Metalinguistic Awareness and Bilingual vs. Monolingual EFL Learners: Evidence from a Diagonal Bilingual Context

Sima Modirkhamene
University of Urmia, Iran

This paper reports a study of 85 Iranian EFL learners in the English Language Department of Urmia University. It explores the possible differences between performance of 38 Persian monolingual and 47 Turkish-Persian bilingual EFL learners on metalinguistic tasks of ungrammatical structures and translation. The underlying hypothesis is that bilinguals in diagonal bilingual contexts experience a significant development in terms of their metalinguistic awareness. Results of some t-test analyses indicated consistent differences between the two groups in favour of bilinguals. The findings, thus, strengthen the proposal that bilinguals may develop a more analytical orientation to language that may help them in learning additional languages. The findings are discussed in relation to implications on EFL learning as well as EFL teaching.

Keywords: Metalinguistic Awareness, Bilingual, Monolingual, Linguistic Background

Second language/s learning is a complex process that may be influenced by a variety of individual, social and psychological factors. One of the key issues that may lead to a diversified range
of findings in research on second language/s learning is the learner variable. Altman and Vaughan (1980), Ellis (1994), Klein (1995), Kormi-Nouri, Moniri, & Nelson (2003), and Modirkhamene (2005, 2006) maintain that among the plethora of individual learner variables, special attention should be given to their linguistic background, i.e. the role played by the learners’ previous experiences with language learning. This is due to the fact that linguistic background of learners has been identified to interact with learners’ strategies and cognitive processing in various learning tasks particularly in language learning situations. Therefore, this aspect of learner variables needs to be systematically evaluated as far as providing reasonable justifications for research on second language/s is concerned.

With multilingualism growing in speech communities, the interdependency between linguistic conditions on the societal level and the individual use and knowledge of languages is emphasised (Jessner, 2006). In recent years, there has been a tendency towards exploring cognitive aspects of multilingual proficiency, more specifically, through presenting the functions and roles that metalinguistic awareness in multilingual speech and learning can fulfil. It has been reported that the development of proficiency in two or more languages can result in higher levels of metalinguistic awareness, which in turn facilitates learning of second language/s (Ringbom, 1987; Cenoz & Valencia, 1994; Lasagabaster, 1998, 2000, Jessner, 2006). The main hypothesis in these studies is that cognitive advantages occur as a consequence of the bilingual experience. In other words, it is believed that knowing language/s other than an L1 extends rather than reduces the individual’s cognitive abilities, which, in turn, confers benefits rather than creates problems. The assumption is that a person who knows two languages has access to situations and experiences that are not available to a monolingual person. Since the notion of metalinguistic awareness is central to this study, the author intends to review briefly the main interpretations of metalinguistic awareness and its relation to bilingual development presented in the literature.
Metalinguistic Awareness and Bilinguality

Baker (1993: 122) defines metalinguistic awareness as "the ability to think about and reflect upon the nature and the functions of language". This includes knowledge about the demands of different language and literacy events and beliefs about oneself and others as language users (Rowe & Harste, 1986). Otherwise stated metalinguistic awareness refers to one's ability to attend and reflect upon the properties of languages. By metalinguistic development Paradis (1981) means both the development of individual's awareness of certain properties of languages and also to his ability to analyse linguistic input, i.e. to make the language forms themselves the objects of focal attention and to look at language rather than through it to the intended meaning. Cook (1997) explains metalinguistic awareness as the ability to play with language, as one of the features typical of a multilingual’s cognitive style in contrast to most monolinguals.

Learners manifest their metalinguistic abilities through various metalinguistic tasks. Some metalinguistic tasks involve identification and revision of syntactic, semantic, and phonological errors. The most explicit metalinguistic skill is the capacity to explain a grammatical error, explicate and articulate knowledge of the rules underlying the corrected sentence. Therefore, noting errors and correcting them can be considered as other example of metalinguistic skill. Examples of errors as far as language learning is involved include errors in terms of gender, singular and plural, verb tense and time, and word order, etc.

Most studies on the positive consequences of bilinguality as far as learning languages is concerned, according to Cenoz (2003: 81), “relate the advantages presented by bilinguals to the influence of bilingualism on cognitive development (e.g. concept formation, creativity) and specifically to metalinguistic awareness”. It is hypothesized that cognitive advantages occur as a consequence of bilingual experience (Cummins, 1976, Verhoeven & Vermeer, 1992). In this case, an indirect effect of bilinguality is taken into account, i.e. bilinguality affects cognitive aspects of language
learning, particularly metalinguistic awareness, and these, in turn, affect language acquisition/learning. If we accept the viewpoint that language development and cognitive growth are interrelated, and that this interrelationship makes bilinguals different from monolinguals, we need to find out how and to what extent they are different. One should understand what occurs when two different languages are present around a bilingual individual, and how this affects their language-related cognitive functioning.

A widely accepted discussion on the relation between bilinguality and cognitive aspects of learning is the one held by Vygotsky (1962) on general theoretical views on language development and its relation to cognitive development. For him, language plays an essential role in cognitive development, at least, from the time the individual has attained a certain level of language competence. He believes that language, first developed as a means of social communication, is later internalised and becomes a crucial tool in the shaping of cognitive processes, which will enable the individual to organise thought.

For Vygotsky, the evolution of cognitive growth and experiencing with more than one language has different consequences for the development of cognitive abilities. He further insists on the role of metalinguistic skills, namely on the control and self-regulation of cognitive processes induced by the use of more than one language.

Arguments on advanced cognitive functioning among bilinguals have particularly focused on metalinguistic awareness as the most characteristic cognitive ability. Metalinguistic awareness facilitates the acquisition/learning of language by exploiting the cognitive mechanisms underlying the processes of transfer and enhancement. These arguments are indications of the fact that bilinguals may develop a more analytical orientation to language through organising their two language systems. Herdina & Jessner (2002) categorise metalinguistic activities/skills as a sub-field of metacognition concerned with language and its use that comprise: (1) activities on reflection on language and its use and (2) subject’s ability intentionally to monitor and plan their own methods of linguistic processing in both comprehension and production. They
regard metalinguistic awareness as closely linked to the idea of monitoring in second language/s acquisition (SLA), which is “defined as the part of the learner’s system that consciously inspects and from time to time alters the form of the learner’s production” (Herdina & Jessner, 2002: 63). Herdina & Jessner (2002), and Jessner (2006) propose an adaptive and Dynamic Model of Multilingualism (DMM) which intends to provide an explanatory framework for the models that serve as a link between second language/s acquisition (SLA) and bilingualism, in so far as it can explain multilingual acquisition patterns.

According to DMM, multilingual proficiency can be described as the result of the effects both on the language systems and the cognitive system, which are subject to change. In Herdina and Jessner’s view, the theory of dynamic systems used in other sciences such as biology and psychology, presents a new approach to psycholinguistic phenomena by suggesting a holistic view of multilingualism. DMM presents multilingualism as a dynamic process of language development, where existing language systems show influence on developing ones.

Apart from dealing with cross-linguistic influence in multilinguals and the advantages gained from contact with several languages, the model also concentrates on cognitive aspects of language learning. Within the construct of multilingual proficiency, metalinguistic awareness is considered a key component in language learning. This factor becomes more crucial in third language acquisition (TLA) than in second language acquisition, as with increased learning experience, it can be expected that a speeding up of the language-learning process occurs. This, according to Jessner (1999), implies that the nature of metalinguistic skills in multilinguals differs from those found in monolinguals through frequency of use. DMM characterizes the speaker’s system as an ‘enhanced multilingual monitor’ (EMM), which is used by the multilingual speaker to watch and correct his language/s in a multilingual context.

Herdina & Jessner (2002), and Jessner (2006) establish a Multilingual factor (M Factor), including the EMM that brings advantages especially when a bilingual acquires/learns a third
language. They consider the M-factor as a dispositional effect that will have a priming catalytic effect in TLA. Through proposing the multilingual factor Jessner and Herdina express an essential difference between multilingual and monolingual speakers.

Evidence in the literature suggests that metalinguistic awareness and the language monitor experience a significant development in multilingual systems. Reynolds (1991) suggests that the necessity for the bilingual to control two language systems improves the efficiency of the ‘meta-componential system’ (for more details on metacognitive and a taxonomy of cognitive strategies refer to Phakiti, 2003, pages 697-699) of intelligence and their performance in a variety of meta-cognitive and metalinguistic tasks. The meta-componential system of intelligence, termed the ‘executive processes’ (Clyne, 1997), controls intellectual functioning by constructing plans and monitoring and evaluating information processing; it is responsible for a variety of processes such as understanding, selecting strategies, deciding how to perform them, and keeping track of what has been done and what remains to be done in problem-solving. Reynolds’ point of view is that it is the more efficient use of this meta-componential dimension of intelligence that would give the bilingual knowledge of the structure of both languages. Bialystok (1988: 502) calls the executive process the ‘fluid ability’ that is a key component in language processing. The knowledge of procedures, according to Bialystok, for solving a variety of language problems and the ability to execute those solutions through appropriate attentional focus is the function of control of linguistic processing. She posits that different language uses require attention to different aspects of the linguistic input. In conversation, for example, control is required to integrate and monitor the ongoing utterances, determining, for example, how pauses will be filled. Learning to read requires much higher levels of control of processing. It requires proper sampling and integration of formal and semantic information. These ‘processing skill components’ and ‘control of attention’ (Bialystok & Majumder, 1998) are two metalinguistic aspects of language learning confirmed to be advanced in various degrees among bilinguals of different levels of proficiency.
With regard to metalinguistic strategies, Clyne (1997) proposes that bilinguals, through developing bilingually, practise a form of contrastive linguistics comparing the syntax and vocabulary of their two languages, and that the necessity of monitoring and controlling two symbol systems leads to increased meta-componential abilities. Such an extended language monitor can be conceived of as having the following significant functions:

(a) Fulfilling the common monitoring functions (e.g. reducing the number of performance errors, correcting misunderstandings, developing and applying conversational analysis); (b) Drawing on common resources in the use of more than one language system; and (c) keeping the systems apart by checking for possible transfer phenomena and eliminating them and thereby fulfilling a separator and a cross-checker function.

(Herdina & Jessner, 2002:64)

It should be highlighted, however, that these advantages do not mean that monolinguals lack metalinguistic awareness. The point is, the nature of metalinguistic awareness in multilinguals differs from those found in monolinguals through frequency of use (Jessner, 1999). It may be possible that “they achieve this level a little later than bilinguals and that bilinguals are more developed than monolinguals” (Bialystok, 1988:508). According to Oxford (1990), while all language learners use strategies, the more effective students use them "more consciously, more purposefully, more appropriately and more frequently than the less effective students (P: 199)."

One can, therefore, assume that the acquisition/learning of a further language leads to the emergence of competences (e.g. new linguistic skills) as well as language-related cognitive processes (e.g. meta-cognitive strategies, metalinguistic awareness), which form part of the learners’ repertoire. However, one needs to explore whether every type and context of bilingualism leads to the aforementioned skills while taking into account that not every
body who knows some words or expressions and a few number of structural rules of another language can be considered as a bilingual. There are certain social and individual circumstances that may result in positive effects as far as the relationship between bilinguality and metalinguistic awareness is involved.

An analysis of the relationship between metalinguistic awareness and language acquisition/learning, can, therefore, prove very helpful in understanding the cognitive processes involved in acquisition of additional languages. The following section presents a review of the studies conducted on the relationship between bilingualism and metalinguistic development.

Studies on Bilingualism and Metalinguistic Awareness

The number of studies centred on bilingualism and development of metalinguistic awareness has grown steadily in the last two decades (Lasagabaster, 2000). This, according to Lasagabaster (2000), stems from the close relationship existing between metalinguistic awareness and the learning of languages which has drawn the attention of those interested in the acquisition of second language/s in their efforts in establishing second language acquisition theory.

Lasagabaster (2000) divides these studies into two main groups: a) those centring on monolingual and bilingual subjects whose results reveal bilingual superiority and b) those dealing with different performances of bilinguals depending on their level of bilingualism resulting in better performance of balanced bilinguals. What is noteworthy is that most of these studies agree in that bilingualism can be considered as one of the factors that fosters and helps to develop metalinguistic awareness. Following is a survey of some of the studies related to this area of interest.

In a setting with two languages in function (L1 and L2), Ianco-Worrall (1972) designed an experiment to test the separation of sound from word meaning by bilinguals compared to matched monolinguals. She studied 30 children, bilingual in an African language and English. Each bilingual was matched with two monolinguals, one African and one English, with respect to age,
sex, and intelligence. Bilinguals did much better than monolinguals in tests for sensitivity to the semantic properties of words (by contrast, for instance, to interpreting similarities between words in terms of their acoustic properties). Bilinguals were reported to be more aware of the arbitrary nature of words when they were asked to decide whether something could be called by another name. Ianco-Worrall attributes this superiority of bilinguals to their enhanced metalinguistic abilities. She came to the conclusion that her bilinguals were some two years more advanced in this metalinguistic feature of cognitive development. Ianco-Worrall's finding reminds us of Bialystok's (1988) prevalent view that monolinguals achieve higher levels of metalinguistic awareness a little later than bilinguals and that bilinguals are more developed than monolinguals.

In a similar vein, Ben Zeev (1977) assumes that this greater awareness and a more intensive analytical ability towards language, which Lambert (1981) categorizes as a function of cognitive flexibility, develops as a consequence of bilinguals' attempts to keep their two languages apart, to avoid interference. Ben Zeev studied 98 Hebrew/English middle-class individuals with their 188 Spanish/English low SES (socio-economic status) peers, again with age, sex, SES and IQ controlled. Using Cook's (1997) terms, L2 users, i.e. bilinguals did better than monolinguals at different kinds of language games involving substituting words for other words and answering questions but preserving the meaning of the old word. Ben-Zeev puts forward the hypothesis that bilinguals develop a strategy for analyzing the linguistic input, which enables them to overcome the potential interference arising from a bilingual environment. She distinguishes four mechanisms for resolving interference at the structural level of language:

1. a greater capacity for language analysis;
2. sensitivity to feedback cues from surface linguistic structure and/or verbal and situational context;
3. maximization of structural differences between languages; and
4. neutralization of structure within a language.

(Ben Zeev, 1977:31)
From this study one can assume that one of the major outcomes of bilingualism is on language learning and language processing strategies, possibly as indicated in Ben-Zeev’s study, through constant contrastive analysis between the structures of the two languages. This, in turn, may affect general thought processes, and benefit the overall awareness of the individual.

The research findings outlined above are in line with Cummins and Swain (1986) who investigated the effects of bilingualism on development of individuals’ awareness of certain properties of language and on their ability to analyze linguistic input. They matched their subjects on IQ, SES, sex, and age and designed to assess bilinguals’ ability to examine language in an objective manner, apart from objects and events to which it refers. The outcome of the study was that the bilinguals showed a significantly greater awareness of the arbitrary nature of word-referent relationships and were also better able to evaluate non-empirical contradictory statements.

In an L3 learning context, in her small-scale investigation of metalinguistic awareness in second and third language learning, Thomas (1992) included a theoretical discussion of the nature of linguistic knowledge and of the advantages bilinguals are thought to possess in terms of metalinguistic awareness. The participants in her study were 32 students registered for beginning and intermediate French classes. Of the total 19 students were monolingual English speakers with no formal exposure to another language, learning French as a second language. The remaining 13 students (6 with formal instruction in Spanish at least two years, and 7 with no formal instruction in Spanish) comprised those students who had grown up in a bilingual home. The participants were assessed in terms of their beliefs about the nature of communicative competence and the amount of time that should ideally be assigned to communicative and metalinguistic language learning activities in the perfect foreign language-learning classroom.

The findings of Thomas’ investigation implied that bilingual students assigned more importance to knowledge of strategies to
get around their limitations than did their monolingual counterparts. Thomas (1992: 539) believes: “The prior experience of Spanish speaking students seems to have made a difference in what they think it means to be able to communicate in a foreign language”. Furthermore, she hypothesizes that bilinguals have developed awareness that knowledge of such strategies is a component of communicative competence. Therefore, it is likely that this kind of communicative competence helps them in learning/ acquirings additional languages.

In a diglossic situation, Eviatar & Ibrahim (2000) based their research on the continuum between the dialects of a single language and bilingualism. Their goal was to investigate how the degree of difference between the linguistic systems individuals use affects metalinguistic awareness. They compared a group of monolingual Hebrew speakers with two groups of bilinguals: immigrants with Russian as their home language (born in Israel) and those whose native language was Arabic and had not been systematically exposed to any other language. They posed this question: Would exposure to literary Arabic, in addition to their native spoken Arabic, result in the Arabs' developing sensitivity to language or their performance on tests of metalinguistic abilities? They looked for the differential effects of literacy, and language experience. The results of their study of 116 individuals’ metalinguistic skills and vocabulary measures suggested that preliterate and literate Arab children functioned as Russian bilinguals. Therefore, as they expected, bilinguals in this diglossic context performed at higher levels in the metalinguistic tests as compared to monolinguals. Eviatar and Ibrahim propose that this superiority is the result of having to deal with two forms of the Arabic language. However, it should be noted that the two main dialects of the Arabic language, i.e. formal Arabic and the informal one are, unlike other languages, perfectly different. Many illiterate speakers of the informal Arabic may not be familiar with the formal Arabic.

In another study which can be categorised as the second group of metalinguistic studies mentioned earlier, Lasagabaster (2000) focuses on the relationship between language learning and
the development of metalinguistic awareness. In this study, focusing on learning of English as a third language, Lasagabaster selected 352 students with different levels of proficiency in both their languages, namely, balanced bilinguals, dominant bilinguals, and semilinguals (the concept of semilingual is a problematic category criticized to be a wrong concept, for more details see Modirkhamene, 2006) from three linguistic models existing in the educational system in the Basque context (for more details of the linguistic models see Lasagabaster, 2000:106). He measured the metalinguistic ability of the participants through Pinto’s TAM: Test of Metalinguistic Awareness while including the effects of some other independent variables (e.g. cognitive ability and background information). What he believed from his review of several studies on the development of metalinguistic awareness was that early exposure to a second language is one of the factors or activities that promote metalinguistic awareness. As he expected, the results of his study did not reveal any difference between balanced and non-balanced bilinguals in terms of their metalinguistic ability scores.

The studies reviewed so far demonstrate no significant difference among bilinguals with varying degrees of bilinguality and biliteracy (i.e. balanced bilinguals, dominant bilinguals, and bilinguals in a diagonal context). A possible interpretation that emerges from these findings relates to Bialystok’s (1988) view on the link between the level of bilingual competence attained and metalinguistic awareness. Bialystok maintains that metalinguistic awareness develops at an early stage of bilinguality; therefore, different levels of metalinguistic awareness correspond with various degrees of bilinguality.

A critical review of the literature in research on cognitive aspects of bilingualism reveals that, with a few exceptions, most studies related to the development of metalinguistic skills and its relation to bilingualism have been limited to bilingual children. A lack of research involving learners above the age of 17 is worthy of note. In addition, most of the participants in these studies were supposedly balanced bilinguals. All others (in fact the vast majority of those who use two languages in their everyday lives)
are not really seen as bilingual or special types of bilinguals (Grosjean, 1982). Therefore, sufficient and carefully designed studies of the effects of various types and degrees of bilinguality at different age levels on cognitive processing— as many scholars like Baker and Jones (1998) and Galambos & Goldin-Meadow (1990) recommend—need to be carried out. This would provide insights into whether, as Bialystok (1988) emphasises, some of the advancements of the metalinguistic skills demonstrated by full bilinguals extend to partial bilinguals. Otherwise stated, apart from balanced bilinguals, which group of bilinguals gain such an advantage?

The findings of such a study with adult learners in a diagonal bilingual context with two different languages in function will reveal interestingly whether the advantages remain with the bilinguals at later stages of their life. Hence, this study can be regarded as an original investigation that expands research into a new cohort, namely, non-balanced adult EFL learners of English as a third language.

What is especially noteworthy is the fact that studies on bilingualism and its possible effects on development of metalinguistic skills have been performed in diverse contexts. Obviously, then, every context may have its own peculiarities leading to different educational, as well as methodological policies. This applies to an Iranian context where, according to Modarressi (2001), bilingualism, multilingualism, and language maintenance are among the major issues of Iranian sociolinguistics that need scientific considerations. This is even stronger in an educational setting like Azerbaijan, that is a diagonal bilingual. An understanding of the context of this study seems essential at this stage; accordingly, a brief description of the language situation and of schooling in Iran follows:

Iran is a multilingual country where several languages co-exist and there is a lingua franca, Persian, used for educational purposes. Children always take their schooling in the national language of the country, regardless of their ethnic origin, religious affiliation, or the language/s they speak at home. However, they maintain to use their first language/s other than Persian in their
own regions for various activities. West-Azerbaijan is located in Northwest Iran where Azerbaijani Turkish (a Turkic descendent of the Altaic language family) is the dominant language widely used in almost all contexts except for education. Turkish language as a numeric majority is used as the main vehicle of communication. Therefore, in such a context the bilinguals’ bilinguality is simply a fact of ordinary life where Turkish is the first language learned from childhood in the family, environment, and community naturally along with Persian as the language of schooling. Grosjean (1982) refers to this type of bilingualism as “child bilingualism”.

The effects of this type of bilingualism on development of metalinguistic awareness in the particular sociolinguistic context of West-Azerbaijan (diagonal bilingual context), where most people believe that bilingualism has diverse effects on individuals’ cognitive and social development, may shed light on the existing educational policies. It is considered that analysis of the relationship between metalinguistic awareness and linguistic background with a new paring of languages (Turkish and Persian) in a foreign language learning setting could contribute to understanding second language/s acquisition process.

The present paper, thus, follows research findings and theoretical schemes on the outcomes of bilingualism as far as learners' metalinguistic awareness is concerned.

Method

The present paper describes an investigation which explores the possible metalinguistic benefits of exposure to more than one language among EFL learners. The main question is whether there is a difference between bilingual vs. monolingual EFL learners in terms of their performance in metalinguistic tasks. Accordingly, the following research questions are posed.

1. Is there a significant difference between bilingual vs. monolingual EFL learners in terms of their performance in tests of ungrammatical structures (US)?
2. Is there a significant difference between monolingual and bilingual EFL learners in terms of their performance in translation tasks (TT).

Based on the previous theoretical context, the main assumption that bilingual vs. monolingual EFL learners differ significantly in terms of their performance in metalinguistic tasks was put forward through the following hypotheses:

1. There is a significant difference in favour of bilingual EFL learners, as judged against their monolingual peers, in terms of their performance in tests of ungrammatical structures.
2. There is a significant difference between monolingual and bilingual EFL learners in terms of their performance in translation tasks. Bilinguals will get better results.

Participants

A total of 110 Iranian EFL learners completed a questionnaire, and a proficiency test at the University of Urmia in Azerbaijan, Northwest of Iran. Since a number of socio-cultural, psychological, and educational variables (i.e. age, Socio-economic status (SES), motivation and attitudes, exposure to English and other language/s, etc.) were to be held constant, this number was reduced to 85 learners who formed the final sample. The sample included 47 bilingual (male: 11 and female: 36) Turkish-Persian speakers (56.48%) and 38 monolingual (male: 8 and female: 30) Persian speakers (43.52%). All the subjects fell within an age range of 18-22 years.

The subjects’ distribution in terms of their gender and language background is illustrated in Table 1.
Table 1

Subjects’ profile

<table>
<thead>
<tr>
<th>Groups</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td>8</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Bilingual</td>
<td>11</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>66</td>
<td>85</td>
</tr>
</tbody>
</table>

*Instruments and Procedures*

A variety of important variables are involved in measuring second language/s skills including metalinguistic ability. These include individual and social variables, that according to Baker (2001), make simple generalizations about development of bilingualism and the related skills difficult and dangerous. These factors include learners’ motivation and attitudes, age, SES, linguistic history, linguistic contexts, function and use of languages in bilingual settings, and educational factors (Baker & Jones, 1998; Grosjean, 2000). Therefore, a strict control over these variables in bilingual contexts should be imposed to obtain more generalizable findings as much as possible. To this end, the subjects were asked to complete a questionnaire divided into 4 parts.

The first part that elicited demographic data included items about the subjects’ age, gender, and SES. Classification of the subjects into different social classes was determined through analysing their parents’ educational attainment, which as Wagner (1989: 39) states, “is one of the best obtainable measures of SES”.
Accordingly, based on social classifications of the Census Centre in Iran, three classes were distinguished: “upper class”, “middle class”, and “working class”.

Data on the subjects’ linguality were obtained through several questions on their first language, parents’ language/s, the language/s spoken in the family, with peer groups, in the community; the second language, the age of acquiring the second language, the context where it was acquired and its acquisition patterns. Further items were developed to elicit information on the mastery and control of languages to make sure that the subjects were capable of using their languages actively for interpersonal communication. Based on the information obtained the students were assigned to two groups, namely, bilinguals and monolinguals. In other words, those students who reported use of Turkish and Persian languages actively in the family, in the community, and with their peers, were assigned to the bilingual group, and those, who reported their command and ability to use only one language, i.e. Persian, for their daily activities were considered as monolinguals. As mentioned earlier, the researcher was interested in dealing, to some extent, with true monolingual and bilingual subjects (while remembering that there is no true monolingual or bilingual individual), therefore, the learners belonging to both groups were asked to indicate, in order of mastery, all the languages they were capable of using. These included Turkish, Persian, Kurdish, English, Arabic or any other language. Also, they indicated the relevant skills they possessed in each of the languages. In spite of the fact that the monolingual subjects came to a bilingual region (i.e. West Azerbaijan) to do their degrees, except for a few who were identified as non-monolinguals, the remaining reported proficient mastery of only Persian. In this way, one could justify that the selection of the bilingual and monolingual subjects was mostly according to our proposed definition of the phenomenon of bilingualism as "the ability to communicate in two languages at some (low, intermediate, or advanced) level according to the requirements of the speech community surrounding the individual". Therefore, in this study, an individual who understands and produces two languages either
in the written or the spoken form can be considered a bilingual belonging to a certain category. However, here, it is necessary to clarify the main difference between being a bilingual and having limited knowledge of a non-native language. The idea of social conditions of language use, i.e. bilingualism at societal level, plays a substantial role in making this difference between a bilingual and a non-bilingual. Bilinguals mostly learn/acquire their second language for social communication. They may use, at least, some of their language areas, even if not perfect, whereas, a non-bilingual may never use his passive knowledge of a second language.

A third section of the questionnaire was developed to make the subjects as similar as possible in terms of their previous exposure to English language or any other language/s. These items asked about the subjects’ own assessment of their English (or any other language/s) as well as their exposure to them and the length of exposure (if there was any) before entering the university.

Finally, motivation towards learning English was assessed via a series of Likert-format items. This part included statements on learners' motivation to which the subjects replied by reflecting to a number of opinions: “strongly agree”, “agree”, “no opinion”, “disagree”, and “strongly disagree”.

Results of the analysis of responses to the four main parts of the questionnaire led to the exclusion of 12 misfitting students. This number included those who were not within acceptable age range; the students from a multilingual background; the students who were recognised to have higher and lower proficiency levels in English based on their own assessment of English language proficiency, and finally those were recognised not to be motivated to learn English.

Language Proficiency

Prior to any main-test administration, the subjects were examined as far as their language proficiency was concerned. Although, the subjects were asked to assess their English language proficiency, a further step of testing was carried out to make sure
that subjects were within an acceptable range of language proficiency levels as far as comparison of the two groups was involved. In this way, the possible effects of subjects’ differences in their language proficiency on the results of the metalinguistic tasks would be limited. To this end, the standard Preliminary English Test (PET), a Cambridge University Exam that tests ones ability to cope with everyday written and spoken communications was administered to all subjects. PET has three papers: Reading and Writing, listening and speaking. Due to some practical limitations, the speaking test was not administered. The results of the proficiency tests led to the exclusion of 13 highly proficient and less proficient subjects from the study.

Metalinguistic Skill

A growing body of research suggests that speakers of two languages rather than one, show greater explicit knowledge of structural components of language (Bialystok, 1988). The first type of metalinguistic tasks used in this study, thus, is an adaptation of those used by Galambos and Goldin-Meadow (1990), namely, the traditional one asking the subjects to detect grammatical errors in a range of ungrammatical constructions and to correct them. This task included 20 common types of errors, each representing a different type of grammatical error (adapted from Keshavarz, 1999) as well as 10 grammatically correct sentences that were used as filters. Some examples include: My father ordered me don't go to the party; He is the person whom I have known him for many years; I wonder how was he accepted to university because his English is very bad.

A second type of tasks, focused on the subjects’ ability in linguistic manipulation. As maintained by Krashen (1981) monitoring the production of the target language is more efficient when the attention is focused on linguistic manipulation. Bilinguals are thought to manipulate language rather skilfully. Lambert (1977) proposes that Bilinguality may have the effect of providing translators with special forms of intelligence,
sensitivity, and skills at finding out what is meant and what is implied."

Malakoff and Hakuta (1991) state that translation requires language manipulation at two levels. It must both convey the meaning of the source text and produce an appropriate target text. If one considers natural translation, the translator would have to go through four phases:

a. understanding the vocabulary in the original work,
b. understanding the message in the original work,
c. reformulation of the same message in a second language,
d. deciding on the adequacy of the produced text.

It is not only the meaning that the translator reformulates while translating, but also the correct sentence structure in the target language. From this particular information Malakoff and Hakuta conclude that translation is both a communicative and a metalinguistic skill. Its communicative part consists in the translator understanding the message that is aimed to be given in the source language and conveys it in the target language. While doing this, the translator considers the sentence structure and linguistic characteristics of the target language and this constitutes the metalinguistic part of translation skill. That is why translation proficiency requires both bilingual proficiency and metalinguistic knowledge.

Therefore, a second series of researcher made translation tasks including 30 items written in Persian, the common language among all participants were developed. The items consisted of a list of sentences for which the participants had to select one possible translation from a list of three choices. It is assumed that although the participants have to select translations from a list of three choices, they have to proceed information and follow the same procedures that Mallakof and Hakuta propose. In this sense one can use these tests as indices of metalinguistic ability.

The researcher-made tests of ungrammatical structures and translation tasks (samples of which are presented in the appendices A & B) were piloted on 35 EFL students in the English Language
Department prior to the main administration. To estimate the reliability scores of the two discrete-item test papers, i.e. US and TT, the researcher calculated classical internal consistency estimate i.e. KR-21. The reliability scores were within the acceptable limits (i.e. KR-21: .86, .82) for both tests, respectively. These tests were thought to give reasonable sense of the breadth or the limit of metalinguistic abilities in learners.

Administration of the measuring instruments (i.e. questionnaire, PET, and the Metalinguistic tests), took place in the English language Department of Urmia University in West Azerbaijan in Iran during Summer and Fall 2006.

Findings

As mentioned earlier, this study investigates the possible differences that may exist between monolingual EFL learners and their bilingual peers as far as their metalinguistic abilities are concerned. The underlying assumption is that bilingualism/ having the experience of learning/acquiring two languages may be considered as one of the factors that improves learners’ metalinguistic awareness. In other words, the main hypothesis proposed a significant difference between monolingual vs. bilingual EFL learners in terms of their performance in some metalinguistic tasks.

For investigating this assumption, the data were subjected to a series of multiple t-tests for independent samples. The rationale for selecting the t-test for independent samples for all comparisons between the two groups was that the main assumptions regarding normal distribution and homogeneity of variances were clearly met. In other words, in order to find out whether the underlying distributions were normal and that the variances of the distributions being compared were homogenous, the Komogorov-Smirnov test (K-test) and Levene’s test (F-test) were applied.

The results from these sets of analyses indicated that the learners with more than one language in their repertoire compared with those with only one language obtained higher results. The tests, in fact, were indices of knowledge of the structural
components of language (ungrammatical structures) and the learners’ ability of linguistic manipulation (translation).

Table 2 illustrates subjects’ performances in the first set of tests (i.e. ungrammatical structures). The differences reported between the two groups are statistically significant (P< 0.05), i.e. bilinguals performed better than monolinguals. Further support may be seen in Figure 1 that compares the mean score of bilinguals with that of monolinguals. It is indicated that the lower mean score correspond to monolingual subjects.

Table 2
*Independent t-test results of the first sets of tests (ungrammatical structures)*

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>Tobs</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>47</td>
<td>23.45</td>
<td>7.66</td>
<td>83</td>
<td>2.13</td>
<td>0.039</td>
</tr>
<tr>
<td>M</td>
<td>38</td>
<td>19.93</td>
<td>7.49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: B: bilingual M: monolingual Total test score: 30 P< 0.05

The second series of analyses (Table 3) dealt with the subjects' performance in translation tests as indices of their ability to manipulate the language. The same pattern of differences was observed as far as the results of the translation tasks were involved. Otherwise stated, a significant difference between the two groups existed in their performance in metalinguistic tasks. The difference was in favour of bilinguals.
Figure 1. Comparison of the mean scores (ungrammatical structures)

Key: M: Monolinguals  B: Bilinguals  Total Score: 30

Table 3
Independent t-test results of the second sets of tests (translation)

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>T_{obs}</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>47</td>
<td>19.26</td>
<td>6.79</td>
<td>83</td>
<td>2.01</td>
<td>0.041</td>
</tr>
<tr>
<td>M</td>
<td>38</td>
<td>16.34</td>
<td>6.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: B: bilingual  M: monolingual  Total test score: 30  P<0.05

This difference becomes more clear through comparing the means scores obtained by monolinguals (X= 16.34) and bilinguals (X= 19.26) which are indicated in Figure 2. The findings, therefore, may lend considerable support to the proposed hypothesis in favour of bilinguals. They seem to be consistent with the ideas proposed by such scholars as Thomas (1988, 1922),
Lasagabaster (2000), Galambos and Goldin-Meadow (1990), Eviatar and Ibrahim (2000), etc. who propose a strong relationship between the number of the previous languages one knows and development of metalinguistic awareness.

![Figure 2. Comparison of the mean scores of the two groups (translation, TT)](image)

**Key:** M: Monolinguals  B: Bilinguals  **Total Score:** 30  TT: translation tasks

As mentioned earlier the subjects were attempted to be held similar in terms of some other variables. It was important to be certain about the possible effects of these variables, i.e. the socio and psycholinguistic factors of motivation and SES, in the performance of the subjects. The next section deals with separate correlational analyses that were carried out for finding the degree of association between the results related to metalinguistic ability and the variables already mentioned. The results presented in Tables 4 & 5 show the relationship between motivation and the subjects' performance in tests of ungrammatical structures and translation tasks, respectively.
Table 4

Pearson correlations between motivation and test results (ungrammatical structures)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r (US)</td>
<td>P</td>
</tr>
<tr>
<td>Mot</td>
<td>.36</td>
<td>.62</td>
</tr>
</tbody>
</table>

Key: Mot: motivation US: ungrammatical structures M: monolingual B: bilingual

Table 5

Pearson correlations between motivation and test results (translation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r (TT)</td>
<td>P</td>
</tr>
<tr>
<td>Mot</td>
<td>.45</td>
<td>.65</td>
</tr>
</tbody>
</table>

Key: Mot: motivation TT: translation tasks M: monolingual B: bilingual

The figures related to Pearson’s correlation analyses revealed that the degree of association between motivation and performance in metalinguistic tasks is stronger among bilinguals as compared to that of monolinguals, however, this relationship did not turn out to
be significant. It seems probable that motivation serves an effective role as far as performance in some skills of foreign language is concerned. This is perhaps, as Ellis (1994), and Clyne (2003) accept, due to some modification of learners’ motivation and attitude that may arise as a result of positive learning experiences. This close, although not significant, relationship between linguistic background and motivation is also proposed by Baker & Jones (1998) who believe that linguistic background of students is a factor affecting their degree of motivation. If students are already multilingual or come from a multilingual background they may be more attuned to the possibility of speaking different languages. Nevertheless, some well-established research needs to be carried out in this regard.

Further analysis of correlation between SES of the subjects and test results showed no significant relationship between the three main social categories the subjects belonged to and their attainment in the measurement tools. The correlation coefficients calculated for both groups may be viewed in Table 6.

Table 6
Correlations between metalinguistic ability and SES

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>rho (US)</th>
<th>P</th>
<th>rho (TT)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES (Father)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>47</td>
<td>.11</td>
<td>.37</td>
<td>.12</td>
<td>.48</td>
</tr>
<tr>
<td>M</td>
<td>38</td>
<td>.18</td>
<td>.08</td>
<td>.15</td>
<td>.16</td>
</tr>
<tr>
<td>SES (Mother)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>47</td>
<td>.16</td>
<td>.09</td>
<td>.17</td>
<td>.23</td>
</tr>
<tr>
<td>M</td>
<td>38</td>
<td>.28</td>
<td>.18</td>
<td>.14</td>
<td>.19</td>
</tr>
</tbody>
</table>

Key: SES: Socio-economic status  US: ungrammatical structures  TT: Translation tasks
The results presented in Tables 4, 5, and 6 indicate some degree of association between motivation and attainment in metalinguistic tests, but a range of weak correlations among SES and the tests results. It is thought possible that the independent variable (i.e. bilinguality) might be considered as strong predictor of development of metalinguistic ability. These findings, in deed, replicate the reports of others with evidence from a diagonal bilingual context in Iran, which is rarely investigated. In addition, one can tentatively maintain that motivation is also affected by previous language learning. However, the researcher proposes further well-established investigation in this respect.

Discussion and Implications

This study aimed at determining the possible differences between two groups of EFL learners with different linguistic backgrounds, namely, bilingual vs. monolingual learners in terms of their metalinguistic abilities. The findings of this investigation provided support for the hypothesis that different linguistic backgrounds may have various dispositional effects on learners’ metalinguistic awareness as predicted by Herdina and Jessner’s (2002) Dynamic Model of Multilingualism. Otherwise stated, the findings imply that exposure to more than one language puts language/s learners in advantage partially by virtue of their ability to analyse language more skilfully in various learning situations. This finding has been replicated across numerous studies with a range of language parings and a more varied assessment measures (e.g. Thomas, 1988, 1922; Lasagabaster, 2000; Galambos and Goldin-Meadow, 1990; Eviatar and Ibrahim, 2000; etc.) who propose a strong relationship between the number of languages one knows and development of metalinguistic awareness.

The positive relationship between knowing more than one language, namely, bilingualism and development of metalinguistic abilities, can be justified through several possible explanations. The findings of this investigation seem to suggest that
opportunities for the bilingual group for linguistic interaction and the negotiation of meaning related to the languages they know, according to Young (1983), may play significant role in enabling them to develop language awareness. This can be possibly attributed to the different language structures that provide opportunity for a bilingual learner to become consciously aware of the language/s. This is in accordance with what Jessener (1999) proposes about the nature of metalinguistic skills that varies among learner of different linguistic background through frequency of use.

Furthermore, bilinguals use their enhanced monitor system (EMM) to watch and correct their language skilfully. This may remind us of Jessner’s (1999) view of the learner language characterised by strategic/metalinguistic skills, which are developed in order to compensate for the lack of knowledge. One of these advanced compensatory strategies of bilinguals is likely the use of constant contrastive analysis between L1 and L2 (especially in translation tasks). It seems that bilinguals through exploiting the cognitive mechanisms underlying the process of transfer (e.g. keeping the systems apart fulfilling a separator and a cross-checker function, as Herdina & Jessner, 2002 suggest). practice a form of contrastive linguistics comparing the syntax and vocabulary of their two languages to avoid interference. This supports the view proposed by Clyne (1997), and Cummins (1991) that this way of monitoring and controlling two symbol systems lead to meta-componential (e.g. metalinguistic ability) abilities.

Further compensatory strategies are the ones such as language switch, associations made between the linguistic systems, etc. that can be seen as part of the activities related to metalinguistic thinking in the learner. Otherwise stated, the findings may provide support to Clyne’s (2003) idea of ‘expanded monitor skills’ among bilinguals. It can be inferred that the bilinguals’ enhanced monitoring strategies that entail checking, monitoring, and evaluating their thinking (e.g. in a translation task) allow them perform the given tasks, as Oxford (1990) maintains, more efficiently and probably at a speedy rate. This effectiveness among bilinguals according to Modirkhamene (2006) and
Vygotsky (1962) can be attributed to their efficient self-management or self-regulating and planning of cognitive processes in a given language task induced by the use of more than one language. Furthermore, advanced cognitive strategies that include making predictions, translating, summarising, linking with prior knowledge or experience and, applying grammar rules (Phakiti, 2003) may account for this superiority.

Given the observed differences between monolingual and bilingual subjects which seem to confirm some of the existing views concerning metalinguistic awareness, it is suggested that prior knowledge should be activated in the language classroom. This perspective would imply the reactivation of the knowledge of other languages, as suggested by many (e.g. Thomas, 1988) in the learner and, thus, could guide learners in the development of a further language system. This way of explicit instruction may be necessary to encourage students to be aware of language as a system before they develop a faculty for learning a third language.

In addition it is suggested that in multilingual educational settings similarities and differences between languages can be concentrated in order to increase metalinguistic awareness in both teachers and learners. Therefore, a method of teaching foreign languages that concentrates on increasing metalinguistic awareness of language students by teaching commonalities among languages seems to be an effective way in preparing language learners for a more proficient learning.

The findings of the present study provided evidence that similar to balanced bilinguals, those bilinguals who have to actively use their two languages in diagonal bilingual contexts seem to experience a significant development in terms of their metalinguistic awareness. The findings may reveal that contrary to Cummins (1987); Ricciardelli (1992); and Sanz (2000), metalinguistic awareness can not be considered as an outcome of biliteracy or full/balanced bilingualism, rather it is the result of contact with two language systems perhaps at early stages of language learning (Yelland, Pollard, & Mercuri, 1993; Eviatar & Ibrahim, 2000), and even before the onset of literacy (Campbell & Sais, 1995). However, one should not underestimate the stronger
part that metalinguistic awareness plays in the development of cognitive literacy skills (Partridge, 1994) compared to the other skills.

The author, however, may suggest further empirical research on various groups with differing degrees of Bilinguality/ biliteracy. The results of such studies would be more revealing and beneficial to find out whether metalinguistic benefits of bilingualism are associated with only a minimal exposure to a foreign language as Yelland, et. al. (1993) propose or such possible effects are only seen among those who have achieved high facility in both languages (i.e. at least a minimum threshold of competency in one's languages) as recommended by another group of scholars such as Cummins (1987), and Ricciardelli (1992).

To sum up, as far as learning languages (e.g. EFL learning in the context of Iran, especially in the bilingual regions) is concerned one can come to the view proposed by many scholars, such as Lambert (1981); Cummins (1991); Baker (1993, 2001); and Jessner (1999) who definitely talk about an increased tendency in applied linguistics to acknowledge that language comprehension is affected by cognitive abilities (e.g. communicative sensibility, creativity and metalinguistic awareness in language learning). Consequently, it is emphasised that individual learner differences and its possible influences on additional language learning should be taken into account in EFL educational settings.

The Author

Sima Modirkhamene is the Head of the English Language Department, Urmia University. She received her Ph. D. in TEFL from the University of Surrey, UK, in 2006; her M.A. from the University of Tarbiat-Modarress in 1993; and her B. A. from the University for Teacher Education in Tehran. She has been teaching undergraduate and postgraduate students of English as a Foreign Language at the University of Urmia since 1993. Her research interests include bilingualism and second language acquisition,
cross-linguistic transfer, and intelligence in relation to language learning.

References


Rowe, D. W., & Harste, J. C. (1986). "Metalinguistic awareness in writing and reading: The young child as curricular informant Metalinguistic awareness and beginning literacy:


Appendices

Appendix A: A Sample of Test of Ungramatcial Structures

Below is a list of 30 statements. Each statement consists of one grammatical error. Please find that error, underline it, and write the correct form of the statements in the spaces provided.

1. I graduated from University of Isfahan about two years ago.

-----------------------------------------------------------------------------
2. My parents have been born in the capital of Iran, i.e. Tehran.

3. His relatives searched everywhere for him last night.

4. Our cousins from the North had come to visit us a couple of weeks ago.

5. I was going to school on foot when I was a child.

6. Most the people who travel abroad are businessmen.

7. Although Iranian students study English six years in high school, their English is very bad.

8. We had a terrible accident when we were coming back our town.

9. This is not an appropriate time to discuss about politics.
Appendix B: A sample of Translation Tasks

Below is a list of 30 statements. Please select the only possible translation from the choices.

1. ا. He fighted with his woman last night.
   b. He quarreled with his wife last night.
   c. He had a quarrel with his woman last night.

2. a. We will arrive back at Tehran after about 12 o'clock.
   b. We will arrive back to Tehran after about 12 hours.
   c. We will achieve back to Tehran after about 12 o'clock.

3. a. He smokes a lot.
   b. He smokes a lot of cigar.
   c. He used to smoking a lot of cigar.

4. a. I can't read in dormitory because some students open their radios very loud.
   b. I am not able to study in the dormitory since the students have opened their radios loudly.
   c. I can't study in the dormitory because some of the students turn on their radios loud.

5. a. I asked him, "where did you learn English?"
   b. I asked him where did he learn English.
   c. I asked him, " where you learned English?"

6. b. Please reply with my letter soon.
   a. Please answer to my mail early.
   c. Please answer my letter soon.
7. او از سگ‌ها ترسی ندارد.
a. He is not afraid of dogs.
b. He doesn’t afraid from dogs.
c. He is not afraid from dogs.

8. من همیشه در نوشتن صحیح لغات انگلیسی اشتباه زیادی می‌کنم.
a. I always make many mistakes in English spelling.
b. I do mistakes many times in English spells.
c. I always have mistakes in the spelling of the English word.