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Bilingual effects are not unique, only more salient

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I am in full agreement with Aneta Pavlenko's analysis of the data and her line of reasoning about emotion words and emotion concepts, but not with her claim that the findings are unique to the study of bilingualism, and that differential language emotionality is uniquely visible in bi- and multilingual speakers. I will argue that (i) emotion words and concepts behave like other aspects of bilingualism, exhibit the same kinds of phenomena, and are susceptible to the same types of interference; (ii) the phenomena observed about emotion words and emotion concepts are not unique to bilinguals but merely more salient; and (iii) what applies in any conceptual domain applies within the emotion domain as well, in both unilinguals' and bilinguals' conceptual systems.

It is to be expected that, as is the case with other aspects of language representation and processing, bilinguals will either pattern with unilinguals in both languages (coordinate concepts) in their use of emotion words; or perform differently from unilinguals in one (subordinate concepts) or both of their languages (compound concepts), depending on the specific circumstances of their acquisition and frequency of use. Given that the language-specific emotion concepts (i.e., those concepts whose limits have been set by the corresponding lexical items) vary across cultures, they too should be expected to manifest the same three patterns of representation. These differences are also reflected in unilingual speakers who have had different types of experience associated with certain words in different social contexts (Paradis, 2005/2007).

To the extent that the circumstances of acquisition and use that led individuals to acquire a particular L2 concept corresponding to a specific emotion are similar to those of native speakers of that language, they will display the same reactions, corresponding to the same conceptual representation, as native speakers of that L2. Conversely, to the extent that the circumstances of acquisition and use (in particular the amount and intensity of use) were insufficient, the concept will retain features of L1. After long and intensive exposure to the L2 cultural context, L1 concepts may become less and less available and may merge with the closest L2 equivalent. These steps have their counterparts in the acquisition and development of concepts (including emotion concepts) in the language of unilinguals.

In section 2.4, Pavlenko distinguishes seven conceptual processes in the bilingual lexicon: (1) co-existence, (2) L1 transfer, (3) internalization of new concepts, (4) restructuring, (5) convergence, (6) shift, and (7) attrition. The first refers to the static representation of two distinct sets of concepts, each corresponding to the native concepts in the respective language (i.e., Weinreich's (1953) coordinate representation). The same conceptual processes are also at work in unilingual speakers: synonyms have counterparts in the conceptual system. Like translation equivalents, synonyms do not have exactly the same meanings and cannot always be used in the same contexts (e.g., *jealous*, *envious*, *covetous* – not to mention the other meanings of *jealous*, such as "vigilant" (as in *jealous of his rights*, or "demanding complete devotion"). Therefore, the corresponding concepts must have distinct representations. Words sometimes appear aversive in one of a speaker's languages and not in another, but this is not specific to bilinguals: depending on the context of its use (e.g., with parents or in-laws), *liberal* may be considered a compliment in one group, an insult in another (Paradis, 2007). The values of bilingual individuals change when they are surrounded by stimuli from different cultures: Bilinguals may exhibit different personality characteristics when speaking different languages (Ramirez-Esparza, Gosling and Benet-Martinez, 2006), but unilinguals will likewise exhibit different personality traits and change their interpretations of the world and their emotional reactions to it in response to the cues given by different social environments.

The next six conceptual processes are developmental ones: the transfer of L1 features ((2) in Pavlenko's list), whose end-state is either subordinate representation (if the L2 concept is inappropriately identical to the L1 concept), or the partial inclusion of inappropriate L1 features. In unilinguals, conceptual features may be transferred from a frequently used word to its rare quasi-synonym, possibly from a different sociolinguistic register.

The internalization of new concepts, (3), refers to the acquisition, with their appropriate characteristics, of L2 concepts that have no equivalent in L1. (Note that, just as any abstract or concrete word rarely (if ever) possesses an EXACT translation equivalent, emotion words and emotion concepts do not have exactly the same semantic

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and corresponding conceptual boundaries either.) Unilinguals acquire new concepts from new experience; language-driven concepts are acquired the same way, when a new concept is verbally defined (usually at school). Nor do any two unilinguals possess identical concepts – including emotion concepts, and to an even greater extent, emotion-laden words. There is no qualitative difference between bilingual and unilingual speakers in the way they acquire, form, use or store concepts (Paradis, 2007). Different concepts of the same language and those shaped by experience coexist and interact in a unilingual's conceptual system in the same way that concepts of two languages coexist and interact in the bilingual individual's conceptual system.

Restructuring, (4), refers to the modification (but not replacement) of partially overlapping L1-based concepts in the direction of closer approximation to the L2 concept; that is, it increases the overlap by incorporating some new characteristics. In unilinguals, concepts may be partially modified either through new experiences or by a verbal description that separates them from other similar but not identical concepts.

Conceptual convergence, (5), refers to the fusion of an L1 and an L2 concept, so that L1 concepts now contain L2 features and vice versa, corresponding to a compound representation. Bilingual speakers' conceptual representations are distinct from those of unilingual speakers of both their languages; in other words, they exhibit bi-directional interference. In unilinguals, two concepts may be fused subsequent to novel experiences or through the much more frequent use of a quasi-synonym from the same or a different sociolinguistic register. One concept may lose some of its emotional force while the other acquires additional strength. These changes may take place when the speaker changes environments (e.g., moves from the city to the countryside, or the reverse; or from one circle of friends to another, etc.).

Conceptual shift, (6), refers to the complete adoption of the L2 concept, which thereby replaces the previous partially overlapping L1 concept. The same occurs with an L1 linguistic feature (phonological or syntactic) that partially overlaps with L2 and will end up having the identical values to the L2 feature, on the way to L1 attrition. An analogous situation would apply to unilinguals who may have an emotion concept that previously partially overlapped with their in-laws' but has now become indistinguishable from theirs.

Conceptual attrition, (7), occurs in the L1 lexicon of L2 users who have ceased to rely on particular L1 categories to interpret their experiences. As with attrition in general (Paradis, 2004), the activation threshold for these concepts is nevertheless not high enough to prevent recognition of these categories. All of the above phenomena have been reported in all aspects of bilingualism, that is, in other lexical and conceptual domains, in syntax, and in phonology (Weinreich, 1953). Following complete integration into a new social milieu, some unilingual emotion concepts may cease to have their original value and speakers may indeed espouse their new social class values entirely.

Now, similar to bilingual representations in general, the end-state – and the state at any point of development – of the conceptual system is not all or nothing. Within a single individual, some concepts will exhibit contents that are completely legitimate in each language; other concepts will exhibit increased, total, or no overlap. Likewise, in the course of a unilingual's lifespan, emotion concepts (not unlike concrete and abstract concepts) will change as the speaker gains new experience, including schooling.

Undoubtedly, emotion words and emotion-laden words "appear to be more memorable than neutral words" (p. 149) and stand out along a number of dimensions. After all, affect is known to play a significant role in lowering the activation threshold of any representation (Paradis, 2004). Individuals with global aphasia have been observed to loudly produce whole phrases or short sentences when their emotions are aroused by some sudden discomfort – even though they are unable to put two words together under normal circumstances. Conversely, individuals who have no damage to the language system per se but a disconnection between the limbic and language systems are unmotivated to speak and must be prompted continually. Hence, it should not be surprising that emotion words and emotion-laden words are more easily accessible than neutral words, in any language spoken, in proportion to their relative affective strength. But whether emotion words form a distinct subset of the lexicon, and in what form, I leave to computer modeling and psycholinguistic experiments to determine. There is no doubt that they possess distinctive characteristics. They also differ across individual native speakers of the same language and general culture in terms of salience, function, encoding, and, structurally, in terms of causal antecedents of emotions, their appraisals, consequences, means of regulation and display, and the physiological reactions associated with particular concepts. As with other aspects of bilingualism, the difference between unilingual and bilingual individuals is thus not a qualitative but a quantitative one. These phenomena figure on a continuum of less to more visible, from unilingual speakers to bidialectal speakers, to bilinguals speaking two structurally and culturally related languages, to those who speak two languages of different language families.

As Balint (1979) points out, emotionally charged communications cannot be expressed equally well in different languages; each word is surrounded by a cluster of associations which is different in every language, even in varying human relationships using the same language. Emotion words and their corresponding concepts reflect

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norms and values specific to the particular culture of the environment (social class, urban vs. rural, even regional – e.g., East vs. West coast in the U.S.; Northern vs. Southern France or Germany); moreover they evolve with age. Experiments on intra-cultural differences in the cognitive salience of emotion words report age-based variations (Gross et al., 1997; Carstensen et al., 2000; Birditt and Fingerman, 2003; Vainik, 2006). Independently and inexorably, over the course of an individual's lifetime, technological, political and social changes bring about profound adjustments in the evaluative perception of, and emotive reaction to, various events, situations and behaviors, and the words and concepts that refer to them (Hsia and Tsai, 1981).

This means that, with increased experience, as one simply gets older, or with a change in circumstances, as one changes social class or lifestyle or moves from the city to the country or the reverse, the concepts that correspond to emotion words and the emotions attached to emotion-laden words change, without the speaker having to acquire a foreign language. They change along all seven dimensions described by Pavlenko. In fact, one merit of her study is precisely that it highlights one more domain in which bilingual research findings are generalizable to unilingual phenomena.

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