Linguistics

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Part I Researching Bilingualism and Multilingualism

1 Research Perspectives on Bilingualism and Multilingualism

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1.1 Introduction

For many people, bilingualism and multilingualism are a fact of life and not a problem. Contact between people speaking different languages has been a common phenomenon since ancient times. Increased international travel and modern information and communication technologies provide even more opportunities for people of different tongues to get to know each other. Even if one was born and brought up as a monolingual, the opportunity to learn other languages is no longer a luxury for the elite. Nevertheless, some regard bilingualism and multilingualism as an issue of concern, and raise questions such as: Can learning more than one language at a time affect children's intellectual development? Do bilingual and multilingual children present special educational needs? Can bilingualism and multilingualism result in schizophrenia, split or confused identity, or mental illness? Do bilingualism and multilingualism lead to social disorder between communities? These are legitimate questions, the answers to which depend on one's experience, knowledge of the phenomenon, and point of view. They are also worthwhile research questions that need to be addressed scientifically. Findings from scientific research on bilingualism and multilingualism can provide strong evidence for answering these questions.

1.2 Societal and Individual Bilingualism and Multilingualism

Fishman (1980) made a useful distinction between bilingualism or multilingualism as an individual phenomenon and as a societal phenomenon. A quick look at the statistics will tell us that most of the countries in the world are multilingual – there are 193 countries and over 6,000 different languages. This does not mean, however, that the individual citizens of multilingual countries are necessarily multilingual

themselves. In fact, countries which are officially multilingual, such as Belgium and Switzerland, may have many monolinguals in their population, while officially monolingual countries, such as France and Germany, have sizeable multilingual populations. Several questions arise here: Why are some countries officially multilingual whereas others are officially monolingual? What rights do different languages have, in government, in education, or in social interaction? What are the effects of the language policies of a country on its citizens? What are the effects of bilingualism and multilingualism on the country's economic and social development?

A multilingual individual is anyone who can communicate in more than one language, be it active (through speaking and writing) or passive (through listening and reading). Multilingual individuals may have become what they are through very different experiences: some may have acquired and maintained one language during childhood, the so-called first language (L1), and learned other languages later in life, while others have acquired two or more first languages since birth. What is the relationship between the languages in the process of language acquisition? Are early and late bilinguals and multilinguals different kinds of language users? Are some languages more easily learned and maintained than others? These are some of the questions that could be researched with regard to bilingualism and multilingualism as an individual phenomenon.

Whenever two people meet, they need to decide whether they want to interact with each other and in what way. When bilingual and multilingual speakers meet, an issue for consideration and negotiation is which language should be used. Most bilingual and multilingual speakers seem to know which language is the most appropriate for a given situation, but how do they know it? Most bilingual and multilingual speakers switch from one language to another in the middle of a conversation, but why do they do it? Bilingual and multilingual interaction can also take place without the speakers switching languages. In certain areas, it is not uncommon for speakers to consistently each use a different language. This phenomenon is found, for example, in Scandinavia, where speakers of Swedish and Norwegian can easily communicate by each speaking their own language. To what extent are these speakers aware of the differences between their languages?

Individual and societal bilingualism and multilingualism are by no means entirely separate. Multilingual speakers in officially monolingual countries often find themselves constrained by official policies and unable to utilize their full linguistic repertoire, just as monolinguals in officially multilingual countries find it difficult to cross linguistic boundaries to make full use of the opportunities and resources available. Can these kinds of tensions be resolved through legislation? What would be the long-term effect of tensions of this kind?

1.3   Research Perspectives

Research on bilingualism and multilingualism has a very long history. Detailed documentation of societal language contacts in Europe, for example, dates back to

the seventeenth century; Whitney's analysis of the grammatical structure of bilingual speech was published in 1881; and Cattell's experiments, which compared word associations and reaction times of bilingual and monolingual individuals, were published in 1887. Nevertheless, bilingualism and multilingualism became a major focus of scientific research only in the last century, especially from the 1970s. Three broad research perspectives can be identified: linguistic, psycholinguistic, and sociolinguistic. Each of these perspectives has its distinct themes and research methodologies.

1.3.1   Linguistic perspective

Research on bilingualism and multilingualism is central to the contemporary linguistics agenda. Chomsky (1986) defined three basic questions for linguistics:

1   What constitutes knowledge of language?
2   How is knowledge of language acquired?
3   How is knowledge of language put to use?

For bilingualism and multilingualism research, these questions can be rephrased to take into account knowledge of more than one language (see Cook, 1993):

1   What is the nature of language or grammar in a bi- or multilingual person's mind, and how do different systems of language knowledge coexist and interact?
2   How is more than one grammatical system acquired, either simultaneously or sequentially? In what respects does bi- or multilingual acquisition differ from monolingual acquisition?
3   How is the knowledge of two or more languages used by the same speaker in bilingual interaction?

With regard to the first question (the nature of multilingual knowledge), a key issue is whether and how the different languages in the multilingual person's mind interact with one another. One important characteristic of the multilingual is their ability to move between different languages: they can speak one language at a time, behaving more or less like a monolingual; or mix languages in the same sentence, clause, or even word, resulting in a linguistic phenomenon known as code-switching. There is a very large body of literature describing the structural patterns of bilingual code-switching. It is clear that code switches take place at specific points in an utterance; they are structurally well formed and seem to conform to the grammatical constraints of the languages involved. Muysken (2000), for example, offers a typology of code-switching: "insertion" of material (lexical items or entire constituents) from one language into a structure from the other language; "alternation" between structures from languages; and "congruent lexicalization" of material from different lexical inventories into a shared grammatical structure. Linguists have developed various models specifying the grammatical constraints of these processes. For instance, models of the insertional type of code-switching

view the constraints in terms of the structural properties of some base or matrix language, e.g. the Matrix Language frame model of Myers-Scotton (1997), while models departing from alternation see the constraints on code-switching in terms of the compatibility or equivalence of the languages involved at the switch point, e.g. Poplack (1980).

As is often the case in linguistics, counter-examples are reported as soon as a new model or constraint is proposed. More recent linguistic studies of code-switching question the theoretical value of the various grammatical constraints, arguing instead for the application of the basic principles already afforded by Universal Grammar. MacSwan (2004: 298), for example, goes as far as to say that "Nothing constrains code switching apart from the requirements of the mixed grammars." Put differently, the generative-universalist position is that all of the facts of bilingual code-switching may be explained in terms of principles and requirements of the specific grammars used in each specific utterance. MacSwan also questions the status and explanatory power of the matrix language, a concept that is widely believed to exist by code-switching researchers and is central to models such as the one proposed by Myers-Scotton. While it is generally accepted that the two languages involved in code-switching tend to play different roles – one providing the morphosyntactic frame while the other provides specific items, usually open-class content morphemes – the concept of matrix language is not theoretically motivated and probably not needed for explaining the structural patterns or constraints.

The second major area of linguistic studies of bilingualism and multilingualism concerns the acquisition of linguistic knowledge. Earlier studies of bilingual acquisition attempted to chart the developmental paths and stages of the bilingual child. Volterra and Taeschner (1978) suggested that bilingual acquisition went through three key stages:

Stage I: the child has one lexical system comprised of words from both languages;
Stage II: the child distinguishes two different lexicons, but applies the same syntactic rules to both languages;
Stage III: the child speaks two languages differentiated both in lexicon and syntax, but each language is associated with the person who uses that language.

Although some studies both before and after Volterra and Taeschner's had evidence supporting the model, there has been much criticism particularly of the claims made regarding the first two stages. This is generally known as the "one-system-or-two" debate; i.e., do bilingual children begin with a fused linguistic system and gradually differentiate the two languages, or do they start with a differentiated system? Part of that debate centers around the question: What counts as evidence for differentiation or fusion? Volterra and Taeschner (1978) and Taeschner (1983), for instance, based their decision on whether the child made appropriate sociolinguistic choices, i.e., whether the child spoke the "right" language to the "right" person. It was argued that awareness of the two languages as distinct plays a crucial role in deciding the issue of differentiation, and a child's ability to

make appropriate language choices reflects that awareness. However, as McLaughlin (1984) points out, the argument that bilingual children separate the languages when they are aware there are two systems is circular unless some criterion is provided for assessing what is meant by awareness other than that children separate the languages. In any case, we need to bear in mind that a child's apparent (in)ability to choose the right language for the right addressee is a rather different issue from whether the child has one or two linguistic systems. Part of the problem is the familiar one of what we can infer about competence from performance.

In a longitudinal study of a girl named Kate who was acquiring Dutch and English simultaneously, De Houwer (1990) provided strong evidence for the separate-development argument. De Houwer reported that Kate used only Dutch with monolingual Dutch speakers, but would occasionally switch to English when interacting with Dutch-English bilinguals. Thus, the child seemed aware of the linguistic abilities of the interlocutors. De Houwer further suggested that Kate used English and Dutch in the same manner as do children monolingual in one of her languages. She was, according to De Houwer, already fully bilingual by the age of 2;7. Although lexical mixing was not a focus of De Houwer's analysis, the phenomenon was discussed. In the majority of Kate's mixed utterances, a single-word item, most often a noun from one language, was inserted into an utterance that was otherwise completely in the other language. These mixed utterances were well formed, that is structurally grammatical. De Houwer used this as evidence for the child's separate rule systems of the two languages.

Meisel (1989) also took issue with Volterra and Taeschner (1978), criticizing their stage of syntactic mixing for being too vaguely defined; he pointed out that the evidence given by Volterra and Taeschner was not sufficient to support the hypothesis that bilingual children must undergo an initial stage of syntactic mixing, a situation which would need to be explained by the child's processing both languages as a single system. Meisel argued that one could only consider those aspects of grammar where the two adult systems differed as valid empirical evidence for instances of syntactic mixing or of differentiation between systems. In addition, one should try to find evidence for or against a non-differentiated syntax in structural areas where the language production of monolingual children in each language differed. Meisel further suggested that if it could be shown that young bilingual children used linguistic structures in which the two adult target systems differed, this would constitute evidence against the one-system hypothesis. There now exists a large body of literature rebutting the "fused" system hypothesis, arguing instead that bilinguals have two distinct but interdependent systems from the very start (e.g. Genesee, 1989; Meisel, 1989; De Houwer, 1990; Döpke, 1992; Lanza, 1997; Deuchar & Quay, 2000).

While the one-versus-two-systems debate continues to attract new empirical studies, a more interesting question has emerged regarding the acquisition of bilingual and multilingual knowledge. More specifically, is bilingual and multilingual acquisition the same as monolingual acquisition? Theoretically, separate development is possible without there being any similarity with monolingual acquisition. Most researchers argue that multilingual children's language development is by and large the same as that of monolingual children. Nevertheless, as Genesee (2002) points

out, one needs to be careful about the kinds of conclusions one draws from such evidence. Similarities between bilingual and monolingual acquisition do not mean that (1) the two languages a bilingual child is acquiring develop in the same way or at the same speed, or that (2) the two languages a bilingual child is acquiring do not influence and interact with each other (see e.g. Paradis & Genesee, 1996; Döpke, 2000).

There is one area in which multilingual children clearly differ from monolingual children, namely, code mixing. Studies show that multilingual children mix elements from different languages in the same utterance as soon as they can produce two-word utterances (e.g. De Houwer, 1990; Lanza, 1997; Deuchar & Quay, 2000; and David, 2004). Like adult code-switching, multilingual children's language mixing is highly structured. The operation of constraints based on surface features of grammar, such as word order, is evident from the two-word/-morpheme stage onward, and the operation of constraints based on abstract notions of grammatical knowledge is most evident in multilingual children once they demonstrate such knowledge overtly (e.g. verb tense and agreement markings), usually around 2;6 years of age and older (see further Meisel, 1994; Koppe & Meisel, 1995). As Genesee (2002) points out, these findings suggest that, in addition to the linguistic competence to formulate correct monolingual strings, multilingual children have the added capacity to coordinate their two languages on-line in accordance with the grammatical constraints of specific languages during mixing. While these studies provide further evidence for the separate-development (or two-systems) argument, they also suggest that there are both quantitative and qualitative differences between multilingual and monolingual acquisition.

Although much of the language acquisition research focuses on children, learning languages can be a lifelong experience. The field of second language acquisition (SLA) addresses some of the fundamental issues of how learners who may have begun their lives as monolinguals acquire additional languages at a later time. For example, what effect does the timing of additional language acquisition have on the later-learned languages as well as earlier-acquired ones? Clearly one of the key objectives of second language acquisition is to become bilingual. But why do some learners appear to be able to achieve a much higher level of proficiency in the later-learned languages, and at a much faster rate than other learners? Can the attainment level in the later-learned languages be maintained when the speakers reach an advanced age? What aspects of their multilingual knowledge may be subject to attrition and loss? While many of these issues are typically addressed in SLA, which is generally considered to be different from bilingualism and multilingualism research, second language learners and other later-acquired language users are regarded as an important and distinctive group of bilinguals and multilinguals.

The third major area of linguistic research on bilingualism and multilingualism concerns how bilinguals put their knowledge of two or more languages to use. Earlier studies of multiple language use focused on language choice in different contexts and for different purposes. Fishman's domain analysis (2000 [1965]), for example, outlined the ways in which speakers make their language choices according to topic, setting, and participant. Gumperz (1982a) identified a range of discourse functions of bilingual code-switching, including quotation, addressee specification,

interjections, reiteration, message qualification, and personalization versus object-ivization. Such descriptive accounts laid the foundation for later, still developing research on the pragmatics of multilingual speech.

Invoking the notion of "contextualization" – the processes by which speakers construe the local and global contexts which are necessary for the interpretation of their linguistic and non-linguistic activities – Auer (1984, 1995) argued that multilinguals alternate their languages in conversation to build a frame of reference for the interpretation of each other's intentions. According to Auer, the interpreta-tion of function(s) or meaning(s) of code-switching is influenced by the sequential patterns of language choice. He proposed a distinction between discourse-related and participant-related code-switching. Discourse-related code-switching contributes to the organization of the ongoing interaction, while participant-related code-switching permits assessment by participants of the speaker's preference for and competence in one language or the other.

From the speaker's point of view, language choice allows them to calculate the relative costs and rewards of speaking one language rather than another. This is the premise on which Carol Myers-Scotton builds her "rational choice model." Under such a model, what makes choices "rational" is the premise that the speaker makes cognitive calculations that take account of how the speaker views available evidence that indicates likely outcomes of choices, but the speaker also considers his or her own values and beliefs. So rational choices are subjective, with the emphasis on mental calculations about getting the best outcome (Myers-Scotton & Bolonyai, 2001).

1.3.2   Psycholinguistic perspective

Psycholinguists working on bilingualism and multilingualism are interested in essen-tially the same three key issues – multilingual knowledge, multilingual acquisition and multilingual use. Yet the research methodologies are quite different from those of theoretical and descriptive linguistics. Psycholinguistic research tends to use experimental and laboratory methods to investigate multilingual behavior. They are less concerned with describing and explaining structures of multilingual speech, but more so with the cognitive processes involved in receiving and producing multilingual speech.

Psycholinguistic research on the cognitive organization and representation of bilingual and multilingual knowledge is inspired and influenced by the work of Weinreich. Focusing on the relationship between the linguistic sign (or *signifier*) and the semantic content (*signified*), Weinreich (1953) distinguished three types of bilinguals. In Type A, the individual combines a signifier from each language with a separate unit of signified. Weinreich called them "coordinative" (later often called "coordinate") bilinguals. In Type B, the individual identifies two signifiers but regards them as a single compound, or composite, unit of signified; hence "compound" bilinguals. Type C relates to people who learn a new language with the help of a previously acquired one. They are called "subordinative" (or "subordinate") bilinguals. His examples were from English and Russian:

(a) 'book'   'kniga'
        | |
     /buk/   /kn'iga/

(b)   'book' = 'kniga'
                /\
        /buk/   /kn'iga/

(c)   'book'
          |
        /buk/
          |
       /kn'iga/

Weinreich's distinctions are often misinterpreted in the literature as referring to differences in the degree of proficiency in the languages. But in fact the relationship between language proficiency and cognitive organization of the bilingual individual, as conceptualized in Weinreich's model, is far from clear. Some "subordinate" bilinguals demonstrate a very high level of proficiency in processing both languages, as evidenced in grammaticality and fluency of speech, while some "coordinative" bilinguals show difficulties in processing two languages simultaneously (e.g. in code-switching or in "foreign" words identification tasks). It must also be stressed that in Weinreich's distinctions, bilingual individuals are distributed along a continuum from a subordinate or compound end to a coordinate end, and can at the same time be more subordinate or compound for certain concepts and more coordinate for others, depending on, among other things, the age and context of acquisition.

Weinreich's work influenced much of the psycholinguistic modeling of the bilingual lexicon. Potter, So, Von Echardt, and Feldman (1984) presented a reformulation of the manner in which bilingual lexical knowledge could be represented in the mind in terms of two competing models: the Concept Mediation Model and the Lexical Association Model. In the Concept Mediation Model, words of both L1 and L2 are linked to modal conceptual representations. In the Lexical Association Model, on the other hand, words in a second language are understood through L1 lexical representations. As can be seen in figure 1.1, the models are structurally equivalent
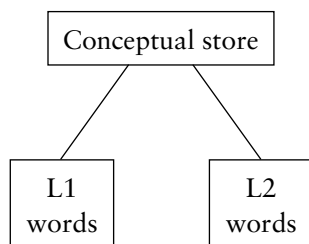

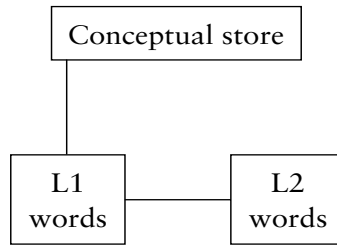*Figure 1.1*: Concept Mediation Model

Figure 1.2: Lexical Association Model

to Weinreich's distinction between coordinative and subordinative bilingualism. At the same time, several researchers (e.g. Kolers & Gonzalez, 1980, and Hummel, 1986) presented evidence for the so-called dual-store model, as represented in figure 1.2. This latter model has also generated considerable research on the existence of the putative "bilingual language switch" which has been postulated to account for the bilingual's ability to switch between languages on the basis of environmental demands (e.g. MacNamara, 1967; MacNamara & Kushnir, 1971).

  Subsequent studies found conflicting evidence in favor of different models. Some of the conflicting evidence could be explained by the fact that different types of bilingual speakers were used in the experiments in terms of proficiency level, and age and context of acquisition. It is possible that lexical mediation is associated with low levels of proficiency and concept mediation with higher levels, especially for those who have become bilingual in later childhood or adulthood. Some researchers called for a developmental dimension in the modeling of bilingual knowledge. Indeed, although the various psycholinguistic models were initially proposed without reference to bilingual acquisition, they clearly have important implications for acquisitional research and need to be validated with acquisition data. Kroll and Stewart (1994), for example, proposed the Revised Hierarchical Model which represents concept mediation and word association not as different models but as alternative routes within the same model (see figure 1.3).

  As well as developing new models of bilingual mental lexicon, psycholinguists have used the latest functional neuroimaging technologies to investigate the cognitive organization of languages in the bilingual brain (see Abutalebi, Cappa, & Perani, 2005, for a summary). The key research question here is the relationship between the pre-wired neurobiological substrate for multiple languages and environmental, time-locked influences such as age of acquisition, exposure, and proficiency.
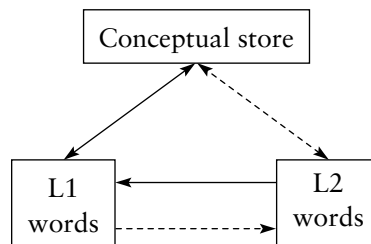

Figure 1.3: Revised Hierarchical Model

It has been found that while the patterns of brain activation associated with tasks that engage specific aspects of linguistic processing are remarkably consistent across different languages and different speakers, factors such as proficiency seem to have a major modulating effect on brain activity: more extensive cerebral activations are associated with production in the less proficient language, and smaller activations with comprehending the less proficient language.

Psycholinguistic studies of bilingual and multilingual use centers around two issues: activation level of the contributing languages and selective access to the lexicon. As discussed earlier, an important distinctive feature of being multilingual is to be able to make appropriate language choices. Multilingual speakers choose to use their different languages according to a variety of factors, including the type of person addressed (e.g. members of the family, school-mates, colleagues, superiors, friends, shopkeepers, officials, transport personnel, neighbors), the subject matter of the conversation (e.g. family concerns, schoolwork, politics, entertainment), location or social setting (e.g. at home, in the street, in church, in the office, having lunch, attending a lecture, negotiating business deals), and relationship with the addressee (e.g. kin, neighbor, colleague, superior–inferior, stranger). However, even more complex are the many cases where a multilingual talks to another multilingual with the same linguistic background and changes from one language to another in the course of conversation. On the basis of such observations, Grosjean (1998) proposed a situational continuum that induces different language modes. At one end of the continuum, bilinguals are in a totally monolingual language mode, in that they are interacting with monolinguals of one – or the other – of the languages they know. At the other end of the continuum, bilinguals find themselves in a bilingual language mode, in that they are communicating with bilinguals who share their two (or more) languages and with whom they normally mix languages (i.e., code-switch and borrow). These are endpoints, but bilinguals also find themselves at intermediary points. Figure 1.4 is a visual representation of the continuum. The base languages (A and B) are located in the top and bottom parts of the figure, and the continuum is in the middle. Additional dimensions can be introduced when more than two languages are involved. At the monolingual end of the continuum,
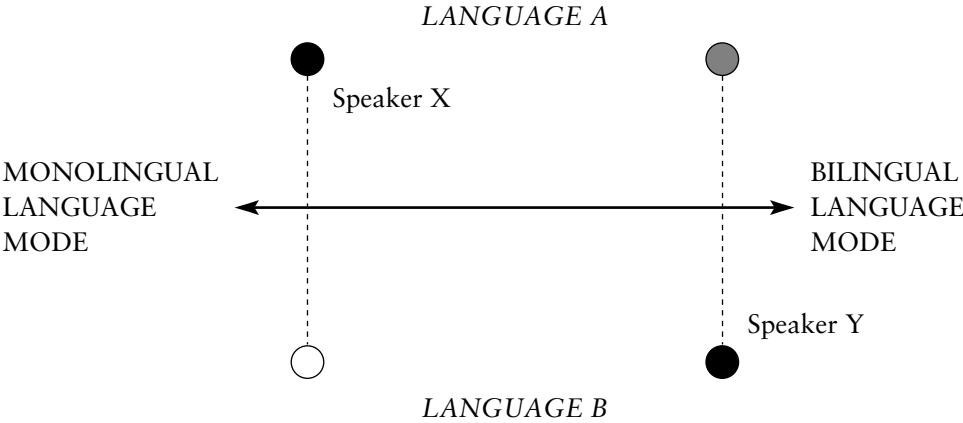

Figure 1.4: Language mode

bilinguals adopt the language of the monolingual interlocutor(s) and deactivate their other language(s) as far as possible.

When a bilingual is in bilingual mode, he or she will access or select words from two languages to produce sentences. How words are accessed or selected in speech production has been a central issue in psycholinguistics. In psycholinguistic research on bilingualism, the question becomes that of how different lexical items in different languages may be accessed or selected differently. Following earlier psycholinguistics models of speech production and more recent work by Clahsen (1999), Pinker (1999), and Jackendoff (2002), Myers-Scotton (2005) proposes a Differential Access Hypothesis for bilingual production. The hypothesis assumes what is known as the 4-M model, which differentiates four types of morphemes: content morphemes, and three types of system morphemes – early system morphemes, bridge late morphemes and outsider late system morphemes. It is suggested that the different types of morpheme under the 4-M model are differentially accessed in the abstract levels of the production process. Specifically, content morphemes and early system morphemes are accessed at the level of the mental lexicon, but late system morphemes do not become salient until the level of the formulator as in Levelt's Speaking model (1989). The hypothesis has received considerable attention in the literature and is being tested with a range of language contact phenomena.

1.3.3   Sociolinguistic perspective

The sociolinguistic perspective differs from the linguistic and psycholinguistic perspectives outlined above in terms of both its research methodologies and its fundamental concerns. Sociolinguists see bilingualism and multilingualism as a socially constructed phenomenon and the bilingual or multilingual person as a social actor. For the multilingual speaker, language choice is not only an effective means of communication but also an act of identity (Le Page & Tabouret-Keller, 1985). Every time we say something in one language when we might just as easily have said it in another, we are reconnecting with people, situations, and power configurations from our history of past interactions and imprinting on that history our attitudes towards the people and languages concerned. Through language choice, we maintain and change ethnic group boundaries and personal relationships, and construct and define "self" and "other" within a broader political economy and historical context. So, the issue of language use that linguists and psycholinguists are concerned with becomes an issue of identity and identification for the sociolinguist.

The notion of identity has gone through considerable changes in sociolinguistics. In the earlier variationist sociolinguistic work, as exemplified by the work of Labov (1972b), identity was taken to mean the speaker's social economic class, gender, age, or place of origin. It is assumed that speakers express, rather than negotiate, identities through their language use. Several scholars, such as Cameron (1990) and Johnstone (1996), later criticized such assumptions and argued instead that identities are negotiated through social interaction. Linguistic forms and strategies have multiple functions and cannot be directly linked to particular identities outside of interactional contexts. Work by Rampton (1995, 1999) and Lo (1999), for

example, demonstrated that identities are locally constructed. More recent work by Pavlenko and Blackledge (e.g. Blackledge & Pavlenko, 2001; Pavlenko & Blackledge, 2004a) emphasizes the negotiation of identities.

The idea that identity is negotiable can be traced back to the work of social psychologists who were interested in group processes and inter-group relations (e.g. Tajfel, 1974, 1981). Identity, from this particular perspective, is reflective self-image, constructed, experienced, and communicated by the individual within a group. Negotiation is seen as a transactional process, in which individuals attempt to evoke, assert, define, modify, challenge, and/or support their own and others' desired self-images (Ting-Toomey, 1999: 40). Identity domains such as ethnic, gendered, relational, facework, are seen as crucial for everyday interaction. Speakers feel a sense of identity security in a culturally familiar environment, but insecurity in a culturally unfamiliar environment. Satisfactory identity negotiation outcomes would include the feelings of being understood, valued, supported, and respected.

There are two major problems with the inter-group social-psychological approach to identity and identity negotiation. First, the categories used in the analysis are often rigid and ill-defined and have a monolingual and unicultural bias. The world is often seen as consisting of "them" and "us," "in-group" and "out-group," or "we code" and "they code." The so-called negotiation, in this particular perspective, is unidirectional – the native speaker abandoning (or at least modifying) his or her first language and culture in order to learn the language of the host culture. This process is often known as "convergence" or "acculturation." The second major problem concerns the approach's static and homogeneous view of culture and society. It does not take into account the historical, ideological, and economic processes that led to the present social grouping or stratification.

Adopting a poststructuralist approach to the notion of identity, Pavlenko and Blackledge (e.g. Blackledge & Pavelenko, 2001; Pavlenko & Blackledge, 2004a) argue that the relationship between language and identity is mutually constitutive and that identities are multiple, dynamic, and subject to change. For them, negotiation of identities is the interplay between reflective positioning (after Davies & Harré, 1990), that is, self-representation, and interactive positioning, whereby others attempt to reposition particular individuals or groups. Their analyses of multilingualism and identities in a variety of social contexts demonstrate that languages are appropriated to legitimize, challenge, and negotiate particular identities, and to open new identity options. Identity options are constructed, validated, and performed through discourses available to individuals at particular times and places – that is, certain linguistic resources may be available to certain groups of speakers, while others may not (Tabouret-Keller, 1997).

Parallel to the work on multilingualism and negotiation of identities, sociolinguists critically examine some of the concepts and notions commonly used by other researchers in the field of bilingualism and multilingualism. For example, the very idea of code-switching raises questions as to what a language is. Instead of thinking of languages as discrete systems, sociolinguists tend to see multilingual speakers as actors of social life who draw on complex sets of communicative resources which are unevenly distributed and unevenly valued. The linguistic systematicity therefore appears to be a function at least as much of historically rooted ideologies (of

nationality and ethnicity) and of the ordering practices of social life as of language *per se* (Gal & Irvine, 1995). This perspective goes beyond a focus on mental representation of linguistic knowledge and opens up the possibility of looking at bilingualism and multilingualism as a matter of ideology, communicative practice, and social process.

This particular sociolinguistic perspective has important implications for the way researchers collect, analyze, and interpret data. Informed by developments in anthropology, sociology, and cultural studies, sociolinguists have examined communicative practices within and across sites that can be ethnographically demonstrated to be linked. Working with the ideas of *trajectories* (of speakers, linguistic resources, discourses, institutions) across time and space and of *discursive spaces* which allow for, and also constrain, the production and circulation of discourses, Heller (e.g. 1995b, 2006) has examined multilingual practices in a number of communities and argued that such practices contribute to the construction of social boundaries and of the resources those boundaries regulate. They therefore also raise the question of the social and historical conditions that allow for the development of particular regimes of language, for their reproduction, their contestation and, eventually, their modification or transformation.

A further, closely related, area in which sociolinguists have extended the work of linguists and psycholinguists on bilingualism and multilingualism is that of the acquisition of linguistic knowledge. Building on earlier research on language socialization, which focused on young children acquiring their first language in culturally specific ways, scholars such as Kulick (1992), Crago, Annahatak, and Ningiuruvik (1993), Zentella (1997), and Schecter and Bayley (2002) examine bilingual and multilingual children's developing competence in various speech and literacy events. Particular attention is given to the range of linguistic resources available, or not, in bilingual and multilingual communities and the ways in which children, as well as adolescents and adults, learn to choose among these resources for their symbolic value. The researchers emphasized language socialization as an interactive process, in which those being socialized also act as agents rather than as mere passive initiates. This line of inquiry also demonstrates how domains of knowledge are constructed through language and cultural practices, and how the individual's positioning affects the process of knowledge acquisition and construction (see further Bayley & Schecter, 2003).

1.4 The Transdisciplinary Future

There is no doubt that a much more nuanced picture of the human language faculty, and indeed of the human mind, has emerged as a result of extensive research on bilingualism and multilingualism over many decades. We understand more about the human capacity for language through such research than the monolingual perspective can ever offer. Theories of human language and mind have become informed in new and essential ways by research on bilingualism and

multilingualism. New research questions have been asked, hypotheses formulated and paradigms constructed. The multidisciplinary nature of bilingualism and multilingualism research as evidenced in the above discussion of the various research perspectives has been a clear strength of the field. Nevertheless, the future of the field requires a more comprehensive framework that transcends the narrow scope of disciplinary research. So, what are the main challenges to bilingualism and multilingualism research as it moves forward to a transdisciplinary future?

First, there is the issue of language. Each discipline develops its own jargon. Communication across disciplines may prove to be difficult since it requires the use of technical terms that are not well understood by colleagues in the other relevant disciplines. Even when the same terms are used, the intended meanings and connotations may be misinterpreted due to lack of a common background. For example, the very term "language" may suggest a fairly discrete linguistic system to a psychologist, but may be very problematic to define for a linguist. Similarly, how is a "bilingual" person defined? Researchers from different disciplinary backgrounds may come up with very different answers. Some may insist on having no monolingual experience at all; others are happy to include adult second or foreign language learners as bilinguals. Still others may argue that language proficiency and dominance are determining factors.

Second, research methods. Disciplines are often devoted to their own methods of investigation. This may lead to misunderstanding of and opposition to the research findings. It is important to remember that research methods are chosen for a purpose and have to be appropriate for the research questions. Yet the research questions are not at all value-free. They are often posed with particular disciplinary, even ideological, biases. Even apparently neutral, scientific terms, such as "accommodation" and "variation," can be used to serve particular biases, and require *in situ* explanations. Certain research questions favor certain research methods. Consequently, evidence from studies that employ different methods may be brushed aside as irrelevant.

Third, there is a confusion of "multi-/interdisciplinarity" and "innovation." A comprehensive understanding of any complex social phenomenon such as bilingualism and multilingualism requires contributions from a variety of disciplines. The multidisciplinary and interdisciplinary approach has definitely generated research outcomes that challenge the received wisdom about the human mind and society. But being multidisciplinary or interdisciplinary does not in itself entail innovation. Innovation requires thinking creatively, breaking new ground, adding value, and making a difference. Innovation often results in the constitution of a new approach or discipline.

Fourth, the tension between "basic" research and "applied" research. At a time when research funding and resources are limited, applied research that has more direct and immediate impact on policy and practice receives more attention and support than studies that address basic research questions. There is also a tendency to misapprehend applied research as naturally interdisciplinary and basic research as narrow. Yet without advances in basic research, there would be no firm basis for knowledge transfer, which is the key to applied research. Basic research can address social concerns. In fact, it can be argued that the majority of the research

questions in the bilingualism and multilingualism field come from the concerns of individuals and their communities. They can be, and have been, turned into basic research questions.

The increased amount of bilingualism and multilingualism at both the individual and societal levels offers the research community new opportunities to evaluate their knowledge base and develop their theories and models of language and communication. Society's interest in bilingualism and multilingualism is also growing. A challenge to the research community is to make what may be viewed as scientific research socially relevant as well. Academic researchers working in the field of bilingualism and multilingualism feel rightly proud of the fact that they not only have a lot to say about the linguistic and psychological theories and models, but also make significant contributions to sociopolitical debates about the world we are living in today. Researchers should look forward to moving away from narrow focuses on individual disciplines, learn from each other's perspectives, and create new ideas. It is the responsibility of researchers to lay the irrational fears of bilingualism and multilingualism to rest through good science. It is equally important that bilingual and multilingual researchers address sociopolitical issues head-on.

18 Factors Affecting Multilingual Processing

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1. Introduction

Although generally the same areas of the brain are activated during language use in skilled multilinguals (de Bot and Jaensch 2015) and late bi/multilinguals are able to demonstrate native-like performance, language processing can be affected by a number of individual and interacting factors. Individual differences in working memory (WM) capacity (WMC), proficiency level, the age of acquisition (AoA), exposure and language use, processing speed, language (psycho)typology, and language status are among the most influential factors that affect processing in multilinguals (Caffarra et al. 2015; Roberts 2012; Roncaglia-Denissen and Kotz 2016; Sagarra 2017; van den Noort et al. 2014; see also Chapter 23 in this volume). Some of these factors may not have a role in processing the first language (L1), but they critically influence language processing and representations in the second/third language (L2/L3). In most cases, processing depends on the interaction between factors (Pliatsikas and Marinis 2013) and one factor may attenuate or modulate the influence of other factors.

In this chapter, we review the relationship between WM resources, language processing, and performance along with other identified factors that affect multilingual processing: language proficiency, L2 age of acquisition, exposure and language use, processing speed, and language typology and language status. We also provide a discussion of implications for future work.

2. Working Memory Capacity

WM is a multicomponent, limited capacity system that is responsible for the temporary maintenance and simultaneous processing of the information (Baddeley 2003, 2007, 2012; Baddeley and Hitch 1974). WM can store limited amounts of information – three to five chunks (Cowan 2001; Unsworth and Engle 2007) – for immediate and accurate recall

during a limited amount of time (i.e. less than a minute). Thus, due to these limitations, individual differences in WMC (i.e. the extent to which normal adults vary in their WMC; Linck et al. 2014) is considered a variant of the cognitive individual differences that are associated with performing various cognitive and linguistic tasks. WM has been demonstrated to have a role in L1 and L2 vocabulary learning, reading and listening comprehension, oral and written proficiency, learning L2 sounds, and L2 sentence processing (Daneman and Hannon 2007; Engle 2001; Felser and Roberts 2007; Gathercole and Baddeley 1993; Juffs and Harrington 2011; Martin and Ellis 2012; O'brien et al. 2006; Service 1992, 2012; Williams 2012; also see Linck et al. 2014 for a meta-analysis).

2.1. *Measuring Working Memory Capacity*

WMC is measured by both simple and complex span tasks. Simple span tasks such as word span, letter span, nonword span, and forward digit span mainly measure the storage function of WM, whereas complex span tasks simultaneously tap both the processing (executive control) and storage (short-term memory) functions of WM. A commonly-used complex span task is the reading span task (RST; Daneman and Carpenter 1980) or its spoken variant, the listening span task (Mackey et al. 2010). Participants are required to either read or listen to sequences of sentences, two to six in length (Juffs and Harrington 2011), and memorize the last word of each sentence for later recall. A grammaticality judgement task or semantic plausibility task is followed by each sentence to check the speed and accuracy. The latter task acts as a distractor and taxes both processing and storage functions of WM, causing the whole procedure to be more demanding on the cognitive system. The automated or computerized versions of the RST (Unsworth et al. 2009) are now widely used in place of the original paper- or card-based version.

The operation span task (OSpan; Turner and Engle 1989) is another technique that measures complex memory span. In the OSpan task, participants are asked to read aloud sets of mathematical operations while computing the outcome at the same time. They then verify whether the answer is correct or incorrect and memorize the letter or word displayed which they are asked to recall later. The sets vary from two or three to six or seven in length and the unrelated sets of letters or words must be recalled (verbally or non-verbally) in the original serial order. Following Unsworth et al. (2005) and Unsworth et al. (2009), some researchers have used the computerized version of the OSpan task, called the automated operation span. In this task, participants read aloud and solve simple math problems one at a time by pressing the 'Yes' button if the solution is correct or the 'No' button if it is incorrect. After each problem, participants read aloud a word. At the end of each set, they recall the words in the order in which they were presented. A three-item set (taken from Unsworth et al., 2005) would look like:

is (8/2) – 1 = 1? Bear

is (6*1) + 2 = 8? Drill

is (10 * 2) – 5 = 15? Job

???

(p. 499)

The experimental math equations are simplistic and the items to be recalled are checked for frequency, number of characters, phonemes, syllables, imaginability, familiarity, and concreteness.

Like the RST, the OSpan task measures the simultaneous processing and storage of information. Although operations replaced the sentences in the RST, the task demands were largely unchanged (Conway et al. 2005). One advantage of the OSpan task over the RST is that it does not require the knowledge of language and, thus, lessens the demand on comprehension (Juffs and Harrington 2011). The OSpan may avoid confounding the relationship between the RST and language proficiency (Lu 2015). Conway et al. (2005) suggest that replacing the words to be recalled with letters can further reduce the dependence on language. In addition to the OSpan task, the backward digit span (Kormos and Sáfár 2008), in which participants are required to recall presented sets of digits in reverse order, can decrease the effect of language. Unlike simple measures of WM, complex span tasks such as the RST and OSpan task push WM storage to the limit in the face of processing demands to engage executive attention processes (Conway et al. 2005), thus making the task more demanding on the cognitive system. Reading sentences aloud in the RST or solving mathematical operations and recalling words in the OSpan task can further burden the WM resources, make the tasks more demanding, and prevent rehearsal. Both tasks are reliable and valid measures of individual differences in WMC and are highly correlated with other linguistically-demanding tasks such as reading comprehension. Furthermore, automated versions of complex span tasks allow the experimenters to collect the data related to the accuracy and speed of processing.

2.2.   *Language Effects in Multilinguals*

So far, theoretical accounts have not considered separate WM components for the additional language(s) a bilingual has acquired. Some studies suggest that there are no differences in WMC in L1 and L2, which means that WMC is language independent (Harrington and Sawyer 1992; Osaka and Osaka 1992; Osaka et al. 1993). However, other studies (Coughlin and Tremblay 2013; Service et al. 2002; Shekari and Service 2017a; van den Noort et al. 2006) found that bi/multilinguals exhibit larger WMC in their dominant language and that their L2/L3 WMC is affected by L2/L3 proficiency level. For example, the findings of the study by Service et al. (2002) revealed that lower proficiency in L2 consumes the L2 learners' internal resources, resulting in lower reading span scores in less-skilled bilinguals. Van den Noort et al. (2006) tested a group of L1 Dutch, L2 German, and L3 Norwegian multilinguals using simple and complex memory span tasks. The results of the study revealed differences in performance in all three languages. Participants had larger functional WMC in the L1, followed by the L2, then L3. Thus, WM resources in less-skilled bilinguals can be affected by presenting the input in a non-dominant language. In other words, the cognitive internal resources interact with L2/L3 language proficiency. Because language learning, development, and processing are dynamic processes (de Bot 2012; de Bot et al. 2007; Lowie and de Bot et al. 2015) and can be improved by experience with the target language over time, WMC in L2/L3 may reach the level of L1 as the result of mastery in L2/L3 proficiency.

2.3. Effects on Language Processing

Individual differences in WMC influence language processing and performance in L1, L2, and L3. A number of studies have found that there is a relationship between WMC and language processing, with an advantage exhibited by individuals with a higher WMC in terms of: sentence comprehension; resolving syntactic ambiguity; integrating pragmatic, lexical-semantic, and syntactic information for efficient processing; and being sensitive to (morpho)syntactic violations (Dai 2015; Dussias and Piñar 2010; Farmer et al. 2017; Havik et al. 2009; Hopp 2014; Just et al. 1996; Kim and Christianson 2017; Mackey et al. 2010; Medina et al. 2017; Sagarra and Herschensohn 2010; Shekari and Service 2017a; Williams 2006).

There is still debate on the relationship between WMC and L2 syntactic processing. Some studies (Dussias and Piñar 2010; Havik et al. 2009; McDonald 2006, 2008; Reichle et al. 2016; Sagarra and Herschensohn 2010) suggest that individuals with a higher WMC perform better than those with a lower WMC regarding syntactic processing. In contrast, other studies found no significant relationship between individual differences in WMC and (online) syntactic processing (Caplan and Waters 2005; Coughlin and Tremblay 2013; Felser and Roberts 2007; Waters and Caplan 2002). The debates led to two different approaches to memory for syntactic processing. The separate sentence interpretation resource (SSIR) hypothesis (Caplan and Waters 1999) considers a distinct specialized verbal working memory system for syntactic processing, whereas the single resources (SR) model (Just and Carpenter 1992) considers unitary WM resources for performing all verbal tasks. Caplan and Waters (1999) presented evidence from various sources on the relationship between individual differences in WM and efficiency of syntactic processing, memory load, and syntactic processing among three groups including: patients with poor short-term memory and WM, patients with aphasia and various brain lesions, and healthy participants. Their study supported the notion that there is a specialization in the verbal WM system for syntactic processing which is neither affected by WMC nor the external load and does not differ between participants with a higher or lower WMC.

Coughlin and Tremblay (2013) examined the role of proficiency and WMC in processing short- and long-distance number agreement dependencies between object clitics and their antecedents in French by moderately and highly proficient English-French bilinguals. The results revealed that although both groups showed sensitivity to agreement violations in the offline acceptability judgement task, only highly-proficient bilinguals showed more sensitivity to number agreement violations in the online self-paced reading task. Highly proficient bilinguals had lower WM scores in L2 than in L1 and there was a weak relationship between L2 performance and L2 WMC. The researchers argued that proficiency and WMC modulate sensitivity to agreement morphology in sentence processing.

In two self-paced reading experiments, Kim and Christianson (2017) investigated the effects of WMC on processing globally ambiguous relative clauses among proficient Korean-English bilinguals. They examined whether the effects of WMC on processing strategies patterned differently across the L1 and L2. The target sentences contained a complex noun phrase (NP1 – of – NP2) and a modifying relative clause (RC). In English,

the RC follows the complex noun phrase, NP1 – of – NP2 – RC, and English native speakers generally have a preference for attaching the RC low to the NP2. In contrast, in Korean, a head-final language, the RC precedes the complex noun phrase, RC – NP1 – uy – NP2,[1] and native Korean speakers resolve the ambiguity by attaching the RC high to the NP1. Kim and Christianson assessed participants' WMC using the RST in the L1. The results revealed that participants employed appropriate processing strategies to disambiguate the target sentences in L1 and L2. WMC was found to be a factor that affected ambiguity resolution in L1 and L2. However, only skilled bilinguals with a larger WMC were sensitive to the potential RC ambiguity and could retain both interpretations in WM to resolve the ambiguity. This was consistent with the predictions of the capacity constrained parsing model (MacDonald et al. 1992), namely that an increase in WMC led to longer reading times in the critical region.

In another study, Dussias and Piñar (2010) investigated the processing of long-distance *wh*-extraction (e.g. Who$_i$ did the police know t_i killed the pedestrian?) in a grammaticality judgement task. They tested a group of proficient late Chinese-English bilinguals whose L1 did not have an overt *wh*-movement. They used Waters and Caplan's (1996) version of the RST to measure subjects' WMC and examined if there was a correlation with L2 sentence processing. The results revealed that the reading patterns of the bilinguals with a higher WMC were similar to those of native speakers of English (especially those with a greater WMC). This suggested that these bilinguals had access to the same plausibility information and employed it the same as English monolinguals. On the other hand, the lower-WMC L2 group failed to attend to and employ the lexical-semantic information during L2 sentence comprehension the same as the higher-WMC L2 group and English monolinguals. Overall, their results revealed that L2 sentence processing requires adequate internal resources to access and integrate different sources of information.

Contrary to capacity-based approaches to L2 processing, Cunnings (2017) states that the difference in L1 and L2 processing can be related to the quality of representations in memory which includes memory encoding, storage, and retrieval operations. He argues that cue-based approaches to individual differences to L2 processing emphasize the quality of representation in memory while individual differences in WMC measures have a role in capacity-based approaches to L2 processing.

3.   Proficiency

The degree of proficiency in a non-native language can affect language processing and performance in bi/multilinguals. Roberts (2012) notes that processing input in the L2 can put a strain on the processing system, particularly in less-proficient L2 learners. Unlike L1 processing that is an automatic process, processing input in a non-dominant language for less-proficient late L2 learners is indeed more demanding for the cognitive system and relies on more cognitive resources as shown in several studies (Green 1998; Linck et al. 2014; Meschyan and Hernandez 2006; Perani and Abutalebi 2005). While having greater WM resources may result in more efficient processing, the extra load imposed by a non-dominant language or language complexity may cause processing

deficiency, inaccurate language representation, and poor task performance among less-proficient L2 learners.

The degree of proficiency interacts with other variables such as WM resources and influences processing and task performance in L2/L3 (Coughlin and Tremblay 2013; Hummel 2009). An increase in proficiency can attenuate the burden imposed by a once-weaker language. In multilingual studies using neuroimaging techniques, L2/L3 learners with low proficiency levels showed additional brain activity, mostly in pre-frontal areas, in languages in which they were not fluent and activated fewer neural substrates for sentence and discourse level processing in the left temporal lobe (Briellmann et al. 2004; De Bleser et al. 2003; de Bot and Jaensch 2015; Perani and Abutalebi 2005; Perani et al. 1998). On the other hand, proficient L2/L3 learners are more efficient in processing, have more accurate representations and responses, and can demonstrate native-like processing (Bel et al. 2016; Keating 2017; Rossi et al. 2017; Shekari and Service 2016; Tanner et al. 2014; van Hell and Tokowicz 2010). The results from event-related potential (ERP) studies testing phonological, morphological, syntactic, and morphosyntactic processing have revealed that proficient bilinguals are able to display similar native-like ERP signatures in response to syntactic or morphosyntactic violations (Liang and Chen 2014; McLaughlin et al. 2010; White et al. 2017; also see van den Noort et al. 2014; van Hell and Tokowicz 2010, for analyses of some neuroimaging studies). Linck et al. (2015) state that the degree of proficiency in the L3 changes the amount of cross-language interactions between the three languages. For instance, L2 influences phonological processing in less-proficient L3 learners; however, the L2 effects are attenuated by the increase in L3 proficiency.

In a priming paradigm study, Liang and Chen (2014) compared the morphological processing mechanisms of highly-proficient and less-proficient Chinese-English bilinguals. The ERPs showed that proficient L2 learners exhibited priming effects in morphological conditions at 350–400 ms, 400–450 ms, and 500–550 ms while no such effects were observed for less-proficient L2 learners for any of these time conditions. They observed a stronger correlation between proficiency and the magnitude of ERP priming effect in morphological conditions than semantic and form conditions. They suggested that the decomposition of regular inflected primes (e.g. *walked* to *walk+ed*) left a trace in the episodic memory which facilitated the access of the target, '*walk*', hence leading to an attenuated N400 component. In contrast, less-proficient L2 learners showed no priming effect within the N400 range, suggesting no decomposition of the prime and no facilitation to access the target word. Their results are consistent with Ullman's (2004, 2005) declarative/procedural memory model, suggesting that the proficiency level of L2 learners is a dynamic process that can result in a change in L2 learners' word processing as they become more proficient.

4.   Age of Acquisition

The effect of L2/L3 age of acquisition (e.g. early vs. late bi/multilinguals) on language learning and processing has been widely studied (Archila-Suerte et al. 2015; Bloch et al. 2009; DeKeyser 2013, 2017; van den Noort et al. 2014; Roncaglia-Denissen and

Kotz 2016; Wattendorf and Festman 2008; Wattendorf et al. 2014). In most cases, L2 learners are divided into early and late groups and their performance on various language processing tasks is compared. Although proficiency and extensive experience with the target language are good predictors of language processing in multilinguals, morphosyntactic processing is affected by AoA when proficiency is matched (Sakai et al. 2009). AoA can also affect the cerebral representation of language. In an fMRI study, Bloch et al. (2009) investigated the effect of AoA on cerebral activation during language production in proficient multilinguals. The results of the study revealed that the age of L2 acquisition correlated with and modulated the variability of brain activation in all three languages, with low variability in early multilinguals and higher variability in late multilinguals. There was an increase in the individual variation of local cerebral activation in Broca's and Wernicke's areas in the later-acquired languages (regardless of typological differences between the acquired languages). In another fMRI study, Wattendorf et al. (2014) investigated the impact of early bilingualism on the organization of the cortical language network during sentence production in early multilinguals, who acquired the L2 before the age of three, and late multilinguals, who acquired L2 and L3 after the age of nine, respectively. Their findings revealed that brain areas commonly involved in sentence processing and bilingual language control were activated in both early and late multilinguals during the performance of the narrative task. However, the AoA influenced the subsequently learned languages irrespective of whether they had been acquired early or late. Their results showed regional differences in neural activity in both groups. While early multilinguals exhibited higher neural activity in prefrontal (and subcortical) areas that involve language and cognitive controls, higher neural activity was registered in the posterior superior temporal gyrus (pSTG) in late multilinguals. They propose that 'early learning of two languages has a pervasive effect on a neural network that is presumed to regulate language control in bilinguals at different processing levels, which include even subcortical structures' (p. 14).

There is a strong relationship between the onset of AoA and L2/L3 phonological processing. In an fMRI study using the pre-attentive listening paradigm, Archila-Suerte et al. (2015) investigated the effect of L2 AoA, socioeducational status (SES), and L2 proficiency on L2 phonological processing among a group of Spanish-English bilinguals. The results showed that although early and late bilinguals with similar SES had similar performance in speech production, AoA was the main factor that affected the neural processing of L2 speech sounds in brain areas involving speech perception and executive processes. Bilinguals (both early and late) with lower SES showed increased activity in the inferior parietal lobule compared to bilinguals with higher SES suggesting that 'bilingualism can serve to counteract the negative effects of low socioeducational environments on cognition' (p. 46). When compared with monolingual English speakers, the results suggested that early L1 acquisition recruits expected temporal regions in speech perception processing, whereas early acquisition of two languages increases the engagement of prefrontal regions that are involved in WM to process L2 speech sounds. The study suggests that AoA has an important role in L2 phonological processing and interacts with other individual variables such as L2 proficiency and SES.

5.   Exposure and Language Use

Experience with L2/L3 input and frequency of its use can alter processing mechanisms, reduce L1 transfer effects, and ultimately result in native-like processing (Frenck-Mestre 2002; Kroll et al. 2015; Pliatsikas and Marinis 2013; Shekari and Service 2017b). In a self-paced reading study, Pliatsikas and Marinis investigated the ways in which L2 learners process regular and irregular English past tense inflexion at the sentence level by using real forms (regular/irregular) and forms that included violations (regularized/irregularized). They further examined whether the type of exposure in L2, namely naturalistic vs. classroom, would affect morphological processing in bilinguals. They recruited two groups of highly proficient Greek-English bilinguals: an L2 group with the naturalistic-exposure tested in the UK and another L2 group with the classroom-exposure tested in Greece. The distinction was made to investigate the possible effect of naturalistic L2 exposure on processing. The inflected and pseudo-inflected forms were embedded in one sentence each. The results revealed that L2 learners showed the same effects as native speakers of English in applying the rule-based decomposition mechanism by processing regularly inflected forms slower than irregular verbs. The type of L2 exposure did not affect the morphological decomposition and both groups showed similar effects, with small variations in processing regularized verbs. These results supported the notion that dual-system processing for inflectional morphology is accessible to both native speakers of English and L2 learners and that the morphological processing was largely affected by the overall amount of exposure to L2 input. The researchers argue that the effect of L2 exposure on morphological decomposition was not modulated by proficiency since they controlled for the proficiency level and AoA for both L2 groups. Their findings are consistent with the predictions of Ullman's (2004, 2005) declarative/procedural memory model that L2 grammar processing relies more on the declarative memory system in less-proficient L2 learners and may come to rely on the procedural memory system as L2 learners become more proficient. However, in some other studies (Muñoz 2008; Silva and Clahsen 2008), the effect of L2 exposure on L2 processing was modulated by other individual differences such as proficiency, AoA, cognitive resources, or a combination of them.

   Frequency- and usage-based approaches to language learning and processing can show the role of L2/L3 intensive experience on processing. According to probabilistic or exposure-based processing models of sentence processing, such as the tuning hypothesis (Mitchell et al. 1995), the accumulated exposure to L2 can account for the shift in processing strategies for L2 input. For example, during ambiguity resolution, the parser is assumed to tune its parsing preferences based on the overall distribution of forced disambiguation preferences it has encountered and resolved in the past. This may also make bilinguals abandon their L1 parsing mechanisms in favour of L2. Thus, the tuning hypothesis predicts that parsing preferences will change if the reader or listener has been exposed to an unusual preponderance of one ambiguity resolution type compared to another during some period prior to testing (Dussias and Sagarra 2007). The statistical and artificial grammar learning and the effects of training in which subjects are exposed to a specific structure before or between experiments (Morgan-Short et al. 2010; Wells et al. 2009) can further support the effects of language experience and use on multilingual processing (Kroll et al. 2015).

Babcock et al. (2012) examined the morphological processing of English past tense inflected forms among native English speakers and L1 Chinese or Spanish speakers learning L2 English. The researchers were interested in how storage/decomposition distinctions might be influenced by factors such as L2 proficiency, AoA, and length of residence/exposure to an L2. Their results revealed that processing inflected forms in the L2 did not always depend on the same mechanisms as in the L1. The critical factors of proficiency, length of residence/exposure, and AoA yielded less dependence on storage and more on composition while the native language of L2 learners had no effects on L2 morphological processing. Babcock et al. suggested that the computational mechanism underlying at least some aspects of language (e.g. rule-governed aspects of inflectional morphology) continue to be affected by the factors mentioned above. This confirms Ullman (2012) and Clahsen and Felser's (2006) predictions that increasing exposure or proficiency can lead to the native-like morphological decomposition, even in late L2 acquisition.

Further support for the role of exposure and experience with the target language come from statistical learning, priming effects, and training subjects on infrequent structures, for example, the increased exposure to more object relative clauses facilitates interpretation and processing speed (Brandt et al. 2017; Christiansen and Chater 2016; Deng et al. 2017; Hopp 2016; Morgan-Short et al. 2012; Wells et al. 2009). In Deng et al.'s study, participants who received short-/long-term training showed more sensitivity to the subject-verb agreement violations than a control group. In addition, the attrition of an L1 in an L2 environment (see Schmid 2016, for a review; see also Chapter 7 in this volume) and backward processing transfer in which L2 parsing strategies are applied to process L1 input (Dussias and Sagarra 2007) also show that exposure to the target language and the frequency of its use can alter the processing strategies in favour of the dominant language.

6.   Processing Speed

Another factor to consider in our discussion is processing speed. The effect of speed is more robust in studies where online (real-time) and speeded techniques are employed to test processing efficiency. Bilinguals usually exhibit longer reading/response times while processing input in L2/L3 or doing a task in their non-dominant language, especially in experiments that use online, time-locked, speeded, or time-stressed paradigms (Frenck-Mestre 2002; Hopp 2010). However, proficient L2 learners are able to demonstrate a native-like processing (Hopp 2010). Roberts (2012) believes that processing speed could relate to efficiency in several different processes undertaken during language comprehension including orthography/sound decoding, lexical access, integration of syntactic and other information, and the prediction or anticipation of up-and-coming input. Since a bilingual's languages are activated in parallel and are accessible simultaneously during production and comprehension (Kroll and Ma 2017; Kroll et al. 2006, 2012), bilinguals are usually slower than monolinguals when it comes to processing.

In a battery of four experiments, Hopp (2010) investigated the processing of case and subject-verb agreement in German under time pressure in speeded grammaticality judgements. Advanced and near-native learners of L2 German were tested who had either English, Russian, or Dutch as an L1. The participants viewed the stimuli at five speeds ranging from 250 ms (speed 1) to 71 ms per word (speed 5). The results showed that the subject-verb agreement was less affected by speed and was processed robustly by all L2 groups under increased processing load, with a significant decrease in accuracy in speed 5. However, only L1 Russian bilinguals performed at the level of German native speakers in processing the German case and advanced L2 groups, irrespective of L1, were not sensitive to case in speeded processing. Hopp argued that this could be caused either by L1 effects or greater computational strains of L2 processing, especially in less-proficient bilinguals. Furthermore, he suggests that for L2 learners, case marking under speeded conditions is subject to an earlier breakdown than for native speakers. Overall, the results of the study suggest that late L2 learners can reach the level of native-like processing in the domain of L2 inflexion. However, L1 and task demands can cause non-native-like processing, resulting in reduced processing efficiency and non-native-like L2 inflexion.

7.   Language Typology and Language Status

The linguistic relatedness between a multilingual's languages can affect language processing and can manifest in lexicon organization, phonology, morphology, syntax, morphosyntax, and parsing mechanisms. Typologically-different or-similar language families, e.g. Korean/Chinese, Chinese/Japanese, and English, are often studied to investigate the effects of language distance on processing (Carrasco-Ortíz et al. 2017; Dai 2015; D'Anselmo et al. 2013; Jeong et al. 2007; Kim et al. 2016; Liu et al. 2017; Park-Johnson 2017; Tolentino and Tokowicz 2011). Liu et al'.s ERP study on the L2 production of inflected words in Korean L1 and Chinese L1 bilinguals revealed that morphosyntactic similarities between Korean and English modulated processing. While Korean bilinguals and native speakers of English followed the same processing mechanisms, Chinese bilinguals did not, indicating that morphosyntactic similarities had a modulatory effect on producing regular and irregular past tense verbs in English.

L3 processing can be positively or negatively influenced by L1 and L2 cross-linguistic similarities or differences. Llama, Cardoso, and Collins (2010) investigated whether language distance or L2 status phonologically influence L3 production. The researchers defined L2 status as 'any languages the speaker knows in addition to the L1' (p. 40). They tested two groups of trilingual learners: English-French-Spanish and French-English-Spanish. These participants produced Spanish words containing voiceless stops onset in stressed position. While these three languages share the same phonemes /p, t, k/, they differ in voice onset time (VOT). The voiceless stops are aspirated in the stressed onset position in English and have long lags but they lack aspiration in French and Spanish and have short lags. The results revealed that L2 status was the determining factor in selecting the source language for the aspiration feature of

L3 words. For the English-French-Spanish group, the suppression of aspiration in L2 resulted in L3 Spanish VOT values that were closer to those of L2. However, in the French-English-Spanish group, the production of L3 stops was influenced by L2 English and had longer VOT values than required in L3 Spanish.

The role of psychotypology in trilingual processing of cognates can further explain how different languages interact during multilingual processing. Szubko-Sitarek (2015) investigated the influence of psychotypology and L2 status on the representation of cognates in the multilingual lexicon. Using a lexical decision task, the researcher tested a group of Polish-English-German trilinguals. The stimuli included Polish-German cognates (e.g. *DACH*, meaning *roof* in Polish and German), English-German cognates that overlapped in orthography and meaning but were different in Polish (e.g. *FINGER*; Polish: *palec*), and German control words that were different from both their English and Polish translations (e.g. *GELD*; English: *money*; Polish: *pienia̧dze*). The lexical decision task was conducted in the weakest language and mean reaction times were calculated for the cognates with English, Polish, and the non-cognates. The results revealed that Polish-German (L1–L3) cognates and control words were processed faster than L2–L3 cognates. Szubko-Sitarek explained that trilinguals' extensive experience with German, more than English, modulated the effect of language psychotypology. The results are contrary to hypotheses which predict that psychotypology and the L2 status have a robust effect on transfer (Foote 2009).

8.   Conclusion

Overall, language processing in proficient multilinguals seems to be qualitatively similar to that of native speakers. However, it is quantitatively affected by several individual variables or a combination of them. Individual differences in WMC, proficiency, AoA, exposure, processing speed, and language typology and status are the most studied factors in most psycholinguistic and neurolinguistic studies looking at multilingual processing. The factors that influence such processing interact with each other and the role of one factor may undergo significant changes as the result of the development/ shift in other variables. Future multilingual studies not only should consider and control for these factors, but also should contemplate how they might modulate the effects of each other. Since it is not always easy to recruit or match the participants according to the desired criteria or control for interfering variables, using mixed-effects regression models for data analyses are more appropriate. As proficiency and language processing are dynamic processes, longitudinal studies can best reveal any changes in processing mechanisms as the result of the shift in the individual differences that affect language processing in multilinguals.

NOTE

1   -uy is a genitive case marker in Korean.

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Bilingualism and Multilingualism: The Media, Education, Literacy, and the Law

23 Bilingualism and Multilingualism in the Global Media and Advertising

TEJ K. BHATIA AND WILLIAM C. RITCHIE

The economic forces of globalization together with the rise of global media have set the stage for a dramatic, exponential rise in global bilingualism. Even now, worldwide language contact prompted by global advertising, internet communication, and other electronic media forms (e.g., social media forms such as Facebook, Twitter, YouTube, the multilingual internet, DVD and entertainment technology) is unprecedented in the history of human communication. Not only are the degree, scope and magnitude of language contact increasing at an astonishing pace, but the processes and the impact of such contact on global multilingualism call for a new examination and new approaches to the study of plurilingualism. This chapter focuses on the pattern of English-based plurilingualism as reflected primarily in global print and television advertising. Not only will the chapter discuss the role of English as a source of global plurilingualism and the changes it is undergoing in this role, but will also posit a long-neglected plurilingual approach to advertising media discourse which in turn sheds light on the processes and underlying reasons for the spread of English in global media.

The main reasons for the choice of advertising to illustrate the spread of plurilingualism worldwide are as follows: (i) in many areas of the world, advertisers consciously or unconsciously favor plurilingualism; (ii) advertising is an integral part of modern-day communication; and (iii) language use in advertising has profound implications for communication generally. While print and television advertising provide a picture of plurilingualism as a result of globalization from

the top down (multinational to national; primarily urban), an attempt is also made here to touch on advertising which is rarely acknowledged in the Western world and is a byproduct of globalization from the bottom up (e.g., from rural to urban).

Finally, the Further Reading section deals with new horizons in language learning resulting from the emergence of the social media, DVD-, internet- and mobile-learning technology.

Globalization and International Advertising: Key Issues

Globalization is defined as the integration of finance, markets, technologies, and information systems in a way that is tying the world together so as to enable each of us to reach around the world faster, cheaper, and more deeply than ever before (Friedman 2000).

One of the central concerns of globalization for international advertisers is how to resolve the paradox of globalization and localization (global vs. national and regional interests, appeals, affiliations, etc.) in terms of formal and functional linguistic manifestations. This concern has manifested itself in the form of the 'standardization' vs. 'adaptation' debate in international advertising, media, and marketing (see Heileman 1997; Hite and Fraser 1988; Hornikx *et al.* 2010; Kanso 1991; Kujala and Lehtinen 1989; Mueller 1992; Onkvisit and Shaw 1987; Ryans and Ratz 1987 among others). In 1983 Theodore Levitt declared in an article in *Harvard Business Review* 1983 that with the dawn of globalization, the era of multinational companies customizing their products and advertising in numerous ways to meet the individual tastes and choices of different markets is over. However, if the market research on this topic is any indicator, the dilemma of 'to customize or not to customize' is currently far from resolved.

What is the most suitable linguistic vehicle for globalization and customization? There is no doubt that the question of language choice is practically resolved. English is the choice of global advertisers and marketers. English has effectively dethroned its competitor languages, such as French and Russian, in this arena and continues to do so with more vigor and dynamics; thus becoming the single most important language of globalization (see Phillipson and Skuttnab-Kangas, chapter 20, this volume, for further discussion).

Although the language choice is settled, the question of which variety of English is appropriate is still very much alive. English is undergoing dynamic changes in the process of engendering and shaping global market discourse; this has important ramifications for international advertising media and marketing on one hand and bilingualism on the other. Consider, for example, the reach of media in Figure 23.1. Japan has the highest number of vending machines of any country in the world. This photograph was taken in a village in the Gunma region, about 120 miles away from Tokyo. In this village there is no high school or any other provision to learn English, yet advertisers are there, interestingly, with messages in English.

Figure 23.1   Media reach: English in rural Japan (Gunma)

The customization debate has ramifications for bilingualism and for the theory of linguistic accommodation. Although a cursory view of the debate seems to show an advantage for monolingualism and monolingual texting in advertising, even in its narrowest view advertising actually promotes bilingualism based in English. This chapter will argue that, in practice, international advertisers can use – and, in fact, do use – an approach that goes beyond monolingual texting. By doing so, they solve the paradox of 'globalization' and 'localization' in an optimal fashion by following an innovative approach grounded in plurilingualism. This creates communicative accommodation, which is a key ingredient for gaining maximum appeal for the product in terms of creating favorable affective consequences. (For more on linguistic accommodation, see Sachdev, Giles, and Pauwels, chapter 16, this volume.)

In addition to exploring the issues of globalization and international advertising, linguistic creativity and language change, the chapter will attempt to answer the following specific questions:

- What are the factors which favor mixing with English in global advertising?
- What kind of linguistic elements can be mixed? Where and how? In other words, are there any constraints on language-mixing in global advertising?
- Why do advertisers mix languages – particularly local languages with English?

- What is the social evaluation of English-mixing in advertising? How do advertisers overcome the negative social evaluations often created by language-mixing?
- What are the psycholinguistic dimensions of multilingualism and global advertising?

Approaches to Advertising Discourse

The language of advertising has been studied from a wide variety of approaches; these can broadly be grouped into three categories: (i) linguistic approaches; (ii) literary approaches; and (iii) semiotic approaches. The linguistic approaches to the language of advertising can be grouped into the following four categories: (a) linguistic/structural approaches; (b) semantic approaches; (c) pragmatic approaches; and (d) psycholinguistic and information-processing approaches (for more information on these approaches see Bhatia 2000: 108–17; Luna and Peracchio 2005 for language activation). What is common to these approaches is that they view ads primarily from the angle of monolingualism. Topics such as deception, media literacy, the Gricean notion of conversational maxims and preferred structural choices all play a central role in such analysis.

A plurilingual view: conceptual framework

This chapter attempts to fill this gap by positing a plurilingual approach to advertising discourse which is grounded in research on bilingual verbal behavior. The three salient features of the approach are as follows:

1 Advertising is essentially a mixed system – a system of verbal and nonverbal components (pictures, music, etc.). The two components exhibit a complex pattern of information sharing which can form a continuum. At one end of the continuum are ads in which one component – either verbal nor nonverbal – is essentially redundant or irrelevant and at the other end lie ads in which each component complements the other in the transmission of meaning. In the absence of either one, there is a significant loss of meaning. In other words, the task of information sharing is critical to both verbal and nonverbal components.
2 The verbal component of an ad mirrors the two critical complementary aspects of bilingual/multilingual verbal behavior – (i) ability to keep two (or more than two) linguistic systems separate; and (ii) ability to integrate and mix the two (or more than two) systems.
3 Although language-mixing is an integral aspect of multilingual verbal behavior, society often views it negatively and regards it as a sign of linguistic deficiency. That is why plurilinguals are sometimes regarded as having trouble expressing thoughts and their language usage is regarded as lacking grammar or system. In short, their language is regarded as 'bad language.' What is

interesting is that bilinguals themselves consider language-mixing to be 'bad language' as well.

Bhatia and Ritchie (2004/2006) and Bhatia (2001) postulated three attitudes toward language-mixing in advertising. Before we describe these attitudes in detail, let us indulge ourselves in the narration of an incident which took place in Mexico City a few years ago. This incident is instructive and will shed light on the relevance and validity of the attitudes described below.

While strolling in Mexico City with several friends who were scholars of Spanish literature, the first author of this chapter came across an advertisement on a billboard that read *Este colchó box spring* ('this box spring mattress'). The Anglicism in the ad prompted one scholar to comment that, 'Mexicans are basically lazy people. They do not even want to translate English words into Spanish in their own country.' This evaluation won approval from a majority of the group though a minority (including the first author) dissented strongly. One individual became so concerned with the mixed nature of the ad that he could not resist asking the salesperson in English, 'Why do you advertise the product half in Spanish and half in English?' The immediate response of the salesman was, 'I would sell only half, if I did not use English.' This exchange is quite revealing about the underlying reason(s) why mixing with English is so widely favored in global advertising, and at the same time it also cautions advertisers about the potential backlash that English can induce if a delicate balance of language-mixing is disturbed.

Incidents such this one are, in fact, quite common. A case in point is an article by Tan (2002) reporting that the government of Singapore has banned the movie, *Talk Cock*. The main reason given for the banning of this movie was that it used a mixed variety of English popularly called 'Singlish,' which includes elements of Malay, Tamil, and some of the Chinese languages. Linguistic prescriptivism clearly played a key role in the decision. Not only societies at large, but also governments feel compelled to regulate language varieties and particularly mixed varieties in media and entertainment to wipe out the perceived negative effects of 'bad language.' These two types of incident (one involving a government and one involving society at large) have led us to recognize the following three attitudes toward language-mixing in global advertising: the negative attitude; the neutral attitude; and the positive or systematic view.

Negative view

The negative attitude – found almost universally among the population at large – is based on the view that language-mixing is an unsystematic form of behavior. Due to the long history of linguistic prescriptivism and purism worldwide, the language-mixing behavior of bilinguals is generally regarded as a 'linguistic deficiency' of some kind. Not only do monolingual societies view language-mixing as a sign of bad linguistic behavior, but, as noted above, even bilinguals themselves often do. Gumperz (1982) and others have pointed out that if one makes

bilinguals consciously aware of their language-mixing, they tend to apologize for their 'bad' verbal behavior.

If it is true that language-mixing is negatively evaluated, then, given the fact that the failure of any advertisement is economically taxing, one would think that advertisers should distance themselves from language-mixing. However, even a cursory analysis of any large sample of advertisements from plurilinguistic societies readily discredits the role of this attitude in determining the design of advertising worldwide: Not only do advertisers find language-mixing to be natural, they also find language-mixing and even multiple language-mixing, together with the mixing of various scripts, worthy of inclusion in their advertisements.

Neutral view

The neutral attitude consists in the assumption that language-mixing accomplishes low-level cosmetic effects, such as ad hoc attention getting. Therefore, language-mixing is considered a transient fad or a one-time charm that is always short-lived. The evidence for this attitude lies in the fact that advertisers occasionally use foreign language material just to get the attention of the potential customer. In the process, advertisers often disregard even the expression of meaning. However, this use of language-mixing is globally rare (except in Japan); it does not come close to accounting for even the tip of the iceberg of the actual incidence of language-mixing in advertising. Furthermore, it misses the underlying reasons for the widespread language-mixing actually found in advertising. Recall the discussion of Figure 23.1 above.

Positive view

The positive or systematic view is compatible with the current position on language-mixing adopted by most sociolinguists. It views language-mixing as a systematic and rule-governed phenomenon which satisfies the creative needs of bilinguals, especially those needs that can be met neither effectively nor efficiently by means of the single, separate linguistic systems which are at the disposal of bilinguals. (For a state-of-the art treatment of language-mixing in the research literature, see Bhatia and Ritchie (1996); see also MacSwan, chapter 13, this volume, and Ritchie and Bhatia, chapter 15, this volume.) This view recognizes that language-mixing in advertising can satisfy the deeper innovative and creative needs of advertisement writers to create the desired effects of persuasion, naturalness, and other socio-psychological effects in their language. Our analysis of English-mixing in global advertising lends support to this view by making correct predictions about the qualitative and quantitative pattern of language-mixing with English in global advertising. The discussion of global advertising which follows will reveal that not only is the incidence of language-mixing with English on the increase but also socio-psychological functions and domains allocated to English cannot be easily and naturally duplicated by other languages in the production of advertising discourse.

In short, advertisers in general appear, perhaps not surprisingly, to adopt the view of language-mixing expressed by the salesman in Mexico City (who would prefer to sell *all* of his merchandise rather than just half of it) as opposed to that of the literary scholars, who clearly had other priorities.

Typology of the Global Spread of English and Language-mixing

English is perhaps the single most important linguistic source for the promotion of global bilingualism and for linguistic creativity. English has official or special status in at least 75 countries with a total population of over 2 billion (Crystal 2003: 69). It is spoken as a first language and as a second or official language along with one or more languages by around 750 million. Speakers of English as a second language will soon outnumber those who speak it as a first language. Around 800 million people are believed to speak English as a foreign language. One out of four of the world's population speaks English to some level of competence.

According to the British Council website, English is the main language of books, newspapers, airports and air-traffic control, international business and academic conferences, science, technology, diplomacy, sport, international competitions, pop music, and advertising. Over two-thirds of the world's scientists read in English, three-quarters of the world's mail is written in English, 80% of the world's electronically stored information is in English. Of the estimated 40 million users of the internet, some 80% communicate in English. Although the global dominance of English is self-evident, and is growing rapidly, it is premature to claim that other major languages of the world are dying and English is the killer language. In fact, the 10 most-widely spoken languages of the world are rapidly catching up with English in the arena of global electronic communication and media. Furthermore, English in itself is changing due to its contact with other languages and its use in advertising and other forms of communication. Not only this, English cooperates and coexists with other languages from which it derives its mixed character.

Research on the global spread of English-speaking communities has led to the development of various typologies and models based on the users and uses of language. One such typology is characterized as consisting in 'three concentric circles of English.' This analysis was originally proposed by Kachru (1985) and has subsequently been updated to account for the dynamic and demographic spread of English, notably in Kachru (2005). The three circles are characterized as the inner circle, the outer circle, and the extending or expanding circle. The inner circle represents those countries or societies where English is spoken as a native language. The outer circle refers to the spread of English in its nonnative context in which English came into contact with genetically and culturally unrelated languages (e.g., in Asia and Africa). All the countries in the outer circle are multilingual and multicultural. Furthermore, in most of these countries English has

official status in the government's language policies. For instance, the Indian Constitution recognizes English as an 'associate' official language along with Hindi. Similarly, in Singapore, English is recognized as an official language. In Nigeria and Zambia, English is one of the state languages. In these regions, English plays an important role in day-to-day social interaction.

The expanding circle includes those countries which recognize the importance of English as an international language (e.g., China, Greece, Israel, Poland) and teach English as a foreign language. English has no official status, but is valued for international business and scientific, technological and academic discourse. Needless to say, the three-circle typology is not water tight. Although Japan belongs to the expanding circle, teaching guidelines of the government of Japan called for the introduction of English at primary and middle schools in fiscal 2002 and at high schools in fiscal 2003. For the purpose of this chapter, countries such as Germany, France, and Spain are grouped into the outer circle because of a long but unofficial association with English, whereas Russia is grouped in the expanding circle. In Figure 23.2, these three circles are joined by a line to show the pattern of global communication through world Englishes. Language-mixing represents one important parameter which contributes to the divergence and convergence of the use of Englishes in the three circles. Although language-mixing with English, particularly in the outer and expanding circles, exhibits some distinctive properties such as the adaptation of English phonology and syntax in Japanese, Spanish, and Indian advertising (see Bhatia 1987, 1992, 2007 for details), this chapter will focus on those shared aspects of English-mixing which are donated by the inner circle to the outer and expanding circles of English and which are the typical ingredients of the formation and the marketization of global advertising discourse. Product names such as *Walkman* which is a Japanese innovation are the contribution of the expanding circle to the inner and outer circles of English.

In regard to the phenomenon of mixing of other languages in the inner circle of English advertising, such mixing with, for example, French, Spanish, and
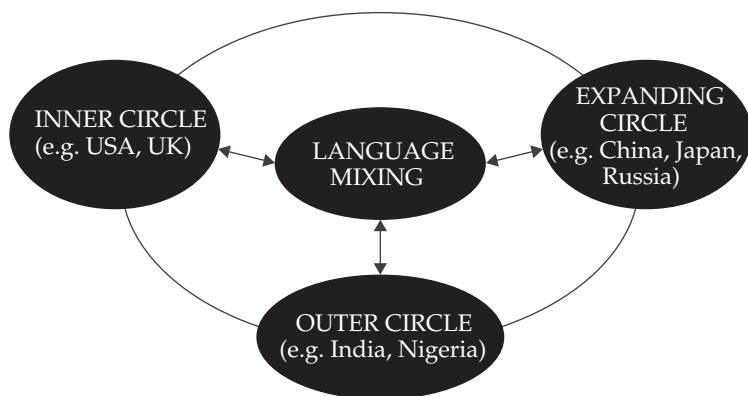

Figure 23.2   Global English typology: Mutually feeding relationship

German is quite well known, and therefore, will not be considered here. Also outside the scope of this chapter is the discussion of the status of mixing which blurs the distinction between borrowing and code-mixing/code-switching (for more details see Bhatia and Ritchie 1996; Muysken chapter 8, this volume; Backus chapter 31, this volume).

Bilingualism through non-Roman scripts

A cursory examination of English in advertising in the outer circle and expanding circle countries might lead one to conclude that the incidence of English-mixing is not very significant. However, such a conclusion would be premature. If one takes into account the use of English wrapped in non-Roman scripts, one would arrive at a totally different conclusion about the use of English in global advertising. Consider, for example, the Hindi advertisement from India in Figure 23.3. This advertisement is deceptive in the sense that it gives the appearance of a totally monolingual Hindi text. The same is true of the Korean advertisement in Figure 23.4. The two ads subscribe to two distinct processes of introducing bilingualism. While the Hindi ad from outer-circle India capitalizes on the relatively high incidence of bilingualism with English and makes no attempt to reinforce English either by means of paraphrasing the English terms in Hindi or writing

Figure 23.3   English in a Hindi advertisement (in Devangari script)

Figure 23.4   English in Han'gul (Korea)

them in the Roman script, the creators of the ad assume that their readers will be bilinguals. If they are not bilingual, they are being initiated to bilingualism via Devanagari script. In contrast the process of inducing bilingualism in the Korean ad is different. The Korean ad does not expect the same degree of bilingual competency on the part of its readers as does the Hindi ad. The ad is built primarily on a paraphrasing strategy. The readers are initiated into bilingualism by the inclusion in the ads of both script-based transliterations of the English word and paraphrasing of English into Korean.

In the Hindi ad the only overt sign of English presence in the Hindi ad is in the model number which is given in Roman script. The seemingly monolingual character of the text is further reinforced by the fact that the attention-getter employs a monolingual text drawn from Hindi (*shandar shakti* 'superb power'). However, an analysis of the body of the advertisement reveals that the Hindi text is interwoven with italicized English text written in the Devanagari script.

(1)
Line   Mixed structure (*English* + Hindi)
1   *L.M.L. Vespa* T5-ES   kaa   *aerodynamic*   andaaz
                                  of   style
         'The aerodynamic style of the L.M.L. Vespa T5-ES.'
2   iskii   *seat*   'its seat'
2–3   *steering handle*   kaa   *design*
                              of
         'The design of the steering handle.'
3   *8 BHP*   kii   shakti
                          of   power
         'The power of 8BHP.'
         button   dabaate   hii
                           press   as soon as
         'As soon as (one) presses the button'
4   kushal   *engineering*   se   banaa   *suspension*
         skillful   with   made
         'suspension made with skilled engineering'
5.   *electric start*   vaalaa   *model*
                              one
         'the electric start model'

English lexical items outnumber Hindi items. Not only is the use of English quite extensive, but the ad also demonstrates the feature of complex inter-sentential mixing with Hindi.

This use of English in non-Roman scripts is not an exception, but is a quite widespread tendency in global advertising. Furthermore, the findings of the research on memory show script-mixing leads to greater memory (see Ahn and La Ferle 2008). As pointed out earlier, the Korean advertisement in Figure 23.4 exhibits the use of English in a more elaborate way. Although Roman script is obvious in the acronym AGC, and the expressions *In-Molding Color Design!* and *COLO…R…ING*, more words appeared in the Korean script called Han'gul than in Roman. Words such as *coloring, color design*, *stop watch*, and *battery* appear in the main body of the advertisement in Han'gul. Even the Korean attention-getter at the beginning of the advertisement belongs to English, i.e. *coloring*, which is written in Han'gul.

In Japanese advertising, English carves out a place by means of Katakana script, the script in which foreign words are usually written. Some expressions or words of English are assimilated to the extent that they are written in Hiragana script, the script used for ordinary Japanese words. The multiscript ad from Japan in Figure 23.5 employs Hindi as well as Chinese scripts.

Infiltration of English into ads by means of non-Roman scripts can also be attested to in Chinese and Russian advertising. The unmarked pattern is similar to that of Korean. However, Chinese advertising in Taiwan and Singapore exhibits some parallelism with Indian advertising. In addition to promoting bilingualism with English, the non-Roman scripts provide an important manipulative

Figure 23.5 Multiple language and script mixing

threshold for the penetration of English in those structural domains which are usually difficult to access. The following discussion will further clarify this point.

Multilingualism and Structural Domains

Viewing an ad as a discourse unit, one witnesses the following eight parts to its structure: (i) product name; (ii) company name or logo; (iii) labels; (iv) pricing; (v) availability; (vi) slogans; (vii) main body; and (viii) headlines and subheaders. Although properties such as pricing and availability are primarily content-based and thus more semantic than structural in nature, they are treated as a distinct structural domain since print ads impose a visual structure on them, thus separating them like other structural parts. Not all ads show all eight parts. The structural domains are not mutually exclusive either. It is not uncommon to find a product name or a slogan as a headline, thus neutralizing the distinction between the headline and the slogan parts of an ad.

Similarly, the properties vary according to medium (e.g., television, wall advertising, internet). Wall advertising (see the subsection 'Globalization from the bottom up' below) often does not incorporate the body of the ad, while print ads show a counter-tendency in this regard. Furthermore, some structural parts might be incorporated into others.

Consider the Tirupati spices ad in Figure 23.6. With the exception of pricing, all other structural properties are present in the ad, as described below:

Headlines:	jale	par	namak	zaruur	chiRkiye
	burnt	on	salt	definitely	sprinkle
	'Certainly rub salt in the wound.'				
Body of ad:	A three-paragraph body appears to the right of the product label display.				
Slogan:	bhojan	kii	shaan	baRhaaiye	
	Food	of	grandeur	increase	
	grihiNii	kii	shaan	baRhaaiye	
	housewife	of	dignity	increase	
	'Add grandeur to [your] food [and] add to the dignity of the lady of the house.'				

Product name: <u>Tirupati</u> (in Hindi)
Company's name or logo: <u>daadhiich</u> industries, followed by information about availability below the line in Hindi
Wrappers or labels: Given in English to the left of the body text

The ad uses the rule-violation strategy to get attention. Commonsense dictates that one does not rub salt in a wound. Nevertheless, the attention-getter encourages us to violate traditional wisdom by doing so. The body of the ad then reveals that the wound in question is that of a neighbor who would be jealous of the great taste and smell of your cooking with the Tirupati spices. The body of the ad goes on to advise not giving away the secret of your great cooking to your neighbor.

Figure 23.6   Structural domains of an advertisement

The third paragraph stresses the purity and the natural ingredients of the product. Packaging information is also provided. The seal of approval by the government of India is also emphasized. The body of the ad goes on to provide a list of the spices produced by the company. The product name is given in Hindi at the end of the body of the ad and is reinforced by the package display, but this time in English. The company name and address are separated from the rest of the ad by a line and so is the slogan. The address of the company together with contact information connotes product availability and corporate reliability.

The ad also reflects changing societal values. The notion of making one's neighbor jealous by one's possessions runs counter to the traditional Indian value system, which values neighbors as a part of one's extended family and discourages the unnecessary display of valued objects.

English and structural domain dependency

Viewing the eight structural parts as domains of an advertisement, it is important to observe that English is assigned these structural domains neither randomly nor symmetrically. As the following discussion will reveal, some structural domains admit English more freely than others.

Product name   The most favorite and most easily accessible domains to English are product naming and company naming. Bhatia (1987) analyzed over 1,200 advertisements primarily in Hindi that were printed between 1975 and 1985. The study revealed that more than 90% of the 1,200 advertisements analyzed carried a product name in English, for example, *Sanforized, Supertax, Trigger, Signal-2, Mustang, Click-IV, Freedom Mealmaker, VIP, Travel-light, Fair and Lovely, Protein Conditioner Shampoo, Clinical Special, High Power Surf,* and *Oriental Stereo Recorded Cassettes*. According to the Hobson-Jobson dictionary, the English word *shampoo* is borrowed from the Hindi word *champii*; however, it is the English reincarnation of the word *shampoo* which is prevalent in Indian advertising and the *shampoo* product names. Even with the culturally grounded Indian product names, English does not hesitate to take a share of the pie (e.g., *Morarjii Fabrics, Ambiprincess*) where Morarjii and Ambi are Indian names. Not only this, but common products produced by indigenous companies and aimed at indigenous populations are named in English (e.g., *Mohan's Gold Coin Apple Juice*). In Japan, English product names qualified with English first-person possessive pronouns (e.g., *my juice, my car*) are quite frequent. The possessive pronoun can be further subjected to the process of reduplication. Meraj (1993: 224) shows a similar trend in Urdu advertising in Pakistan. Her sample reveals that English product names account for 70% of the ads while only 9% of product names were drawn from Urdu. The remaining 21% were mixed product names (English + Urdu) such as *Chanda Battery Cell, Good Luck Haleem,* and *National Kheer*. The same trend is widely attested in Russia and other European countries.

It should be noted that inner English is in turn being enriched by product names drawn from other languages: *Nike* (Greek), *Volvo* (Latin), *Samsaar* (Sanskrit), and *Nokia* (Finnish).

One of the notable features of English product names in addition to introducing bilingualism through Chinese characters is that they map sounds with a positive meaning. For instance, Subway is written in three characters 赛百味 which represent a close approximation to the pronunciation of Subway as 'sai bai wei' which means 'It tastes better than other hundred flavors.' Practically all famous global brand names follow the same translational and transcriptional strategy, e.g., creating homonyms.

Company name or logo   Next to product names, company names show the most preference for English among parts of ads. Globalization of business has given further impetus to English in this domain. Even the names which are not English are given an English look either by means of linguistic adaptation or by writing

in Roman. Sony is known worldwide through Roman lettering. Abbreviations and acronyms heavily favor the employment of English on a near-universal basis.

Labeling and packaging   Like many product names, the labels of products shown in an advertisements overwhelmingly favor not only English but also the Roman script. Numerical information (e.g., in graphs; and telephone numbers) is another site for the selection of English in an advertisement. Packaging information such as *family pack* is provided in English.

Pricing   The language of pricing is as sensitive to local constraints as culturally grounded products. However, one can witness a trend towards English or U.S. currency, e.g., in Spanish advertising in Latin America. Discount information (e.g., 40% off) in non-English Japanese ads is invariably given in English.

Slogans   English is witnessed less often in slogans than in the product or company name domains. However, when English is utilized in slogans, it is usually wrapped in a sentence-like (or phrasal) structure rather than the nominal or one-word structure preferred by product or company naming. Another feature of English in slogans is that English is only rarely represented in non-Roman scripts. Usually no attempt is made to either paraphrase or translate English slogans into native languages. Whether it is Chinese, Japanese, Russian or Hindi advertising, the slogans can be expressed in full-length English sentences and Roman script. Slogans such as *Freedom is my birth right* (India), *We grow quality* (Japan), *Digital PC – Beyond the Box* (Hong Kong), *Smart and Soft – Samsung* (Korea), and *Let's make things better* (Germany) can be witnessed throughout the world.

Main body   The employment of English in the main body of an advertisement constitutes the last and the most difficult barrier for English. Since the product description and explanations about the utility of the product are given in the main body of an advertisement, it is not surprising that this structural domain departs from the other domains in terms of its preference for a sentence-like structure. In this domain, native languages usually override English. On the other hand, English is conquering this last barrier by way of capitalizing on those domains which are within its easy reach such as product names and lexicon associated with product types such as computers, technological and fashion products. New technologies such as the internet and multimedia have provided a special boost to English usage. The discussion of futuristic themes and developments is often carried out by means of keywords which are drawn from English. Numbers, graphs, and figures are presented in English.

Headers and subheaders   As is the case with English in the body of the advertisement, it takes a back seat in headers. This domain is occupied by other languages in advertising. The English-only Roman text as a header usually appears in the form of a product name as in example (3) below. The English-only structures are often nominal or phrasal as in examples (2) and (3) below. If a header goes beyond

the phrasal level (i.e., either a sentence or conjunct sentence), the use of English is discouraged. Nevertheless, like slogans, this domain is gradually surrendering to English as in example (6), a header drawn from a Hong Kong advertisement. With the emergence of multimedia and internet technologies, the language of the header is becoming more and more bold even in the expanding countries (see, e.g., headers from Japanese advertising in (7)). The use of English in headers is expanding to subheaders. In a mixed structure, English forms either a subject or a predicate argument of the sentence as exemplified in (5), or occurs in a topic-comment structure as in (4). The following attention-getters illustrate the generalizations drawn here.

(2) <u>Phrasal</u>
     a feast of elegance.
     Expanding frontiers of telecommunication

(3) <u>Nominal</u>
     Golden moments. McDowell moments
     The cotton collection
     Cooking

(4) <u>Mixed: topic-comment</u>
     Kancan, mixer grinders   aur   non-stick cookwares
     Kancan,   and

(5) <u>Mixed: object argument</u>
     super champion   baniye
                            become

     'Be a super champion.'

(6) <u>Full sentence</u>
     What is girdle?

(7) <u>Full sentence: futuristic themes</u>
     See what tomorrow will bring (Japan)
     Multimedia: A world where all communications are one.

On the basis of the generalizations drawn about the pattern of English use in outer and expanding circles, the following structural hierarchy can be postulated (see Figure 23.7).

The hierarchy, represented in a staircase fashion, claims that in order to reach the highest step of the staircase, English must pass through all those steps which precede it (from right to left in the figure). When English manages to reach the step of product naming, then other, more difficult steps, such as company name, become available to English. However, if the use of English is restricted to product naming, the probability of its being used in the body of the advertisement is not high. If one finds the incidence of English in the main body of an ad, one can predict that all the domains of advertisement for that product are within the reach of English. The real test of the presence of English in the body of an advertisement is when English, as in slogans, begins to appear with verbs coded with English
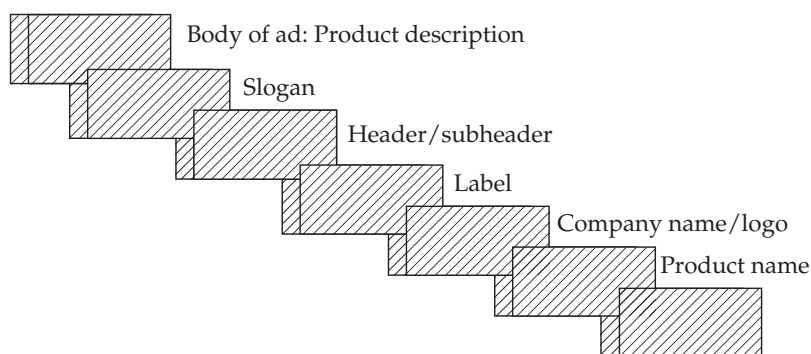
Figure 23.7 English – the structural dependency hierarchy

tense-aspectual information. This hierarchy does not include pricing because of its very restricted currency in advertising. In addition to predicting structural dependencies, this hierarchy also predicts the process by which English gains currency in global advertising. The onset of English penetration begins with naming, and then spreads to other domains. The reversal of this process appears not to occur.

Globalization and the Marketization of English

Globalization is a consumer culture of the twentieth century in which 'writers of the advertising copy offer themselves as poet laureates of the global village' (Barnet and Cavanagh 1995: 14). The new world economy rests largely on Global Bazaars, the Global Shopping Mall, the Global Workplace, and the Global Financial Network (Barnet and Cavanagh 1995: 15). In these four domains of the new economic order, English is the leading linguistic vehicle for the homogenization of global advertising discourse. The following sections present a partial list of some terms and expressions which are common to global advertising. For lack of space, a large number of names of American and English musicians, Hollywood movies, bands, musicals, actors, actresses, directors, international companies, and product names, etc. are excluded from this list. The list of examples presented below constitutes just the tip of the iceberg in global advertising discourse.

- *Fashion* – design, cream, lotion, moisturizing cream, model, top model, perfume, mascara, eye-liner, makeup.
- *Entertainment, food, drinks, and restaurants* – action-packed, album, art show, artist, bar, beef, burger, cafe, cappuccino, cast, cheese, chicken, classical music, coca-cola, coffee shop, coffee house, cold coffee, director, espresso, film, guitar, ham, hamburger, happy hour, host, hot coffee, ice jazz, junk food, liqueur,

lunch, lunch-special, menu, mineral water, music, office, pepsi, tea, piano, pizza, production, punk rock, restaurant, rock, rum, salad bar, scotch, side-walk cafe, stand-up comedy, steak, talent, tea, thriller, taste bud, tiffin carrier, vodka, whisky, wine.

- *Sports* – baseball, blazer collection, cap, casual, classic, design, dress code, dress up, fashion line, hand made, jacket, label, made in USA, model, see-through, sport wear, sweater, trend.

English is the single most important transmitter of global cultural discourse, manifesting itself largely in U.S. films, television, music, magazines, fashion, sports, and Disney theme parks. As a result, advertising worldwide is unified by vocabulary drawn from the inner circle of English.

Here is a partial list of the words and expressions used in the global workplace and financial network:

advertisement, agency, appointment, backup system, bites, bits, bond, CD-ROM, contact, demo, download executive, easy control, fax, fax modem, file, floppy, format, graphics, growth, hard disk, information highway, input, junk, manager, megabyte, memo, multimedia, on-site installation, on-site training, power book, program, promotion, sale, salesman, scanner, strategy, tape recorder, TQ (total quality), tour, training, user friendly, visibility, windows, word processing, work, work station, upgrade.

When these words and expressions participate in the process of language-mixing and the formation of new linguistic categories (e.g., the light verb formation including a verb translatable as *do* in Indian [*karnaa*] and Japanese [*suru*] advertising *download karnaa*, *suttato botan o kuirkku suru* 'to download'; lit. 'down load do'; 'start button click do' respectively) and discussions of new themes (e.g., futuristic multimedia, internet, yuppie culture in Asia and America), they lend further productivity and marketization to English in global advertising. Advertising even from the expanding countries carry headers and attention-getters such as *cutting edge*, *core value*, *on demand*, *details*, *open systems*, *open solution*, *networking*, *personal products*, *software and services*, *ATM*, in English only and only in the Roman script, often with no translation, but perhaps followed by an explanation in the body of the advertisement. The same is true with adjectives and qualifiers such as *new improved* and *maximum strength*.

Structures such as a string of noun phrases (*Oak Wood Furniture Express*), Negative structures (*no hassel, no payment*) and discourse styles (e.g., informationalization, promotional discourse, 'cold call' scripting; see Goodman and Graddol 1996: 141–57) reflect the two important ways in which the qualitative aspects of global bilingualism is undergoing homogenization. The homogenization impact of advertising discourse in English worldwide on other languages is so profound that it is affecting the general rules of information structuring. For instance, a simple inquiry 'where are you from?' might invoke the answer 'By Uniliver, the makers of Colgate, I have been sent from Delhi.' Notice that where in traditional discourse the information sequencing will be as follows: (i) a location disclosure;

(ii) the company name; (iii) the product name. The order is changed to: (i) the company name; (ii) the product name; and (iii) the location disclosure; for more details see Bhatia 2000: 93–4.

Quantitative aspects of English

Let us now turn to the question of quantitative aspects of English usage in global advertising. Is the incidence of mixing with English in global advertising increasing? In order to answer this question, a raw analysis of advertising from the outer circle (India, and European countries such as Germany, Spain, Italy and France), and the expanding circle (China, Japan, Korea, Russia) shows that the use of English is increasing in quantitative terms. A quantitative and qualitative analysis of a cream (*Fair and Lovely*) aimed at lower-middle-class women in India in the 1980s (see Plate 1 in Bhatia 1987) and 1990s (see Figure 23.8) reveals a surge in the use of English. These advertisements are representative of Indian advertising. They are not rare or special cases. One advertisement from the 1990s employs 122 words in the body and 20 words in the header. The advertisement from the 1980s has 448 words in the body and 19 words in the header. Although the number of words used in the body is reduced in the 1990s to one-third of that used in the 1980s, the incidence of the use of English has increased. The new advertisement carries the following six English expressions which are displayed in the Devanagari script only: *winter special*, *formula*, *double sunscreen*, *moisturizing*, *lotion*, and *cream*. The corresponding version of the 1980s uses only four English expressions: *sunscreen*, *bleach*, *pigment*, *ultraviolet*. The last three words are a natural consequence of the themes which are absent in the 1990s advertisement. The 1990s advertisement does not address the ill-effects of ultraviolet rays on human skin, particularly on the skin pigment, which are elaborated in the opening paragraph of the body of the 1980s advertisement. The second paragraph in the old advertisement is devoted to ingredients such as *bleach*, which are found in other creams but are absent in the cream in question. This theme is also excluded from the 1990s advertisement.

The theme, which is shared by both advertisements, is a more reliable indicator of the increase of English usage. In this context, the 1990s advertisement uses six expressions (10 words), whereas the 1980s advertisement contains only one word which is common to both advertisements (*sunscreen*). Notice that the increase in English in the 1990s advertisement is not due to the use of technical terms; rather these words are predominantly drawn from an area in which Hindi words are/ were easily accessible. Even if one does not take into account the factor of shared theme, the increment of English is up by approximately 50% in raw word count (33% in terms of expressions).

In the domain of header and subheader, although the word count is essentially the same (19 words in the 1980s and 20 words in the 1990s), the advertisement of the 1990s carries an additional English expression, *winter lotion*, which is written in the Devanagari script only. The labels of both advertisements are only in English and the Roman script, which displays the product name 'Fair and Lovely'. The

Figure 23.8   Cosmetic advertisement: Fair and Lovely cream

only change is that in the 1990s, the English expression 'with special winter cure' is added together with 'new' in small print. The display is in English and the Roman script in both advertisements. The Hindi slogan from the 1980s *gorepan kii sukomal tarkiib* 'the delicate way of lightening (the skin)' is eliminated from the advertisement of the 1990s. This illustrates not only the growing use of English in general, but also the increasing penetration of English into the various structural domains. In short, the use of English is increasing both in quantitative and qualitative terms.

Another example of the increasing use of English is in cosmetic and beauty product advertising in France. Given the international status of French, the linguistic rivalry between French and English, together with the linguistic attitudes of French speakers and the French academy, it is particularly surprising to find English in a domain in which French has asserted its supremacy, authority, and international status for centuries. Bhatia (1992) presents an analysis of French fashion and cosmetic advertising which reveals a pattern similar to the one found in other countries discussed so far (see also Martin 2001). Product names and attention-getters favor the use of English over French. Expressions such as *advanced cream*, *extra help makeup*, *multi-protection* are steadily increasing in use within the body of French advertisements in the context of offering explanations for the merits of the product in question.

What is the proportion of the English language in a non-English ad? According to a Dutch study of television commercials, one-third of the commercials on Dutch television contain English words (Gerritsen *et al.* 2000). Although research on mixing with English in advertising is gaining momentum, the distributive language load in quantitative terms is rarely addressed. Martin (2001) attempts to answer this question by proposing the cline of code-mixing advertising shown in Figure 23.9.

If one attempts to integrate the continuum within the framework of models of globalization (Table 23.1), the competitive model under which two languages are competing with each other, where one of the languages clearly predominates over the other, endorses the end points of the continuum, while the cooperative model where the two languages 'cooperate' to provide greater balance in their use falls in between the two end points.

Globalization from the bottom up

Although in the Western world, wall advertising is associated with graffiti, it represents a vibrant economic life in Asia and Africa. Furthermore, this form of advertising reflects a pattern of globalization from the bottom up (from rural to urban). Wall advertising comes close to the banner type of advertising witnessed in sports arenas in the West and internet advertising generally, rather than the elaborate print advertising found in magazines. The only difference is that wall advertising contains an invitational closing structure that often gives information

Table 23.1   Models of globalization: competitive and cooperative

Model	*Approach*	*Language/script*	*Text*
Competitive	Either/Or	One and not the other	Monolingual
Cooperative	Mixed	Two or more	Bilingual or multilingual

```
┌─────────────────────────┐
│    English monolingual   │──┐
└─────────────────────────┘  │
┌─────────────────────────┐  │
│  Sentential substitution │  │
│   (host L-->English)     │──┤
└─────────────────────────┘  │
┌─────────────────────────┐  │
│   Phrasal substitution   │  │
│   (host L-->English)     │──┤
└─────────────────────────┘  │
┌─────────────────────────┐  │
│     Isolated lexicon     │  │
│       substitution       │──┤
│    (host L--> English)   │  │
└─────────────────────────┘  │
┌─────────────────────────┐  │
│    Partial substitution  │  │
│   (host L<--> English)   │──┤
└─────────────────────────┘  │
┌─────────────────────────┐  │
│   Phrasal substitution   │  │
│   (English-->host L)     │──┤
└─────────────────────────┘  │
┌─────────────────────────┐  │
│     Isolated lexicon     │  │
│       substitution       │──┤
│    (English-->host L)    │  │
└─────────────────────────┘  │
┌─────────────────────────┐  │
│      Host-language       │  │
│       monolingual        │──┘
└─────────────────────────┘
```
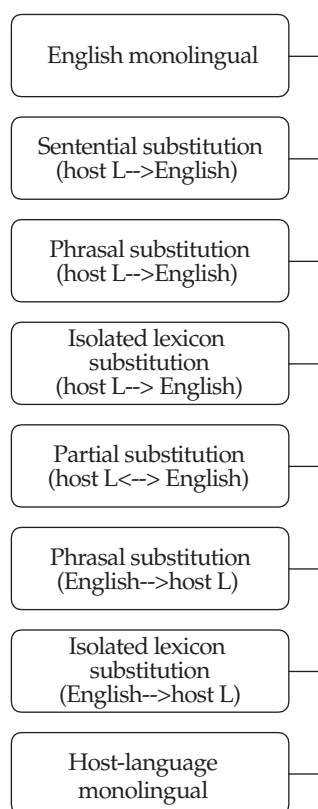
Figure 23.9 Cline of code-mixing advertising
Source: Martin, Elizabeth (2001). Mixing English in French advertising. *World Englishes* 21: 385

about the availability of the product and its distributor. While such structural units are invariably absent from the banner ads, they are present in print ads.

Color schemes and the physical properties of a wall are usually exploited (un)consciously and systematically to impose a structure on an ad and at the same time distinguish its different structural properties (for more details on the structural properties of print advertising see Bhatia 2000: 132–5 and for wall advertising see Bhatia 2000: 142–3; Bhatia 2007: 131–49). Consider, for example, the tea ad for *Taaza* in Figure 23.10. The ad carries a Hindi–Urdu attention-getter in the Roman script. The attention-getter turns out to be the product name (*Lipton taaza caay*), which is prominently displayed on the package. A subheader, *daane daar caay* 'the grainy tea' is from Hindi and is written in the Devanagari script. The third structural property, the slogan (*taaza kii taazgii* 'the freshness of Taaza'; *lipTan caay* 'Lipton Tea'), is written in Urdu with Perso-Arabic script. This demonstrates yet

Figure 23.10   Wall advertising

another facet of promoting bilingualism/multilingualism through the multiple mixing of scripts and languages particularly in those parts of the world where the incidence of bilingualism with English is very great.

English and the Mystique Factor

Now let us return to the answer of the Mexican businessman at the start of this chapter on the use of English. The quantitative and qualitative pattern of the use of English worldwide has added yet another, but invisible, dimension to English which we will term the 'mystique factor.' Although it is possible to make use of an existing translational equivalent of English in other languages or to coin a new corresponding native term, this strategy does not yield the desired socio-psychological effects which only English is capable of transmitting. After all, is there a language in the world which lacks an English equivalent of words such as *new*, *design*, or *juice*? This is the underlying reason that motivated the salesperson in Mexico to make the profound observation that English sells. The suggestion of the Spanish literature scholar missed this potential for the use of English because of the centuries-old Western tradition of linguistic prescriptivism that would have excluded language-mixing and therefore been counter-productive in the context of marketization and advertising.

   Our analysis of the invisible socio-psychological features which English has acquired in the process of being used in global advertising shows that English is often called into service to achieve certain positive and exclusive effects. Rather

Table 23.2 English: socio-psychological features

Threshold trigger	*Proximity zones*
Future and innovation	Vision, foresightedness, advancement, betterment
American or English culture	Limited Westernization, Christianity, values such as independence, freedom, modernization
Internationalism and standardization	Certification, standards of measure, authenticity
Rationality and objectivity	Scientific appeal, problem solving
Competence	Efficiency, organization, quality, safety, protection, functionality, pragmatism
Sophistication	Elegance, style, rarity
Physical fitness	Self-improvement

than treating them as free, unstructured, and mutually exclusive features, an attempt is made here to classify these features into the threshold (that is, seed-like) socio-psychological features which can best be characterized as general, but core features. Once these threshold features are acquired, like an entry to a house, the access to proximity zones (different rooms) becomes opened, which leads to a domino effect. Proximity zones can be characterized as subsets of threshold features. The threshold features and the proximity zones posited here are presented in Table 23.2. An analogy will further clarify the point we are making here. Just as a door threshold gives access to different zones in a house or building, threshold categories provide access to proximate zones which in turn can lead the way to other related zones.

Those readers who are familiar with typological work in the study of grammatical structure will recognize the structure of the domains in which English appears in advertisements as constituting an implicational hierarchy – that is (in general) if English is used in a given advertisement in a domain that is higher up in the hierarchy given below – say, in the slogan – then it will also appear in all of the domains below that domain – in this case, header/subheader, label, company name/logo, and product name. The converse, however, does not hold; if English appears in the product name it may or may not appear in the company name or the label, etc. We may represent the hierarchy as follows, where 'X > Y' represents 'the presence of English in X implies the presence of English in Y, but not conversely'

Body > Slogan > Header/Subheader > Label > Company Name/Logo > Product Name

How these thresholds are created and contrasted in their interaction with the structural properties of an advertisement is the subject of an independent

investigation; therefore, we will not go into it here. Instead, we will attempt to account for the threshold phenomenon and its relatedness to the zones described below.

As we have already discussed, English is considered a natural candidate for transmitting themes of futuristic global communication in Japanese advertising. Japanese is not viewed as equally equipped to carry out this task. Perhaps that is the reason why attention-catching headlines are given in English rather than in Japanese, even in corporate documents. Naturally, English is also best suited to convey American or British culture. Sports images and physical fitness themes dominate the globe to market products, such as Nike shoes, through English. To best convey standardization, technical information is provided in the form of abbreviations, graphs, tables, and acronyms rendered in English. Companies such as Shell convey their competence, reliability, and supremacy by presenting certificate numbers only in English. A case in point is the Chinese advertisement from Hong Kong (see Figure 23.11). Not even once is the actual seal and evidence of a certified company expressed in Chinese.

Bhatia (1987) points out that the Indian fabric industry in the 1980s maintained a delicate balance between modernization and Westernization. The themes of modernization were conveyed nonlinguistically by means of visual images. The use of English was discouraged, for example, in saree advertising. However, in
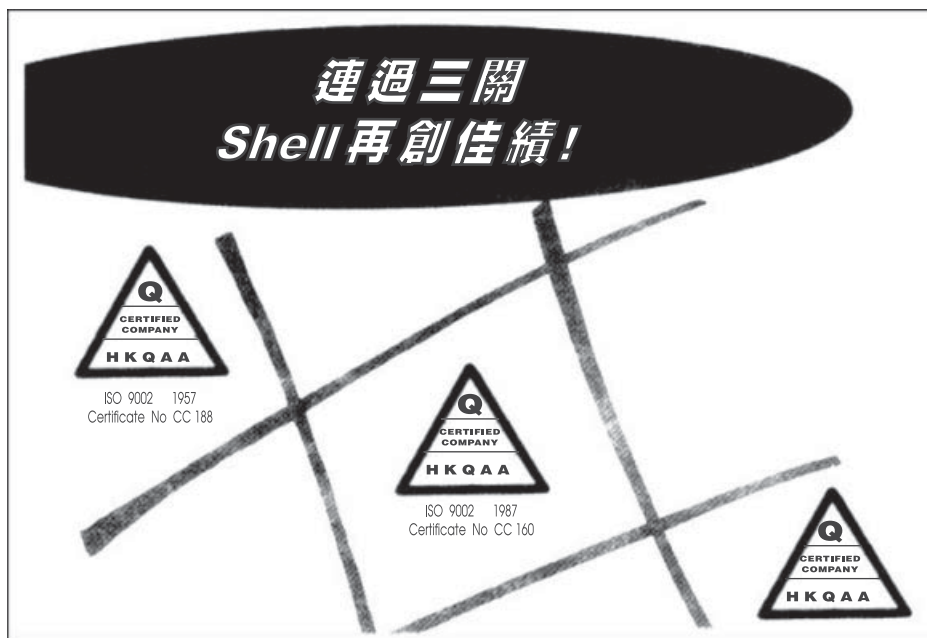

Figure 23.11 Social-psychological function: certification and trustworthiness

the 1990s, a shift was noticeable. Today, it is common to find an English attention-getter such as 'a feast of elegance' to mark the sophistication and style of a saree.

Even the Italian leather and fashion industry, which is known the world over for its style, prefers to express its uniqueness of style by employing an English attention-getting headline, *Style*. Similarly, the English word *design* surfaces in German advertising as a part of the phrase *Funktionales Design*. The sense of quality is better conveyed by means of English, than by German.

The social-psychological features listed in Table 23.2 are multiplying like a splicing and copying gene, leading to a domino effect. The new features are being added to the already large inventory of the social-psychological features of English. Threshold features such as American culture are opening the way to a proximate zone of other related features. For example, the association of English with American culture places it within easy reach of other zones of proximity such as individuality, independence, and self-help – 'do it yourself' themes (see Luna 2011: 549–55 for a discussion of the interaction of language and culture in advertising; see Martin 2011 for the role of multilingualism in carving distinct identities).

Literary and psycholinguistic determinants

In addition to rendering the social-psychological features, mixing with English performs other literary and psycholinguistic functions such as rhyming (*Trentenaire On Air* – a French radio station ad), reduplication (*MyMy Workman* in a Korean ad), puns (*must* with two meanings: English *must* and Hindi *must* 'crazy'); humor; and slogans (changing value systems: slogan such as 'Freedom is my birth right' aimed at gender equality and empowerment). These functions have immense psycholinguistic power since they play important roles in product recall and information primacy effects.

These are special effects and creative meanings which advertisers strive for. The creativity through English enables them to conquer the negative social evaluation of mixing.

Language Change: The Interaction of Outer and Expanding Circles

Let us briefly discuss some of those formal features which give inner-circle English a distinct flavor in the outer and expanding circles. As Figure 23.2 shows, the expanding and outer Englishes are influencing inner circles of English advertising discourse for the following reasons.

Adaptation

Loveday (1996: 144) presents a list of 10 different English patterns of word formation equivalents to compounding and clipping in Japanese. Without indulging further on this point we would like to emphasize that attempts to impose such

patterns on native languages together with the tendency for lexico-syntactic and lexico-semantic transfer serve as an important source of innovation and violations which give advertising outside the inner circle its distinct and divergent flavor.

In Japanese advertising, it is not uncommon to find expressions such as the following:

(8) We grow quality

(9) interigento yoguruto 'the intelligent yogurt'

(10) meri bunasu 'the merry bonus'

(11) **kuiz**u ni kotae-te **big**gu na **purezent**o
      quiz loc.pp answer-imp. big adj. marker present
      'Let's answer (this) quiz (and) get a big present'

The English sentence (8), although free from any morphological or phonological adaptation, violates the usual selectional restrictions between the verb and its object argument. The English phrases, (9) and (10), which are adapted according to the syllabic structure of Japanese, also show selectional restriction violations between the head nouns and their modifiers. In sentence (11), the English nominal items, *quiz* and *present*, and adjectives such as *big* are subjected to the phonological and syntactic patterns of Japanese.

Consider next an example of a Coca-Cola advertisement in Spanish. The advertisement in English uses the attention-getter expression *Diet Coke* while this expression is transformed as *Coca-Cola light*. Although some English speakers from the inner circle may wonder about this expression, the use of English is motivated to resolve the structural conflict between Spanish and English. The post-nominal adjective is used to satisfy the regular head-initial properties of Spanish and stands in violation of the pre-nominal adjectival requirement of English. For further details see Bhatia (1992: 210–13).

Double marking and reduplication

Consider the following example from a Russian advertisement:

(12) children *yaataa* shoes *i* *na*-put on- *eli*
      pl. marker pl. marker on past. marker
      'Children put on shoes.'

This example duplicates marking the subject and the object arguments. The Russian plural markers are italicized. Similarly, even the English particle verb construction *put on* undergoes a duplication process by prefixing the italicized Russian equivalent of the English particle *on*.

Korean advertising exemplifies yet another property of English usage which is specific to that region. The colorful usage of the pronoun 'my' in Japanese advertising is further extended with a regional flavor in Korea. Expressions such as

MyMy workman are witnessed frequently in advertising. The duplication of *my* without a space adds the dimension of electronic communication, i.e., no space between words. This usage is catching up in inner-circle English advertising.

Hybridization

Hybridization in compounding is another feature of divergence from advertising in the inner circle. The following examples illustrate this process: haicke-<u>böeki</u> 'high tech trade' (high tech [English] + <u>trade</u> [Japanese]), america-<u>sei</u> 'made in America' (America [English] + <u>sei</u> 'made in').

Acronyms and truncation

Consider acronyms such as OL ('office lady', for a modern Japanese 'working girl'), and RP ('retired person'). These are new creations which are highly local to some countries and are not shared by the inner circle. Similarly, Stanlaw (1982: 176) points out truncation, or shortening, as a popular device in Japanese English, e.g., *depato* (department store), *terebi* (television).

Archaism

Some terms, such as *girdle* which originated in the inner circle, have become obsolete in their nativized context. These words are no longer in currency in the inner circle and have been replaced by expressions such as *stomach flattening panties/ pants* or *bottom flattening panties/pants*. However, such expressions as *girdle* have found their way into Asian fashion advertising. A case in point is the Chinese ad from Hong Kong which carries an attention-getting head line, *What is Girdle?*

Analogical patterning

Innovations, such as *Walkman*, which originated from the expanding circles (Japan) are now being subjected to analogical patterning. Therefore, one now finds *Discman* gaining popularity in the outer and expanding circle. However, analogical change is slow to catch on in the inner circle and its use is quite restricted.

Features such as the ones described above in this section add a distinct flavor to English advertising in the outer and expanding circles.

Linguistic Accommodation and Advertiser's Perception

From the above discussion, multiple mixing of scripts and languages together with linguistic adaptations represent a linguistic accommodation which in turn leads to global bilingualism. From the spectacular growth of the use of English in global advertising, one should not conclude that English is a super language that

Table 23.3 Language and domain distribution in Hindi advertising

Language	Audience	Appeal	Value/Aim	Product/discourse domain
English	Male/Female	Outworldly	Modern, Western,	Fashion, science
Hindi	Female	Emotional	Utility, pragmatic	Domestic
Sanskrit	Male/Female	Deep-rooted cultural	Reliability	Fabrics
Persian	Male	Luxury (royal)	Utility (physical)	Cigarettes, sports, fashion

has conquered all the discourse and structural domains of advertising. The globalization of English does not mean that other languages of the world have been dethroned and English can invade global advertising at will. Bhatia (1992) shows that some domains are still inaccessible to English. Table 23.3 exhibits the domains (product, audience, appeal, and value) carved out by different languages in Indian advertising.

Furthermore, laws regulate the use of English in countries such as France (Martin 2001); China and Russia regulate the use of English in global advertising. Although government regulation runs counter to linguistic accommodation, even here the examination of ads shows that advertisers bypass laws (e.g., giving English words in bold and their French translation in fine print) and use English in order to satisfy their creative needs.

It appears that advertisers worldwide either consciously or unconsciously favor bilingualism or even multilingualism over monolingualism. This is true of their promotion of local as well as global products. They expect their readers to have some degree of bilingual competence – that is why their concern for intelligibility sometimes takes a backseat to bilingual texting. Take the case of Japan and the Netherlands. Print advertising in Japan exhibits a strong tendency for mixing with foreign languages, particularly with English. Since the incidence of bilingualism with English is still very low even among the youth, the message of the English text is often incomprehensible. Although consumers often complain about the lack of intelligibility, advertisers are in no mood to yield. Consequently, though English might not be intelligible in some instances, the loss of propositional meaning is not a total loss. It is compensated for by the attention-getting function that lack of intelligibility serves in Japan. This is the predominant trend in Japan – to use English for what we call 'cosmetic' reasons, i.e., as an attention-getting device. This adds yet another dimension to the pattern of global bilingualism and English is often considered a 'cool' language to attract attention.

As van Eltteren (1996: 58) rightly points out, globalization should be viewed as the 'organization of diversity' rather than the 'replication of uniformity,' despite the homogenization of English advertising discourse on a global basis. The process of localization of English parallels the process of globalization. The primary carriers of localization are undoubtedly the local languages which have come in contact with English. However, the other notable aspect of localization is the local adaptation of English. This dual role of English may appear paradoxical at first sight, but it is a natural consequence of the globalization of English. The local adaptation of English (discussed above), together with its mixing with other languages both inter- and intra-sententially, has enabled English to perform both global and local functions in a way which can best be termed as glocalization. Globalization without localization is a fractional view of the global power of English. Because English has to share the pie of localization with other languages, it is only natural that English has yet to acquire many other social-psychological features such as deep-rooted cultural traditions, non-Christian religious concepts, local or regional authenticity or appeal, and alternative medicine. Consider the domination of French and its appeal in the area of fashion, luxury, and beauty; English has begun to weaken the defenses of French and is gradually building inroads into the territory which was the exclusive domain of French, though French has by no means been dethroned by English. Nevertheless, English is constantly retooling itself to acquire those social-psychological features and thematic domains which seem distant at the moment. In short, English is still constructing and negotiating these two paradoxical identities.

Conclusion

From the above discussion, it is self-evident that the negative view of language-mixing is incompatible with the global pattern of advertising. Mutiple mixing of languages and scripts is the hallmark of global advertising. Although the neutral view can account for situations such as those witnessed in Japan, the mixing of English goes beyond the consideration of attention-getting and cosmetic motivation. The positive/systematic view best explains the presence of English in global advertising. In its role as the language of global advertising, not only is English leading to the homogenization of the advertising discourse worldwide, but it is also diversifying in a number of ways. Taking into account the two main aspects of global advertising discourse, namely unification and diversification, the role played by English can best be characterized as glocal. The glocalization of English has led to an ever-growing appetite for English in advertising worldwide which has changed and continues to change the quantitative and qualitative patterns of English usage in advertising around the world. This leads us to conclude that language-mixing or mixing of English with other languages is motivated by the deeper demands of creativity, which in turn support the positive and systemic view to language-mixing and global bilingualism.

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FURTHER READING

Advertising discourse is not only an excellent source of pragmatic language input to improve second-language proficiency, but is also an integral part of democratic communication and values. Internet and social media, in conjunction with popular culture, are posing fresh challenges to understanding bilingualism/multilingualism and increasing the richness of language use (in the language of the Facebook, twitter, the web, email, chat groups, and virtual worlds) which in turn poses new challenges to the typical classroom model of learning second languages. There is a question of death of languages, language rights and minor languages, translations, dissemination of information in less commonly taught languages or non-Western languages, see the sources below.

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