they are allowed to use a strategy of identifying all of the words they know (from both languages).

2) The second important issue concerns the treatment of lexical (grammatical) and semantic knowledge by multilinguals. One theoretical view places lexical knowledge in language-specific memory stores but semantic knowledge in a common conceptual memory store (Kroll & Sholl, 1992), whereas the other theoretical view places both types of knowledge in language-specific memory stores (Paivio, 1986).

   The first theory predicts, for example, that semantic processing of a word in one language (e.g., translating a word presented in a categorized list into another language) should facilitate memory for that word (relative to translating that word when it is presented in a random list), whereas the second theory predicts that no such facilitation would take place (because contacting the meaning of a word in one language should not involve contacting the meaning of the word in other language).

   To date, the evidence supports the first theory, known as *"Concept Mediation"* account, especially in fluent multilinguals (Amrhein & Sanchez, 1997; De Groot, Dannenburg, & Van Hell, 1994; Kroll & Sholl, 1992).

3) The third issue concerns how language familiarity influences a person's ability to correctly identify another person's voice. In a study conducted by Goggin, Thompson, Strube, & Simental (1991), English monolinguals and Spanish-English multilinguals heard texts read by the same person in either English, Spanish, or Spanish-accented English. A short time later, these subjects then heard a voice "line-up" of individuals reading a different text, again in either English, Spanish, or Spanish-accented English. Goggin & colleagues (1991) found a distinctly different pattern in the responses for monolinguals and bilinguals. For monolinguals, actual correct identifications were highest for their respective language. However, for bilinguals, correct identifications were generally the same across the three voice types.

Collectively, these findings indicate that bilinguals' knowledge of two languages aids in their identification of the voice source of the messages they encounter and represents an interesting interaction between speech perception and higher level of language analysis. These findings also represent an advantage multilinguals have over their monolingual counterparts.

3.3.2 Rule-governed Language Choice

How does a multilingual person make an appropriate choice from among the varieties that constitute his/her repertoire? There is consensus among specialists that this choice is not arbitrary but governed by rules (Grosjean 1982, 145). Macrosociolinguistic research established the existence of domains appropriate for the use of one or the other language in diglossic societies (Fishman 1967).

Multilinguals would thus choose the appropriate variety taking into account whether it is a private or public affair, whether the conversation concerns the professional world or leisure activities, religion or education, etc. Where domains entwine (e.g. when an adolescent speaks with a minister [religion] about football [leisure] in the school building [education]), individual factors are isolated and pondered over. Language choice would be determined by characteristic bundles

of situational factors (Grosjean 1982). The same applies to heterogeneous diglossic societies. In all these cases, the value of each language is thoroughly appreciated. By choosing one or the other variety of his/her repertoire, the multilingual speaker makes the most rewarding use of his communicative resources.

3.3.3 Mixing is Rule-governed Too

Sometimes the choice of the appropriate language is not evident. Multilinguals can choose between a monolingual mode and a bilingual mode (Grosjean 1985), i.e. between monolingual and bilingual speech (Lüdi & Pym, 1984) respectively.

In the first case, the language that is not used is 'switched off' as far as possible.

In the second case, the speaker's whole repertoire is activated. Possible criteria for the choice of the monolingual or bilingual mode are: the interlocutors' repertoire, the degree of formality of the situation, normative representations of the interlocutors, etc. In other words, the situation is not 'automatically' bilingual even if both interlocutors are similarly bilingual. Bilingual mode requires a — locally established — mutual agreement on its appropriateness. This holds true for balanced as well as for unbalanced bilingualism (e.g. in the case of learners).

Systematic observations of examples like this have led to the hypothesis that there are rules and norms that overlap single languages and govern the harmonic, i.e. the 'grammatical', mixing of elements from different languages. It may be assumed that the matrix language chosen for various reasons (level of competence of the speaker, presumed level of competence of the audience, conformity with the situation) is activated and provides the cognitive scaffolding for the semiotic organisation of a representation (Talmy, 1985, 1995).

Searching for the appropriate words for what he wants to say, the speaker then scans both of his lexica (or both subsets of his global bilingual lexicon). To fill the gap of words he does not know, that are momentarily not accessible or that may not even exist in the matrix language — or to achieve a special discourse effect —, he will switch to the embedded language. But this is only possible if the lemma of the embedded language word matches the slot provided by the matrix language.

If this is not the case, the speaker will choose to switch to the embedded language for a larger stretch and produce an *"embedded language island"* (Myers Scotton, 1993). Thus, a model of bilingual speech must provide control procedures for the local matching of both language systems (Myers Scotton, 1993; Jake 1995; Jake & Myers Scotton 1997).

Recently, MacSwan (1997, 1999) presented a minimalist approach to intrasentential code-switching. He claims that "nothing constrains code switching apart from the requirements of the mixed grammars", a claim that does not entail a theory about which principles of grammar are relevant to code switching, but "leaves open any and all independently motivated considerations in linguistic theory to the analysis of codeswitching data".

A theory of a multilingual competence should thus be identical with any linguistic theory in general. Consequently, it can be concluded that a linguistic theory must,

in order to be complete, give a full account of the ways multilingual repertoires can be used to produce mixed utterances. Thus, new research on the bilingual or multilingual lexicon (e.g. de Groot and Nas 1991, Cenoz et al. 2003) must be taken into account by every general theory of the lexicon.

Vice versa, each lexical — and language — theory will have to be judged by its capacity to account for bilingual speech.

3.4 MULTILINGUALISM AND THINKING

Suppose a person can speak and think in two or more than two languages. Does that person think differently in each language? Further, do multilinguals – people who can speak two and possible more languages – think differently from monolinguals – people who can speak only one language? What differences, if any, emanate from the availability of multiple languages versus just one? Might multilingualism affect intelligence, positively or negatively?

Does multilingualism make thinking in any one language more difficult, or does it enhance thought processes? The data are somewhat self-contradictory (Hakuta, 1986). Different participant populations, different methodologies, different language groups, and different experimenter biases may have contributed to the inconsistency in the literature. Consider what happens when bilinguals are balanced bilinguals, who are roughly equally fluent in both languages, and when they come from middle-class backgrounds. In these instances, positive effects of bilingualism tend to be found but negative effects may result under other circumstances.

Let us distinguish between additive versus subtractive bilingualism (Cummins, 1976). As we have studied earlier, a second language is acquired in addition to a relatively well-developed first language in additive bilingualism; whereas, in subtractive bilingualism, elements of a second language replace elements of the first language.

It appears that the additive form results in increased thinking ability. In contrast, the subtractive form results in decreased thinking ability (Cummins, 1976). In particular, there may be something of a threshold effect. Individuals may need to be at a certain relatively high level of competence in both languages for a positive effect of bilingualism to be found.

In a study by Eleanor (1993), the relationships among language proficiency, learning mode, learning style, abstract reasoning, and age of second language acquisition in 227 adults was investigated. The subjects, most of whom were university students, included 17 monolinguals, 120 partial multilinguals, and 90 competent multilinguals.

For comparison with competent multilinguals, the monolinguals and partial multilinguals were grouped together. All were tested for language proficiency, learning style (diverger, assimilator, converger, accommodator), learning mode (concrete experience, reflective observation, abstract conceptualisation, active experimentation), and analogy-solving ability. Native English-speakers had higher analogy-solving scores than native speakers of other languages, regardless of language proficiency; competent multilinguals scored highest.

Among competent multilinguals, native English-speakers scored higher than non-native speakers. Competent multilinguals scored lower on reflective observation than did other subjects. There was also a significant negative correlation between learning mode and analogy-solving ability.

No significant difference was found in learning styles, and no significant interaction effect between language proficiency and learning mode or style on analogy-solving ability. Individuals learning the second language after age 12 had higher analogy-solving scores than those learning it earlier. However, early-second-language-learners were more likely to be competent multilinguals.

3.4.1 Other Benefits

The advantages that multilinguals exhibit over monolinguals are not restricted to linguistic knowledge only, but extend outside the area of language (Cook, 1999, 2002), and the substantial long-lived cognitive, social, personal, academic, and professional benefits of enrichment bilingual contexts have been well documented (Thomas & Collier, 1998).

Children and older persons learning foreign languages have been demonstrated to:

1) Have a keener awareness (Galambos & Goldin-Meadow, 1990; Ewert, 2006, 2008) and sharper perception of language (enhanced metalingual abilities, e.g. detection of anomalous sentences; Bialystok, 2001).
2) Foreign language learning "enhances children's understanding of how language itself works and their ability to manipulate language in the service of thinking and problem solving" (Cummins, 1981);
3) Be consistently better able to deal with distractions, which may help offset age-related declines in mental dexterity (Bialystok *et al,*. 2004);
4) Have a better ear for listening and sharper memories (Ratte ,1968; Lapkin *et al.,* 1990);
5) Develop not only better verbal, but also spatial abilities (Diaz, 1983);
6) Display generally greater cognitive flexibility, better problem solving and higher-order thinking skills (Hakuta, 1986).
7) They have better 'measures of conceptual development', 'creativity' and 'analogical reasoning' (Diaz, 1985), divergent thinking and figural creativity (Landry, 1968, 1972, 1973, 1974).
8) Bilinguals or multilinguals are more used to switching thought patterns and have more flexible minds.
9) Foreign language learners consistently outperform their peers in core subject areas on standardised tests. For instance, multilingual children in Brussels secondary schools outperform their monoglot schoolmates in problem-solving and fraction exercises;
10) They possess extra skills in language use, e.g. engage in transfer, borrowing, insertional, alternational, inter- and intra-sentential code switching (Grosjean, 1989), mixing, and translation patterns that are usual and natural rather than exceptional (as is in the case of monoglots), and analyse as psycholinguistically motivated hybrid utterances serving different interactional, linguistic, pragmatic, cognitive and strategic functions (Majer, 2006).

Thus, just like Latin once used to be taught as an academic exercise, mental gymnastics with the aim of cognitive training, it has been demonstrated that people who know more than one language usually think more flexibly than monolinguals.

3.5 ACQUISITION OF A SECOND LANGUAGE

Languages are learnt at different ages, in different situations and up to very different levels of competence. This has of course consequences for the way multilingual repertoires will be structured. It is thus crucial to analyse the social context in which the different varieties making up a multilingual repertoire have been acquired. Recent research has shown for instance that "passive" exposure to other languages during childhood can lead to an unfocussed form of language learning and to a form of competence that can be reactivated at later stages if necessary (Ellis 1995, Franceschini 1996, 1999).

A significant factor believed to contribute to acquisition of a language is *'age'*. Research has shown that some aspects of a second language, such as vocabulary comprehension and fluency, seem to be acquired just as well after adolescence as before. The mastery of nativelike pronunciation, however, seems to depend on early acquisition. In any case, there do not appear to be critical periods for second-language acquisition (Birdsong, 1999). The possible exception is the acquisition of native accent.

Adults may appear to have a harder time learning second languages because they can retain their native language as their dominant language. Young children, in contrast, who typically need to attend school in the new language, may have to switch dominant language. They thus learn the new language to a higher level of mastery.

It is assumed that learning a (second) language is a series of cognitive procedures by which the learner progressively constructs the grammar of the new language, not only assisted by a "language acquisition device" (more for L1, less for L2), but also with the support from more competent members of the community (Vygotsky 1978) in the compass of a "language acquisition support system" based on social interaction (Bruner 1982, 1983).

Research on second language acquisition has shown the importance of a set of interactive procedures. These may be observed in exolingual situations that provide the non-native speaker the necessary help not only to communicate, but also to continue his/her learning process (e.g. Krafft & Dausendschön-Gay 1994).

What kinds of learning experiences facilitate second-language acquisition? There is no single correct answer to this question (Bialystock & Hakuta, 1994). One reason is that each individual language learner brings distinctive cognitive abilities and knowledge to the language-learning experience. In addition, the kinds of learning experiences that facilitate second-language acquisition should match the context and uses for the second language once it is acquired.

For example, consider four different individuals. Ria, a young child, may not need to master a wealth of vocabulary and complex syntax to get along well with other children. If she can master the phonology, some simple syntactical rules, and some basic vocabulary, she may be considered fluent.

Similarly, Kishen needs only to get by in a few everyday situations, such as shopping, handling routine family business transactions, and getting around town. He may be considered proficient after mastering some simple vocabulary and syntax, as well as some pragmatic knowledge regarding context-appropriate manners of communicating.

Meenakshi must be able to communicate regarding her specialised technical field. She may be considered proficient if she masters the technical vocabulary, a primitive basic vocabulary, and the rudiments of syntax.

Sumesh is a student who studies a second language in an academic setting. Sumesh may be expected to have a firm grasp of syntax and a rather broad, if shallow, vocabulary. Each of these language learners may require different kinds of language experiences to gain the proficiency being sought. Different kinds of experiences may be needed to enhance their competence in the phonology, vocabulary, syntax, and pragmatics of the second language.

When speakers of one language learn other languages, they find the languages differentially difficult. For example, it is much easier, on average, for a native speaker of English to acquire Spanish as a second language than is to acquire Russian. One reason is that English and Spanish share more roots than do English and Russian. Moreover, Russian is much more highly inflected than are English and Spanish. English and Spanish are more highly dependent on word order. The difficulty of learning a language as a second language, however, does not appear to have much to do with its difficulty as a first language. Russian infants probably learn Russian about as easily as U.S. infants learn English

3.5.1 Single-System Versus Dual-System Hypotheses

One way of approaching multilingualism is to apply what we have learned from cognitive-psychological research to practical concerns regarding how to facilitate acquisition of a new language. Another approach is to study multilingual individuals to see how multilingualism may offer insight into human mind. For example, some cognitive psychologists have been interested in finding out how the different languages are represented in multilingual's mind. The *single-system hypothesis* suggests that two or more languages are represented in just one system or brain region (see Hernandez & associates, 2001, for evidence supporting this hypothesis in early multilinguals).

Alternatively, the *dual-system hypothesis* suggests that two/different languages are represented somehow in separate systems of mind (De Houwer, 1995; Paradis, 1981). For instance, might German language information be stored in a physically different part of the brain than English language information?

One way to address this question is through the study the multilinguals who have experienced brain damage. Suppose a multilingual person has brain damage in a particular part of the brain. An inference consistent with the dual-system hypothesis would be that the individual would show different degrees of impairment in the different languages. The single-system view would suggest roughly equal impairment in all the languages. The logic of this kind of investigation is compelling. But the results were not. When recovery of language after trauma is studied, sometimes the first language recovers first, sometimes the second/latter acquired language recovers first. And sometimes recovery is about equal for all the languages .

In a related situation, an early bilingual aphasic was trained in his native language but was given no training in his second language (Meinzer & associates, 2006). The researchers found significant recovery of the first language but no change in the individual's ability to use the second language.

The conclusions that can be drawn from all this research are equivocal. Nevertheless, the results seem to suggest at least some duality of structure. A different method of study has led to an alternative perspective on multilingualism. Two investigators mapped the region of cerebral cortex relevant to language use in two of their bilingual patients being treated for epilepsy (Ojemann & Whitaker, 1978). Mild electrical stimulation was applied to the cortex of each patient. Electrical stimulation tends to inhibit activity where it is applied. It leads to a reduced activity to name the objects for which the memories are stored at the location being stimulated. The results for both patients were the same.

The results of this study suggest some aspects of the two languages may be represented singly. Other aspects may be represented separately.

3.6 NEURAL MECHANISM OF MULTILINGUALS

The question whether we may speak of one entwined or several separated systems cannot be fully answered alone by the experimental studies discussed above. Neurosciences may offer additional insights. The functional magnetic resonance imaging (fMRI) has been able to throw light on a large number of factors.

Answers to questions like whether there is a difference between balanced and unbalanced bilinguals, Whether there is a, relation between the neuronal network constructed when learning a second language and the 'classical' language centre, whether the first be integrated into the latter and whether.

The research findings in the neuroanatomy of bilinguals are still contradictory and the analysis of cases of bilingual speech used by speakers with different kinds of multilingual competencies could shed new light on these questions.

Early bilinguals seem to build up a network in sufficiently adaptable to allow the integration of later acquired languages. Late bilinguals have to establish new neural areas to guarantee development of their late-acquired languages. These results could have an important impact on the structure of an integrated language theory. Such a theory will consider multilingual repertoires and their use in different contexts the default case, monolingual competencies and monolingual speech representing just one many cases to be explained. It will match new ways of modelling the dynamics of intercultural communication and contribute to it.

3.7 LET US SUM UP

To summarize, different languages seem to share some, but not all, aspects of mental representation. Learning a second language is often a plus, but it is probably most useful if the individual learning the second language is in an environment in which the learning of the second language adds to rather than subtracts from the learning of the first language.

Moreover, for beneficial effects to appear, the second language must be learned well. In the approach usually taken in schools, students may receive as little as 2

or 3 years of second-language instruction spread out over a few class periods a week. This approach probably will not be sufficient for the beneficial effects of bilingualism to appear. However, schooling does seem to yield beneficial effects on acquisition of syntax.

This is particularly so when a second language is acquired after adolescence. Furthermore, individual learners should choose specific kinds of language-acquisition techniques to suit their personal attributes. These attributes include abilities, preferences, and personal goals for using the second language.

3.8 UNIT END QUESTIONS

1) Describe the various processes involved in multilingualism?
2) Why study of multilingualism is important for cognitive psychologists?
3) What can multilingualism tell us about language structures and processes?
4) What are the advantages of being bilingual? Can you think of any disadvantages?
5) Give a detailed account of language acquisition of a second language.
6) Suppose you are an instructor of English as a second language. What kinds of things will you want to know about your students to determine how much to emphasise phonology, vocabulary, syntax, or pragmatics in your instruction?

3.9 SUGGESTED READINGS AND REFERENCES

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