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# Bilingualism: Language, Memory and Applied Issues

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# Bilingualism: Language, Memory and Applied Issues

## Abstract

Bilingualism, or the knowledge of more than one language, is quite prevalent throughout the world. However, much of the cognitive literature that exists on language processing and memory retrieval has included participants who are monolingual speakers. The current chapter introduces the ways in which bilingualism has been investigated in the areas of autobiographical memory, memory recall, and communication in applied settings. The notion of code-switching or language-mixing is introduced as a strategic means through which bilingual memory may be fruitfully investigated.

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## INTRODUCTION

Many researchers in language and culture would agree that most individuals in the world are bilingual or multilingual (cf. Bialystok, 2001; Schreuder & Weltens, 1993). Indeed, one could argue that cognitive processing is influenced by the interaction between culture and language, and that researchers in cognitive psychology should actually be investigating issues regarding memory, knowledge representation, perception and the like, by exploring the behavior of multilinguals vs. monolinguals. The purpose of this chapter is to introduce readers to the basic fundamental questions that bilingual researchers in cognition and memory often explore and the tools and techniques used to examine the interaction between language, memory, and culture. In addition, certain applications of bilingual research and theory in practical domains will be explored with reference to working with individuals who consider themselves multicultural.

### Basic Definitions

As noted above, there is likely a greater number of people in the world who consider themselves bilingual or multilingual as opposed to monolingual. The complexity, however, with defining oneself as bilingual comes from the fact that language proficiency might vary from having some conversational ability and no reading ability in a second language to being fully versed in both reading, writing and speaking in two languages. There may be different degrees of bilingualism depending upon the language modality one considers. Researchers have sometimes described bilinguals in terms of the amount of knowledge they possess in a particular language. The term *functional* might be used to describe a bilingual's language abilities in one or the other language if they have sufficient proficiency within a specific knowledge domain such as their job or career (Baetens-Beardsmore, 1986). Some researchers consider the age at which an individual acquired each language or the context within which the languages are learned (e.g., structured training and instruction vs. informal instruction at home) as the primary determinants of the definition of bilingualism (Hamers & Blanc, 2000; Hoffmann, 1991). Other definitions exist that focus on *how* a bilingual's languages were learned. Those who learn one language exclusively for the first part of their life and later learn a second language, typically in a different context or location than the first, are often called *coordinate* bilinguals (Ervin, 1961; Ervin & Osgood, 1954; Grosjean, 1982). In other situations, bilinguals may learn both of their languages simultaneously within the same context and timeframe. These individuals are often referred to as *compound* bilinguals. In this case, people are often more likely to code experiences in two languages and learn to label their thoughts and emotions by the use of two language systems, at the same time. For compound bilinguals, it is possible that certain past experiences can be recounted easily in two languages. However, interestingly, for coordinate bilinguals, it might be the case that certain experiences, such as the first time certain emotions are experienced and labeled, occur only in one language-the native language. The idea then that emotions might be coded differently in two languages

emerges as a function of when an individual learns emotion concepts and the specific language that is used when they are first expressed (Altarriba, 2003).

### **Bilingualism and Memory**

How are past events linguistically coded for bilingual speakers? Javier, Barroso, and Muñoz (1993) investigated memory for personal events in a group of Spanish-English bilingual speakers. They claimed that prior bilingual memory research reflected the encoding, storage, and retrieval of information of a non-personal nature and therefore the results could not be transferred to memory for autobiographical events. Javier and colleagues noted that language can serve as a powerful retrieval tool, a cue, to the events that were experienced in the past. Language serves as a feature with which to organize events that have been stored in memory. They stated, "Thus, a word, for instance, may function as a schema of experience which includes symbolic representation as well as the more sensory and perceptual components of the experience under consideration" (p. 321).

Javier et al. (1993) had bilingual participants describe an event in their personal histories for approximately five minutes. Individuals were asked to select an interesting or dramatic personal life experience. These same bilingual speakers were later asked to discuss the same experience, in the alternate language. The experimenters analyzed their recall protocols in terms of numbers of ideas or idea units expressed and the organizational structure of the ideas that were recalled. Across languages, differences were observed in the quantity and quality (affectively) of the idea units that were recalled. As predicted, the nature and quality of the reports given in the more dominant language was richer than in the second language of report. There was evidence of language-specific information as individuals who recalled life experiences that were coded in a particular language produced more elaborate recall of that information when probed in the corresponding language. It appears that each language of a bilingual may serve to represent experiences in slightly varying ways. If the corresponding language is accessed as a cue to memory retrieval, the resulting account may prove richer and more elaborate. Experiences appeared to be related more vividly when discussed in the language in which they had been experienced.

While the work of Javier et al. (1993) was important in many ways, not the least of which was to serve as a beginning to this area of investigation, their work is not without concerns. Perhaps including control conditions in which more neutral experiences were also discussed would aid in discerning whether non-emotion experiences would also benefit from dominant language recall. In addition, it is clear that there would be variation in terms of the event that is selected by individuals. Perhaps having individuals describe an equally emotional event that was more public or known, such as the death of a president, a major news item, etc., would aid in equating the type of experience that is described. The use of "flashbulb memory" (see e.g., Brown & Kulik, 1977) experiences such as these are yet to be explored among bilingual speakers. Further, an important issue to uncover is whether or not bilingual speakers express emotion differently in their two languages as a function of differential socialization practices in those languages. It is

likely that one's reaction to emotions has a learned component—a component that arises through the acquisition of the values, beliefs, attitudes, and behaviors that are demonstrated within a specific culture regarding the various ways of expressing emotion. It may then be the case that emotions are more often or more easily expressed with regards to personal events, if the native language is used; but that more public events that may be experienced later in life are more easily discussed or expressed in the second language, or the language acquired later in life. The influence of all these variables on the encoding, storage, and retrieval of memories throughout the lifespan are yet to be examined.

### **Language, Culture, and Emotion**

Researchers have noted that emotions are often shaped by the social or cultural context in which they are experienced rather than being the result solely of biological determinants (see e.g., Campos, Campos, & Barrett, 1989; Lutz, 1988). Kitayama and Markus (1994) noted that cultural processes work to organize and structure emotional experiences and that descriptions of emotions may vary greatly cross-culturally. In fact, anthropologists have specified a category of emotion called indigenous emotions—those that are non-Western and have no clear counterparts in the West (Doi, 1986, 1990). In a therapeutic setting, for example, emotions are most commonly expressed using language and language labels. Therefore, emotion and culture are closely intertwined and can likely best be examined through the use of the language in which they are expressed. The following sections review the literature on how emotion is coded and used in therapeutic sessions, how descriptions of emotions are tied to the language in which they were experienced, and the implications of switching between languages when discussing emotionally-charged experiences.

### **Bilingualism in Applied Settings**

Many of the events that are recounted in the process of therapy or counseling are emotion-laden or emotion-related. One question that arises is whether or not the notion of language-specificity in autobiographical memory relates specifically to memories of emotional events. Schrauf (2000) noted that memories from childhood and adolescence that were experienced in the mother tongue or native language are typically richer in terms of emotional significance when recalled in that specific language. One might consider this an example of *state-dependent* learning where the state is, in fact, the language context in which the event was originally experienced. According to the Mother Tongue Hypothesis, an individual should retrieve memories from their childhood in greater detail and with a richer emotional vocabulary in the language that was spoken during childhood. Schrauf (2000) suggested that these states are also self-representations and are mired in culture and socialization practices that involve linguistic coding. As a bilingual speaker's languages are a tool for representing the self in therapy, the implications are clear—the use of one language to the exclusion of the other may present a representation of an individual that is deceptive or not wholly accurate. The use of both languages is therefore

recommended when probing issues regarding the personal past (see also Altarriba & Santiago-Rivera, 1994 and Santiago-Rivera & Altarriba, 2002).

### **Verbal expressions of emotion**

As noted here, benefits exist due to the access that bilinguals have to two languages. For instance, they can be more expressive since they are not limited to just one language. The client has a choice as to which language to use and thereby has the ability to select the word that most clearly captures the essence of what they are trying to communicate. Bilinguals can also use their second language to serve a distancing function when discussing troubling events (Pérez-Foster, 1998; Pitta, Marcos, & Alpert, 1978). Likewise, studies have shown that words themselves elicit different emotions when spoken in one's native language as compared to the second language.

Gonzalez-Reigosa (1976) found taboo words to be associated with greater anxiety when presented in the native language instead of the second language. Bond and Lai's (1986) study took this idea a step further by looking at how easily embarrassing topics were discussed in a native language (Cantonese) and a second language (English). A group of female undergraduate students at the University of Hong Kong conducted interviews with each other in both the first and second languages. The topics of the interviews were either embarrassing or neutral. The two embarrassing topics called for a description of a recently experienced embarrassing event that they had personally experienced, as well as a discussion of sexual attitudes prevalent in Chinese and Western culture. Based on the length of time that the interviewee spoke, this study demonstrated how code switching into one's second-language made it easier for the interviewee to speak about the embarrassing topic for a greater length of time. This finding seems to suggest a distancing function inherent in a bilingual's second language.

Marcos (1976) named the emotional detachment that bilinguals often have in their second language as the *detachment effect*. In his theory, he described the second language as serving an intellectual function and being relatively devoid of emotion; whereas the native language clearly expressed the emotional content. Marcos (1976) believed that this split could be maximized or minimized depending upon what was trying to be achieved in therapy. For instance, if the patient were describing a particularly upsetting event to the therapist, the second language could be used to prevent the client from becoming too overcome with grief to continue. The therapist could serve as a guide to the patient with regard to what language is used. If the patient seemed ready to deal with the emotions, the therapist could encourage the patient to use their native language. Depending on whether or not the therapist was also bilingual, the patient would then be asked to fully translate what they had said, or a trained interpreter would be asked to translate. Ideally, the therapist would be able to understand the native tongue and continue the conversation in the language that the patient wished to continue speaking in (Altarriba & Santiago-Rivera, 1994; Santiago-Rivera & Altarriba, 2002).

Rozensky and Gomez (1983) take Marcos' (1976) ideas involving emotion and language a step further by looking at them in light of a psycholinguistic model, and a

psychodynamic model. Thass-Thienemann (1973) introduced the idea that the context through which the mother tongue and second language is acquired affects the ways in which the language is expressed. Since the learning of a second language is very formalized, rationalized, and "founded upon the conflict-free sphere of the ego" (p.131), it is often not involved in the emotional conflicts in the way that the mother tongue is. Therefore, feelings, repressed emotions, and emotional awareness are more likely to reside in the mother tongue and are best expressed in that language.

Finally, it is important to note that within the United States, most counselors or interviewers are typically *not* bilingual. Therefore, clients might often find themselves communicating in their second or sometimes third language-English. As noted earlier, one of the goals of discussing issues related to mental health is often to uncover memories of details or events that have been repressed, generally because they are painful or otherwise traumatic. Even though an interviewer or counselor does not speak the native language of the interviewee, benefits might accrue to that individual by discussing the event in the native or first language. This way, the individual may recount the instance with a fuller degree of emotional intensity regardless of whether or not the content of the discussion is fully understood by the interviewer. The interviewee might then translate the information in some way, in order to relate the information to the interviewer. Nonetheless, the use of both languages in these situations is apt to result in a richer report of past memories and past experiences.

### **Nonverbal expressions of emotion**

Often times, the expression of emotion is also achieved through various forms of nonverbal communication. Aspects of gesture, posture, and eye contact might serve to either reinforce the content of a message or negate or contradict a message. The use of personal space or distance, for example, might imply feelings of intimacy or perceived aggression. For example, in discussions with individuals who are Latin American, Arabic, or French, a closer distance might be taken in comparison to a greater physical distancing in discussions with Northwest Europeans (Jensen, 1985).

Likewise, there are other cross-cultural differences in how facial expressions of emotion are interpreted that might often result in miscommunication or misinterpretation of a message. For example, individuals often attribute happiness or joy to the use of a smile. However, for individuals who are Japanese, this facial expression might convey feelings of discomfort or even apprehension. Within this culture, restraint of strong feelings is seen as an admirable and mature behavior characteristic. Therefore, it is often the case that outward expressions of emotion are discouraged as children are socialized within certain cultures (Yamamoto & Kubota, 1983). With regards to eye-to-eye contact, emotions such as rudeness, aggressiveness, or extreme shyness might be attributed to the avoidance of eye contact particularly in Mexican-American and Japanese cultures. In fact, within these groups, the lack of direct eye contact is encouraged as a sign of deference, respect, and reverence for authority (Knapp, 1972).

In summary, cross-cultural differences in the expression of emotion exist not only in verbal communication but in nonverbal communication as well. These factors are important in attempting to understand the origin and mental representation of different concepts that underlie emotional expression.

### Conclusions

Whether an individual is fully proficient at using his or her two languages or has an unbalanced knowledge of two languages, it is clear that a bilingual possesses two sets of ideas or concepts that may be culture- and language-specific. Whereas the native or more dominant language might encode issues regarding culture, socialization practices, or childhood memories, the second language might function as a tool for tapping non-emotional topics or memories from adulthood. The richness and variety of information represented in bilingual memory may be accessible through the use of language nuances and variables that structure communication differentially in two languages. Therefore, when bilinguals engaged in processes that require language encoding, storage and retrieval, it appears that the use of both languages might reveal more information and more varied information than the use of just one. Future research directions should provide for theoretical frameworks within which to examine other cognitive domains that involve language and how different languages can affect the process of knowledge representation and knowledge access.

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### **Questions for Discussion**

1. What aspects of language use or language preference might be considered in deriving a definition of bilingualism?
2. How might language influence conceptual and semantic understanding differentially in a bilingual's two languages?
3. If you are bilingual, what language do you use to express extreme emotion?
4. How do you think culture and socialization might influence how words and phrases are commonly used in a given language?
5. Have you ever observed bilingual individuals switching between languages? Why might they choose to use language in this way?
6. How do you think culture influences the ways in which individuals use pragmatics in everyday language use?
7. Why might it be useful to engage a bilingual in discussions using both languages when the discussion involves the retrieval of past experiences from memory?
8. How might interview techniques be altered in various domains (e.g., eyewitness testimony, psychiatric intakes, anthropological investigations, etc.) by taking an interviewee's languages into account?