Applied Psycholinguistics and Multilingual Cognition in Human Creativity

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Biculturals (i.e., individuals who have experienced and internalized more than one
culture) are recognized as a growing demographic, and as such will become important
stakeholders in organizations. An emerging stream of research from psychology

and organizational studies indicates that bicultural individuals have a particular set of cognitive skills and competencies that can contribute to the performance of international teams. However, research on biculturals in organizations is facing conceptual and methodological limits due to the complex nature of the construct of culture. While the constructs of culture and language are distinct, they are undoubtedly interwoven; hence, the latter may become a tool to analyze the phenomenon of biculturalism. In this chapter, the authors analyze the literature on social identity, foreign language acquisition, and bilingualism to find potential solutions for these critical challenges.

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Bryan Christiansen, Global Research Society, LLC, USA

Mahmoud Ahmed Gad, Global Research Society, LLC, USA

This chapter explores the connection between cultural indoctrination (CI) and open innovation in human creativity and its importance in an era of global hypercompetition. As organizations are confronted with the need to engage with stakeholders from a variety of different cultural backgrounds, the need to understand the ways in which cultural imperatives play into individual and collective performances becomes increasingly important. Based on an integrated literature review, this chapter examines the following eight factors included in CI: child development, cultural institutionalization, cultural intelligence, language structure and acquisition, social learning theory, religion, social capital, and values orientation theory (VOT). It is from these factors that a conceptual framework is developed for future application in theory and practice in open innovation.

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   Juárez, Mexico
  Aide Aracely Maldonado-Macías, Autonomous University of Ciudad
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  Juan Luis Hernández Arellano, Autonomous University of Ciudad
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Usability is the characteristic of a software product of being effective and efficient and producing satisfaction for users and traditionally is assessed through questionnaires but most of them are only available in English. A software usability assessment questionnaire (SUAQ) is proposed in two languages: Spanish and English. The methodology comprises four stages: 1) questionnaire development, 2) administration, 3) statistical validation, and 4) sample size determination. Twenty items were evaluated in terms of clarity, consistency, and relevancy. Then, the SUAQ was administered to 95 respondents. Overall, reliability values were acceptable in Spanish and English version, respectively. The factor analysis was feasible since the KMO index, and the Bartlett sphericity test was statistically significant. Both versions of SUAQ were tested to determine their validity. The findings show that the proposed methodology is an effective usability assessment instrument and thus an effective software improvement tool from a bilingual approach.

  Libi Shen, University of Phoenix, USA

Language situations vary in different nations. In some countries, a variety of languages are spoken; in others, a single language is used. People who have the linguistic competence to speak several languages are multilingual. What role does multilingualism play in multinational corporations? Is multilingualism a problem or a solution for international business? Does English as a lingua franca play a role in international business? How business leaders react to multilingualism or Englishization? Opinions are divided. Multilingualism has been the focus of interest in recent decades due to globalization, tourism, technology advancement, international trade, and so forth. Language barriers and linguistic diversity surfaced which may

impact corporate communications in international business. Specific language policies might be needed for corporate communications. The aims of this chapter are to explore the roles of multilingualism and Englishization in international business, and to seek approaches for better corporate communications. Associated issues and problems as well as solutions and recommendations will be explored and discussed.

Chapter 9

Juan Carlos Díaz, Universidad EAFIT, Colombia
Sara Aguilar-Barrientos, Universidad EAFIT, Colombia
Heiko Marc Schmidt, Universidad EAFIT, Colombia

Education for future international business (IB) practitioners must be linked to a clear multilingual and multicultural approach. In this chapter, the authors present a case of study of the setup, aspects, and implementations of an IB undergraduate program carried out mostly in a foreign language (English). The program here presented also requires students to acquire a third language, and thus has become the first IB program of its kind in Colombia. The consequences, challenges, and opportunities derived from this multilingual approach to business education are then discussed in this chapter. Through data collected from the study program, it is possible to draw attention to the link between linguistic skills and academic performance, which leads to a short overview of the cognitive correlates to multilingualism and the learning process aspects associated with the use of a foreign language in the classroom. Finally, the authors draft some recommendations for educators and professionals designing IB study programs with a multilingual approach.

Preface

Psycholinguistics focuses on understanding psychological and neurobiological factors that enable humans to acquire, use, comprehend and operate language. Language acquisition and operationalisation are one of the quintessential human traits because non-humans do not communicate by using language. While some scholars believe the history of psycholinguistics began with Chomsky's 'cognitive revolution' in the middle of the 20th century, empirical psycholinguistics actually assumes its earliest tradition in philosophical and educational schools of thought of the eighteenth century. It is usually considered that this field has four official historical roots which, by the end of the nineteenth century, merged and formed a basis for what became called the psychology of language.

According to Levelt (2012), the first root was comparative linguistics that studies the origins of language. The second root was neurological studies of the brain with respect to language. The third root was early childhood education based on Rousseau's theories. The fourth root was the study of speech and language processing based on experimental laboratory research. Since the merge of these four traditions into a distinctive field of study, psycholinguistics has always been an evolving area of research heavily influenced by developments in related fields. For instance, advances in computational approaches, statistical linguistics, mathematical theory of communication, and neural networks led to the emergence of new approaches in natural language processing.

In turn, psycholinguistics has also affected the development of other fields. For instance, business studies have become increasingly concerned with the phenomenon of multiculturalism and multilingualism and their effects in business negotiations, human resource management, entrepreneurship and consumer behavior. Multilingualism is the efficient use of two or more languages, either by an individual speaker or by a community of speakers. With the current wave of globalization, multilingual speakers outnumber monolingual speakers in the world's population. Multilingualism is becoming a social phenomenon governed by the needs of cultural

openness. Owing to the ease of access to information facilitated by the Internet, individuals' exposure to multiple languages is becoming increasingly frequent, thereby promoting a need to acquire additional languages. These important trends alter the way we conduct business and create a need to rigorously access their influences on different aspects of business life.

Another important research area that has become affected by psycholinguistics is creativity studies that explore the phenomenon of the creation of novel, high quality value added content (products, ideas, processes) (Kaufman & Sternberg, 2010), as well as patterns of creative behavior (Woodman & Schoenfeldt, 1989). Language is extremely important for creativity, because generation of innovative ideas and content creation demands deep understanding and effective operationalisation of the language.

Since there is no readily available extant literature that synthesizes psycholinguistics, multilingualism, and language acquisition into one entity and examines how it influences human creativity and different aspects of doing business, we believe this work offers ground-breaking discoveries for multiple areas. This book includes nine chapters that explore a variety of contemporary issues related to the primary subject matter of this publication. Each of these is outlined below.

Chapter 1 examines the relationship between orthography, phonology and morphology in Turkish and what this means for Turkish-English bilingual language processing. In line with contemporary thought, this chapter is written with the view that bilingual speakers engage a singular language or lexical system characterised by fluid and dynamic processes. Particular focus will be given to English-Turkish speaking bilinguals in the United Kingdom, which includes heritage (HL) and non-HL language speakers. Evidence from monolingual developmental research as well as neuropsychology will be examined to confirm findings of previous studies in other European contexts, and also to raise attention to various challenges which need to be addressed across all contexts.

Chapter 2 analyzes the extant literature on social identity, foreign language acquisition, and bilingualism to find potential solutions for critical challenges related to bicultural individuals who are those internalizing more than one culture and are recognized as a growing demographic worldwide. An emerging stream of research from psychology and organizational studies indicates that bicultural individuals possess a particular set of cognitive skills and competencies that can contribute to the performance of international teams. However, research on biculturals in organizations is facing conceptual and methodological limits due to the complex nature of the construct of culture. While the constructs of culture and language are distinct, they are undoubtedly interwoven; hence, the latter may become a tool to analyze the phenomenon of biculturalism.

Chapter 3 explores the ways in which the cultivation of creative discourse is associated with the formation of the necessary conditions that promote human creativity. The study focuses on revealing the mechanisms behind their attempts of personal expression which incite a multifaceted processing of reality and a redefinition of the relationship between pre-existing and newly-acquired knowledge. These mechanisms are studied in order to identify the ways in which creative discourse, under specific conditions, can transform from an innate human capacity into a creative ability.

Chapter 4 chapter investigates the recent global situation of English as a lingua franca. It first presents the principals of traditional applied linguistics and Second language acquisition. Then, it provides an overview of the spread of English and the emergence of new Englishes. It also discusses the concepts of "world Englishes, multilingualism and pluralism". Next, the chapter presents the World Englishes debate to show the gap between monocentrists and pluralists. Finally, the study sheds light on the fact that "Englishes" reflect the multilingual reality of English.

Chapter 5 provides a methodological approach where creativity is encouraged through the production of multimodal iPad-mediated narrative texts in the English as a foreign language classroom (EFL) in secondary education. The study, which is based on creativity of human language, evaluates the multimodal productions of a group of students of secondary education (Year 7) in Spain who work with iPads (1:1 context) within a cooperative learning approach and analyzed from the students' point of view. The results show the impact multimodality has on the own students and on their way of working with the foreign language. The quality of their productions, not only regarding language but also as an act of creation, and the way they appropriate the different semiotic modes multimodality offers will also be examined.

Chapter 6 shows the connection between cultural indoctrination (CI) and open innovation in human creativity and its importance in an era of global hypercompetition. As organizations are confronted with the need to engage with stakeholders from a variety of different cultural backgrounds, the need to understand the ways in which cultural imperatives play into individual and collective performances becomes increasingly important. Based on an integrated literature review, this chapter examines the following eight factors included in CI: Child Development, Cultural Institutionalization, Cultural Intelligence, Language Structure and Acquisition, Social Learning Theory, Religion, Social Capital, and Values Orientation Theory (VOT). It is from these factors that a conceptual framework is developed for future application in theory and practice in open innovation.

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Chapter 7 offers a methodology to develop a software usability assessment questionnaire (SUAQ) in Spanish as a bilingual strategy for computer software improvement. Usability is the characteristic of a software product of being effective and efficient and producing satisfaction for users and traditionally is assessed through questionnaires but most of them are only available in English. In this chapter, the SUAQ is proposed in two languages: Spanish and English. The methodology comprises four stages: 1) questionnaire development, 2) administration, 3) statistical validation, and 4) sample size determination. A total of 20 items were evaluated in terms of clarity, consistency, and relevancy. Then, the SUAQ was administered to 95 respondents. The findings show the proposed methodology is an effective usability assessment instrument and, thus, an effective software improvement tool from a bilingual approach.

Chapter 8 inspects the role of multilingualism in international business and to seek approaches for better corporate communications. Multilingualism has been the focus of interest in recent decades due to globalization, tourism, technology advanced, international trade, and so forth. Opinions are divided on the role of multilingualism in international business. Language barriers and linguistic diversity surfaced with multilingualism which may impact corporate communications in international business. What role does multilingualism play in multinational companies? Is multilingualism a problem or a solution for international business? What role does English as a business lingua franca play in international business? What language policies are needed for corporate communications? The chapter raises these questions and contributes solutions and recommendations for the reader.

Chapter 9 presents a case of study of the establishment and implementations of an International Business (IB) undergraduate program conducted mostly in a foreign language (English) in Colombia. The program presented also requires students to acquire a third language; thus, it has become the first IB program of its kind in Colombia. The consequences, challenges, and opportunities derived from this multilingual approach to business education are then discussed. Through data collected from the study program, it is possible to draw attention to the link between linguistic skills and academic performance, which leads to a short overview of the cognitive correlates to multilingualism and the learning process aspects associated with the use of a foreign language in the classroom. Finally, the authors draft some recommendations for educators and professionals designing IB study programs with a multilingual approach.

We trust this book will spur further empirical and theoretical research into the fields of psycholinguistics and multilingualism for relevant application in multiple areas such as consumer behavior, education, international business, linguistics, management, and beyond. In this era of global hypercompetition that affects all areas of human endeavor today in unprecedented ways, we must do all we can in academia and practice to ensure a sustainable and pleasant livelihood for all concerned. As multilinguals ourselves we truly understand the importance and value of language in contemporary society. This publication should heighten the same sensitivity where it is needed.

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Chapter 1
Orthographical, Phonological, and Morphological Challenges in Language Processing:
The Case of Bilingual Turkish– English Speakers

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ABSTRACT

The chapter examines the relationship between orthography, phonology, and morphology in Turkish and what this means for Turkish-English bilingual language processing. Turkish offers a unique language medium in pitching theoretical perspectives both in linguistics and psycholinguistics against each other because of its properties. Empirical and theoretical considerations are employed from both domains in order to shed light on some of the current challenges. In line with contemporary thought, this chapter is written with the view that bilingual speakers engage a singular language or lexical system characterized by fluid and dynamic processes. Particular focus will be given to English-Turkish speaking bilinguals in the UK, which includes heritage (HL) and non-heritage language speakers. Evidence from monolingual developmental research as well as neuropsychology will be examined to confirm findings of previous studies in other European contexts, and also to raise attention to various challenges which need to be addressed across all contexts.

INTRODUCTION

The ability of the human cognitive system to store and organize language and knowledge about words (phonological, semantic and orthographic representations), and to be able to retrieve those representations on demand require multifaceted, interlinked, and complicated mental processes. Put simply, semantic representations represent meaning of words while lexical representations (phonological and orthographic) refer to auditory and visual forms of words respectively (Kroll & de Groot, 1997). From an evolutionary perspective, bilingualism presents complex and multi-layered cognitive processes that involve the interaction of cultures, expression of social experience, and history of a particular people as well as the mechanism of interaction of languages (Roberts, 2013). Historically, the ability to speak more than one language because of contact with other communities, immigration and trade has been reported dating back to the Sumerians (Woods, 2006).

In this respect, a widely accepted definition of bilingualism is 'both regular use and communicative competence' in native language (L1) and non-native language (L2) (Francis, 1999, p. 194). Some of the common linguistic consequences of language contact, specifically individual and societal synchronic bilingualism, include language learning and revitalization, linguistic creativity, code-switching, language shift and attrition, and translanguaging. As an emerging concept, translanguaging has been used to differentiate the simple shift between two languages (i.e., code-switching) versus flexible or dynamic bilingualism. In this respect, translanguaging refers to the 'speakers' construction and use of original and complex interrelated discursive practices that cannot be easily assigned to one or another traditional definition of a language, but that comprise the speakers' complete language repertoire' (García & Li Wei, 2014, p. 22).

The theory of translanguaging posits that all speakers have a singular linguistic repertoire composed of features that are selected and deployed in different contexts (Otheguy, García, & Reid, 2015). This supposition is in line with cognitive models of bilingualism especially where a bilingual's two languages are assumed to share a single memory store or lexicon. In line with current thought, this chapter is written with the view that bilingual speakers possess one language system in their minds (e.g., Grosjean, 1985; Cook, 1999; Cummins, 2007; Creese & Blackledge, 2010; Li, 2011) and the properties of this system are fluid and dynamic. Cook's Multi-Competence Theory (1991) also holds the view that the knowledge of two or more languages in a bilingual mind is processed via the same capacity. Therefore, the knowledge of these languages must form a super-system and they affect each other rather than being completely isolated (Cook, 2003).

The aim of this chapter is multifold and can be categorised as follows: i) To draw on the foundational theories and models of language contact and morphological

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and orthographic processing in bilinguals. Particular focus will be given to English-Turkish speaking bilinguals in the United Kingdom (UK), in particular heritage-language (HL) speakers. HL usually refers to the non-societal and non-majority languages in a given social context, such as English in the UK. Heritage speakers (HS) are often defined as bilinguals who have acquired HL and the societal language naturalistically in early childhood (Pascual, Cabo, & Rothman, 2012). ii) The latest research on the processing skills of the following groups of populations will be evaluated: a) Turkish speaking monolinguals; b) English-Turkish speaking bilingual neuropsychological case study with language impairments; and c) heritage speakers in the UK. Although Turkish is the target language in these populations, they are nevertheless heterogeneous groups in different respects and therefore must be treated differentially. In the latter part of this chapter, three overarching challenges specific to the extant literature on language processing are discussed. These challenges are grouped as follows: 1) terminology, 2) flexible language practices, and 3) language distance. Implications for applied psycholinguistics and for understanding bilingual language processing are discussed.

A number of classification systems explain the variation in fluency, competence, and order of acquisition for bilingual language usage. For example, the degree of knowledge of languages has been labelled as either subordinate (i.e., when a bilingual speaks one language better than the other) or coordinate ('pure') when a person speaks two languages with identical competency (Grosjean, 1997). The degree of proficiency of the second language has also been used to classify bilinguals as receptive, reproductive, or productive where receptive bilingualism is defined as the ability to understand the subject of an L2; reproductive bilingualism is the ability to competently reproduce spoken language in L2 and productive bilingualism is the ability to competently express innermost thoughts and speech in L2 as in L1 (Bialystock, 2001).

Heritage Speakers as Bilinguals

Realistically speaking, it is difficult to find clear types of bilinguals, but rather a combination of types, which depends on various factors. Grosjean (1997) considers that the bilingual mind is not a simple combination of two monolinguals, but a unique communication system that can use both languages or switch from one language to another depending on context and situation; additionally, bilinguals qualitatively and quantitatively differ from monolinguals in terms of their underpinning cognitive processes. Two key issues have been of particular interest from a psycholinguistic perspective; namely, how are two languages organised and stored? And how are they processed in the bilingual mind?

Greater exposure to L2 at the beginning of the bilingual experience is linked to more advanced L2 acquisition (e.g., Gathercole, 2007; Gathercole & Thomas, 2009; Paradis, 2010). Paradis (2010) argues that input quality which refers to the specific language variation which exists in bilingual's environment plays an important role in L2 acquisition. For example, the variation of dialects or different levels of language fluency can contribute to the learners' language processing. If there is a great variety of the L1 and L2 exposure, this can potentially lead to 'errorful' usage of some language structures.

Proficiency and age of acquisition of L2 have been demonstrated to influence not only behavioural aspects but also the manner in which the bilingual brain becomes activated (Perani et al., 1998). In an fMRI study, the authors employed two groups of participants to investigate the effect of early and late acquisition of L2 in highly proficient bilinguals: a) Italian-English bilinguals who acquired L2 after the age of 10 years, and b) Spanish-Catalan bilinguals who acquired L2 before the age of four years. Perani et al. (1998) reported that 'for pairs of L1 and L2 languages that are fairly close, attained proficiency is more important than age of acquisition as a determinant of the cortical representation of L2'.

Moreover, proficiency is a central tenet of bilingual language processing models. In this respect, Kroll and Stewart's (1994) Revised Hierarchical Model (RHM) propose that both L1 and L2 words share conceptual representations (one store) as opposed to L1 and L2 having separate representations for words (two stores) one for each language. A further assumption is that there is a large overlap in meaning between words in L1 and L2, especially in concrete words as they share more features compared to abstract words.

Meanwhile, language-specific words and abstract words are not assumed to share representations in the bilingual mind. The more features in common that L1 and L2 possess, the easier the translation. The RHM suggests two levels of representation exist: the lexical or word level, and the conceptual or meaning level. At the lexical level, each language seems is assumed to be stored separately. Initially, words in L1 are assumed to gain direct access to meaning, whereas L2 words gain access to meaning via lexical links between L1 and L2 until proficiency in L2 is equivalent to L1. At this stage, a further assumption is that conceptual links are established between L2 and conceptual memory.

The degree of commonality/disparity of orthographic features between L1 and L2 are other influential factors in bilingual language and literacy acquisition and processing. Of particular interest is the difference between L1 and L2 orthographies such as physical features and directionality and to what extent these differences affect language processing. For example, Wang, Koda, and Perfetti (2003) demonstrated differences in English word recognition (alphabetic orthography) between native speakers of Korean (syllabic orthography) and Chinese (logographic orthography);

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while robust cognate effects faster and more accurate recognition of words similar in spelling/meaning in both L1 and L2 than noncognates have been long established in Dutch-English (de Groot & Nas, 1991) and in Hebrew-English bilinguals (Gollan, Forster, & Frost, 1997).

The impact of variation in orthographic transparency is an important factor that influences processes between different languages, but also processes used within a given language. The irregular nature of orthography to phonology mappings in reading and spelling English is well documented (Venezky, 1970), but what is of interest here is the way in which readers are required to employ different processes to successfully derive phonology from print and vice versa. For example, one would fail if they employed the same strategies in reading orthographically similar, regular words such as GAVE and WAVE as opposed to irregular words such as HAVE.

The dual route model of oral reading was proposed by Coltheart in 1978 (Coltheart, Curtis, Atkins, & Haller, 1993; Coltheart & Rastle, 1994) to address such issues and to explain how print (orthography) can be converted to sound (phonology): i) via a nonlexical route which employs grapheme-phoneme conversion rules or GPCs for reading regular words such as GAVE, WAVE, and SAVE, and regularly transcribed nonwords and ii) via a lexical route which retrieves previously stored representations from long term memory when GPCs would fail for irregular words such as HAVE, YACHT, and COLONEL. The dual route model had a huge impact on the understanding of lexical processes involved in visual word recognition in English; nevertheless, it led to theoretical and empirical queries in the field with regards to processes in orthographies with extreme regularity between orthography and phonology such as Turkish. The next section introduces the characteristics of Turkish before returning to this question.

Phonology-Morphology-Orthography Interface of Turkish: A Historical Review of the Orthography

Modern Turkish (Türkçe) belongs to the Turkic languages cluster which is comprised of three families: Ural-Altaic, Mongolian, and Manchu-Tungus. It is currently the common spoken language of nations such as Turkey, Azarbaijan, Turkmenistan, Uzbekistan, and North Cyprus, and is thus spread over a vast geographical area ranging from central Asia to Europe. A classification based on historical-geographical grounds of Turkic languages yields at least seven branches. However, modern Turkish, the official language of the Republic of Turkey, and the subject of investigation in the present thesis, belongs to the South-Western branch of the Ural-Altaic family also known as Oğuz or Turkmen. Today's Turkish language is the successor of Anatolian Oğuz Turkish introduced into Anatolia during the 11th century AD by Selchuk (Seljuq) Turks and the subsequent Ottoman Turkish.

Historically, the first script to be used by the Turkish people was the runic Köktürk script with 38 characters and evidence of its use dates to 688-692 AD to the Çoyren Inscription which was subsequently succeeded by the Orhun Inscription in 732-733 AD (Gencan, 1972). Both these inscriptions are geographically placed in an area which is now part of modern Mongolia. During this period, the Uygur script was also developed and used from 745 to 970 AD. Both scripts are often reported to be poor in representing the enriched sounds of the spoken language, in particular the vowels.

However, based on these early writings it became evident that little has changed regarding the phonological and morphological structure of Turkish over the following 11 centuries. About mid-900 AD, the Turks adopted Semitic Arabic which was even more impoverished in conveying the richness of the spoken sounds of Turkish than the previous two scripts. This is because the number of vowels in spoken, as well as in written Arabic, a typically consonantal Semitic script, is restricted to three vowels, /a/, /i/ and /o/ (expressed in short and long form) as opposed to eight in Turkish, which embodies four front vowels /e/, /i/, /ö/ and /ü/ and four back vowels /a/, /ı/, /o/ and /u/, (so-called front and back to indicate the position of formation in the mouth).

Although the original Arabic script was modified by the introduction of diacritics to mark vowels, similar to the modification to Arabic to transcribe Persian, it was still inadequate to transcribe all eight vowels. Consequently, the acquisition of literacy suffered. In this context, Çapan (1989) reports that in 1927 only about 10 percent of the Turkish population was literate. The late 19th century saw (Gencan, 1972) discontent among a group of writers and journalists who protested against the use of an ill-fitting Arabic script to transcribe Turkish. The orthography was eventually reformed in 1928 by transcribing the sounds of the spoken language in a modified Latin alphabet as part of Atatürk's modernisation plans for the young Republic of Turkey. The aim was to deliberately create an alphabet whereby each spoken sound in standard Turkish (i.e., phoneme) had a letter (i.e., grapheme) which directly corresponded to it; therefore, ultimately providing an optimal environment to facilitate and enhance the acquisition of much needed literacy skills.

The modern orthography is comprised of 29 letter modified Latin alphabet of eight vowels and 21 consonants and was deliberately designed to embody the sounds in the spoken language in a totally transparent representation, where both grapheme-phoneme (reading) and phoneme-grapheme (spelling) conversions were regular, explicit and consistent. Thus, Turkish has a very transparent orthography; indeed, as described next a deliberate attempt has been made to eliminate any irregularities (Raman, 1999).

The most salient aspect of Turkish orthography is therefore the computation of nonlexical phonology in an entirely reliable and context independent manner. The

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developmental impact of this direct relationship between orthography and phonology in Turkish is remarkable and documented by Öney and Durgunoğlu (1997) where children were reported to acquire literacy within the first six months of formal instruction. In terms of the literate adult, data to date support the existence of both lexical and nonlexical routes in reading Turkish as well as input from a semantic route (Raman, Baluch, & Sneddon, 1996; Raman & Baluch, 2001; Raman, Baluch, & Besner, 2004; Raman, 2006).

Vowel harmony is another prominent feature of the Turkish language. Words that are Turkish in origin contain either all front or back vowels. This rule also extends to all grammatical suffixes whereby the vowel in the suffix harmonises with the last vowel in the word. For example, two forms of the plural suffix exist; -LER is used in words where the front vowels E, İ, Ö, Ü occur (e.g., ÜZÜM-LER meaning (grape-s)), while -LAR is used in the presence of back vowels A, I, O, U (e.g., KUTU-LAR meaning (box-es)). For foreign words, such as TELEVİZYON-LAR meaning (television-s), -LAR is the plural suffix because the last syllable -YON contains O. On the other hand, in RİSK-LER meaning (risk-s), -LER is the plural suffix because İ is present. Thus, the vowel harmony is maintained in accordance with the vowel in the last syllable.

Languages are often reported to be one of three 'structural types': isolating or noninflective (e.g., Chinese), agglutinating (e.g., Turkish) and inflecting (e.g., English; see Henderson, 1982 for further details). In this respect, the agglutinative property of Turkish is another prominent feature whereby words are typically composed of sequences of morphs (smallest meaningful unit) with each morph representing one morpheme or meaning unit. Noteworthy also is the lack of a grammatical marker for gender.

For example, from the root word KAL (stay), KAL-MI-YOR (he/she is not staying), and KAL-MI-YOR-LAR (they are not staying), are typical derivations from the root by adding tense and person suffixes. Cromer (1991) reports that '*Turkish is often cited as an example of an agglutinating language which approximates very closely to the "ideal" type*' (p. 229). It is important, however, to note that in strings of agglutinated morphemes each element retains its phonological and semantic identity as well as its relative position in the string (Aksu-Koç & Slobin, 1985). The order of noun suffixes, stem / plural (-ler) / first person possessive (-üm) / locative (-de), can be exhibited in the following root word GÖZ (eye).

It should be noted here that the examples above are displayed in a format which indicates the addition of suffixes (i.e., suffix segmentation), and that they do not represent words in their syllabic structure. Since the vowel 'pulls' the consonant, the derived word GÖZ-ÜM is syllabically segmented as GÖ-ZÜM.

Returning to the suppositions of the dual route model introduced previously, in spite of its extreme transparency between orthography and phonology, visual word

Table 1.

Example	Corresponding translation in English
GÖZ	eye
GÖZ-ÜM	my eye
GÖZ-DE	in eye
GÖZ-ÜM-DE	in my eye
GÖZ-LER	eyes
GÖZ-LER-İM	my eyes
GÖZ-LER-DE	in eyes
GÖZ-LER-İM-DE	in my eyes

recognition in adults has been established to be primarily based on lexical route in Turkish with the nonlexical route acting as a back-up in case of novel words or nonwords (Raman, Baluch & Sneddon, 1996; Raman, Baluch, & Besner, 2004). In the absence of irregular orthography-to phonology generation, it must be noted here that the discrepancy observed between the lexical and nonlexical routes in English is not found in Turkish as the operation of the two routes are essentially non-conflicting and in harmony with each other.

Language Processing

This section provides some background on the competence-performance distinction that will be necessary for subsequent discussion on language processing. This distinction was introduced by Chomsky (1965, p. 3):

Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language [i.e. linguistic competence] in actual performance.

It has been well established in the extant psycholinguistic literature that a bilingual's two languages are active even when speakers intend to encode or decode one language alone (Kroll & De Groot, 2005). These effects are found whether or not the two languages use the same writing system (Hoshino & Kroll, 2008; Thierry & Wu, 2007) and even when one language is spoken and the other is signed (Morford, Wilkinson, Villwock, Pinar, & Kroll, 2011).

Levelt's speech processing model (1993), which was originally created for monolinguals, can be described as one of the most influential psycholinguistic model of language processing. De Bot (1992) further developed Levelt's model which

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occurs in three successive steps: the lexical conceptual structure, the formulator (language encoding), and the articulator (overt production). In the bilingual model, De Bot discusses how the speaker can control his/her language by drawing on Green's Activation model (1986, 1998). Green's model holds that bilinguals do not switch their languages on or off but that their languages show different levels of activation.

Memory is central to our understanding of language processing. According to the multistore model of memory (Atkinson & Shiffrin, 1968), memory consisted of three stores: a sensory register, short-term memory (STM), now working memory (WM), and long-term memory (LTM). In turn, LTM consists of two subsystems; namely, the declarative and procedural memory systems (e.g., Mishkin, Malamut, & Bachevalier, 1984; Squire & Zola, 1996). Based on Anderson's (1983) Adaptive Control of Thought (ACT) model, memory is of three types: declarative knowledge, procedural knowledge, and working memory. The declarative system is explicit and includes the knowledge of 'what' information in the mind- (e.g., grammar rules).

The second component in Anderson's ACT model is the procedural memory system, also known as imperative knowledge, which considers the question of how to do something (e.g., how to implicitly use the grammatical rules in a given language). The third component, working memory, is responsible for temporarily holding information available for processing. Although declarative and procedural knowledge are largely independent of each other, they may interact in a number of ways. For example, recent studies suggest that declarative knowledge may turn into procedural knowledge (proceduralization of declarative knowledge) and procedural (implicit) knowledge may be converted into declarative knowledge as a result of accumulating experience (e.g., Anderson et al., 2004; Bitan & Karni, 2003; Sun & Zhang, 2004).

Memory research within the psycholinguistic context is in its embryonic stage in Turkish. Very recently, however, the role of Age of Acquisition (AoA) and frequency (two powerful psycholinguistic factors) on episodic memory was examined in a free recall task using pictures and their words (Raman et al., 2018). The results were found to be contrary to those previously reported in English (Dewhurst, Hitch, & Barry, 1998) simply because an advantage for early acquired items over late acquired items reported in Turkish is not found in English. Raman et al. (2018) suggested that 'a solution to these paradoxical findings could be offered from an architectural perspective which better addresses the underpinning mechanisms that could be uniquely responsible for the development of episodic encoding and associated processes as a function of a specific orthography.'.

One of the main reasons for this supposition is that the better recall of late acquired words in English is attributed to their 'distinctive' nature, i.e. irregular and unpredictable representations between orthography-phonology. Raman et al. (2018) argue whether the absence of any orthography-phonology irregularity also

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eliminates the formation of 'distinctive' representations, hence the contrary findings between Turkish and English.

Empirical research suggests that the connections between orthography, phonology, and morphology are at play for various language processing skills, such as, language encoding (speaking, writing) and decoding (reading, listening). In reading, for instance, a great deal of literature has suggested that there is a close relationship between morphological and phonological awareness (e.g., Ehri, 1987; 1991). For example, Carlisle and Nomanbhoy (1993) found that both phonological and morphological awareness contributed significantly to word reading in first graders, but the contribution of phonological awareness was greater.

Likewise, a study by Özek and Yıldız (2012) showed that Turkish learners of English had the most difficulty in inferring the meaning of English words which had the following lexicographical properties in print: large margin length (e.g., strengths), polysyllabic, in complex morphology (e.g., encapsulated). This finding supports the morphophonology-orthography interface in reading strategies. Morphological and phonological processes are also tightly interrelated in spoken production. During processing, morphological processes must combine the phonological content of individual morphemes to produce a phonological representation that is suitable for driving phonological processing. Further, morpheme assembly frequently causes changes in a word's phonological well-formedness that must be addressed by the phonology.

Let us illustrate the morphological-phonological interface with reference to a selection of morphophonemic processes in Turkish (see van der Hulst & van de Weijer, 1991 for a full discussion). The examples in (1a-d) exemplify the complexity in Turkish morphophonology which is central in the decoding and encoding of Turkish words (stem+suffixes). This also raises the question of how Turkish-English bilinguals master and apply these rules in everyday communication.

1. Morphophonemic processes in Turkish
    a. Vowel harmony- 'book' kitap (nom.sg)/ kitap+lar (plural)/ kitab+I (poss)/ kitap+tan (abl)/kitap+lar+ı (poss.ac.pl.)
    b. Final devoicing rule- 'book' kitap (nom.sg)/ kitab+ı(3.poss),
    c. The k- deletion- 'bed' yatak (stem) yata-ı (accusative) (replaced with soft g)
    d. Deletion (segment & syllable)- 'laugh' gülüyorum (cont./1sg) gülüyom

The *Mehmet Corpus* (Yildiz, 2016) in (2-5), which was collected from a 3-year-old male heritage speaker living in the UK, through naturally occurring conversations, encapsulate some of the morphophonemic processes applied in contact situations. This child is also an *emergent bilingual*; hence, he has access to spoken English and

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Turkish only, and his phoneme-grapheme mapping skills are yet developing. The term emergent bilingual is used in this chapter to refer to 'young children who speak a native language other than English and are in the dynamic process of developing bilingual and biliterate competencies, with the support of their communities' (Reyes, 2006). In comparison to other terms such as English as an Additional Language, this term views bilingualism as an asset rather than a deficiency.

2. Code-mixing
    a. baba come+*di* = 'Daddy has come'
    b. Naughty+*lik* yapiyor 'He/she is being naughty'
    c. Aç+*ing* 'opening'
    d. Amca monkey+*i* kaldırdı 'uncle lifted up the monkey'
    e. Watay+*a* 'to the water'
    f. Dede at horse+*a* bakıyor 'grandad is look at the horse'
    g. Hold+*ma* = 'don't touch'
    h. Jake is come okul+a 'Jake is coming to school'
    i. Anne *money* verirmisin çünkü babanin money+*s*+*i* yok money lazim babaya 'mummy can you give me money because daddy doesn't have money and needs money'
    j. Going okul+a and *playing* okulda 'I am going to school and I am playing at school'
3. Intra-sentential code-switching
    a. Nene *more* yap 'grandma make more'
    b. It's stuck yapıştı 'stuck'
    c. anne want daddy 'Mum I want daddy'
    d. Ben *climb climb* yapıyom 'I am climbing'
    e. Beni spider *eat* yapcak 'The spider is going to eat me'
4. Non-Standard features
    a. Choclate istiyo-m [istiyorum]'I want chocolate'
    b. Istemiyo-m [istemiyorum] 'I don't want it'
    c. Oyuna gitcem [gideceğim] 'I am going to go out to play'
    d. Puzzle yapcam [yapacağım] 'I am going to make puzzle'
    e. Minion izleycem [izleyeceğim] 'I am going to watch Minion'
    f. Minion öle yapiyo [yapıyor] 'Minion does it like that'
    g. Wiliz boot giycem [giyeceğim] 'I am going to wear wellies boot'
    h. Yeymeycek [yemiyecek]baba apple+ı 'Daddy is not going to eat the apple'
    i. Memet apple+ı yıkaycak [yıkayacak] 'mehmet is going to wash the apple'
    j. Baba big apple yeycek [yiyecek]'Daddy is going to eat the big apple'
    k. I wanna [want to] *ye* more 'I wanna eat more'

5. Morphophonological deviations
   a. Bak anne yeni gozlü**k**+*ü* 'look at mum's glasses'
   b. Baba yata**k**+*ı* 'Dad's bed'
   c. amcanın terli**k**+*i* 'Uncle's slippers'
   d. Memedin yata**k**+*ı* 'Mehmet's bed'
   e. I wanna go 'I want to go'
   f. Oh no my airplane broken I wanna fix it, look at me mummy I'm baby, you broke it
   g. Anne *beni* ışık ver 'Anne bana ışık var'
   h. Ne oldu tavşan ayayı? 'Ne oldu tavşanın ayağına?'
   i. Anne sen ne açıyon? 'Mummy what are you opening?'
   j. I wanna play 'I want to play'
   k. Pamana bağlıyım 'parmağına bağlıyayım'
   l. Anne ABC yapcam yazacam 'Mummy I am going to do write Abc'
   m. Anne tokani istiyom 'Mummy I want your hairclip'
   n. Nerde yatakı 'where is his/her bed?'
   o. Anne verirmisin kitap+ ı= mummy can you give me the book
   p. Kaşık+*ı* 'the spoon'

The output forms in the Mehmet Corpus are categorized into four broad categories: code mixing (see 2), intra-sentential CS (see 3), non-standard features (4) and morphophonological deviations (5). The examples in (4 & 5) indicates that mastery of the morphophonemic processes outlined in (1) are challenging for English-Turkish bilinguals. There are two possible explanations for these deviations: 1) this bilingual child has not yet mastered his literacy skills in Turkish; 2) this is the social dialect of the Turkish community. The examples in (2&3), by contrast, illustrates some of the common linguistic consequences of language contact and flexible bilingualism, including code switching. Code-switching in naturally occurring conversations can be useful in capturing the declarative and procedural knowledge of bilinguals.

It is important to acknowledge that not all researchers use the same terms in the same way, nor do they agree on the territory covered by terms such as code-switching, code-mixing, or code-alternation. Myers-Scotton (1993b) advocates the use of code-switching as a cover term and defines it as: 'alternations of linguistic varieties within the same conversation' (p. 1). The term code-switching will also be used as an umbrella term in the remainder of this chapter to cover the phenomena of alternating between two distinct languages (i.e., codes) within the same conversation.

Poplack (1980) distinguishes three types of code-switching; namely, extra-sentential, inter-sentential, and intrasentential. Extra-sentential code-switching, refers to the insertion of a tag such as you know, I mean; inter-sentential code-switching occurs in different sentences or clauses or across sentence boundaries (see

Example (6a)); intra-sentential code-switching occurs within the same sentence by the insertion of a lexical item (see Example (6b)). This can also result in language hybridization, as with the Dutch word *lim* 'glue' in example (6b). Some scholars also distinguish codeswitching from 'translanguaging' in order to better account for fluid or dynamic bilingualism. The former refers to a simple shift between two languages, while the latter refers to the 'speakers' construction and use of original and complex interrelated discursive practices that cannot be easily assigned to one or another traditional definition of a language, but that make up the speakers' complete language repertoire' (García & Li Wei, 2014, p. 22).

6a.   Inter-sentential code-switching: *du har sgu da energi når du, du har sgu da energi når du øh Sevinç det hadder alts- det hedder altså ikke energi*, onun adı başka bir şeydi energi yaşayanlara. ('you do bloody well have energy when you, you do bloody well have energy when you eh Sevinç, it is called-, it is not called energy, energy is about living things.') (Auer, 1998, p. 247)

6b.   Intrasentential code-switching: len *lim*inizi *låne* edeyim benimki olmuyor. ('man let me borrow your glue mine will not.') (Auer, ibid, p. 250)

Within the language contact approach, the matrix language frame model (hereafter MLF) (Myers-Scotton, 1993a; Myers-Scotton & Jake, 1995) is a useful tool in analysing the linguistic constraints on code-switching. The MLF model claims that in every case of switching, one language is dominant (i.e., the matrix language; hereafter the ML), while the other language is non-dominant (i.e., the embedded language; hereafter the EL). The ML determines the morphosyntactic structure (complementizer phrase; CP) of ML + EL constituents. This model, despite being useful, can pose some challenges for flexible bilingual practices where parallel language activation is in play. For instance, the examples in (2h) shows that the ML is English, but the inflectional morphology is from Turkish (e.g. okul+*a*); and in example (2i) the morphological properties are from both the ML and EL (e.g., money+*s*+*i*).

Challenge 1: Terminological

Studies in cognitive and descriptive linguistics have treated Standard Turkish (ST) as the monolingual baseline, both for L1 and L2 studies. The concept of ST is all the more problematic since the prescriptive and typological accounts of Turkish grammar are not synchronically up-to-date. Descriptive studies on Turkish, including spoken Turkish, by contrast, are printed largely in Turkish and not available to a wider audience (e.g. Aksan, 2000; Dursunoğlu, 2006).

Recent studies have also gained interest in corpus-based Spoken Turkish (e.g., Middle East Technical University *Spoken Turkish Corpus Project* at http://std.metu. edu.tr/en/). Likewise, in language contact situations, ST alone cannot account for further challenges such as flexible language practices, hybridity, and 'imperfect acquisition' and low proficiency in Turkey-Turkish (e.g., Doğruöz & Backus, 2009; Backus, Demirçay & Sevinç, 2013).

Turkish is a widely spoken minority language in Western Europe. The Turks began to arrive as migrant workers in the late 1950s, and settled in Germany, Holland, Switzerland, Austria, Denmark, Sweden, France, and the UK. As observed by Backus, Jørgensen, and Pfaff, Norway, Sweden and the UK also have Turkish minorities, with the one in the UK having a slightly deviant profile. Many of the British Turks started to emigrated from Cyprus, a former British colony (2010, p.482).

This year is the Centenary of the Turkish Cypriot migration to the UK since 1918, while the Turks arrived in the late 1960s and the Kurds arrived in the early 1980s from mainland Turkey. The statistics released from the 2011 UK Census reveal Turkish to be the seventh largest minority language spoken in London with over 71,000 people reporting to speak it as their first language. Kurdish speakers also number more than 15,000 in the capital.

In this sense, the Turkish-speaking communities in the UK and other Western-European countries are different in many respects such as degree of assimilation, linguistic repertoire, and social and regional dialects. Despite these differences, the majority of the recent research in the field of applied psycholinguistics has focused on Turkish-German (e.g., Maviş, Tunçer, & Gagarina; Jacob, Şafak, Demir, & Bilal, 2018; Treffers-Daller, Özsoy, & van Hout, 2007) and Turkish-Dutch bilinguals (e.g., Bosman & Janssen, 2017; Yilmaz & Schmid, 2012). By contrast, studies on Turkish-English bilinguals in the UK are limited in number and scope (e.g., Lytra, 2012; Marinis & Ozge, 2010; Yildiz, 2002). The lack of empirical findings on English-Turkish bilinguals in the UK raises the question of what exactly the nature of European-Turkish is and how these differences are manifested in the language processing skills of the first, second, and third generations.

In order to incorporate these differences, it is suggested that the term 'Turkish-English' bilingual needs to be reconsidered in the literature, especially when referring to the UK context. For example, spoken Cypriot Turkish (Kıbrıs Türkçesi) is typically structured as a VO language as opposed to ST which is an OV language. It is very typical in forming a question (see 7a). Cypriot Turkish uses the aorist tense instead of the present continuous tense, and very often in place of the future tense as well (see 7b).

Moreover, in Cypriot Turkish one does not habitually use the narrative/indefinite past, and only uses the simple past instead (see 7c). Spoken Cypriot Turkish also lacks the question suffix of 'mi' and uses a high rising terminal (see 7d). In Cypriot

Table 2. Example 7

	Standard Turkish	Cypriot Turkish
a.	Okula gidecek misin?	Gideceŋ okula? (Will you go to school?)
b.	Okula gidiyorum (I am going to school)	Giderim okula
		Okula gideceğim (I go to school/I am going to school / I will go to school)
c.	Eve gitmiş (He is reported to have gone home)	Eve gitti/Gitti eve (He went home) suffices.
d.	Annen evde midir? (Is your mother at home?)	Anneŋ evdedir?

Turkish, the reflexive pronoun in third person is different, namely *geŋni* (him, himself, them, themself) and *kendisini* in ST (see Demir, 2002 for full discussion). These examples illustrate that ST alone cannot provide an accurate description of the rich and diverse linguistic repertoires of the Turkish-speaking communities in the UK.

Challenge 2: Flexible Language Practices

The notion of 'flexible bilingualism' as opposed to 'language separation' views language as a social resource (Heller, 2007a, b) without clear boundaries, which places the speaker at the heart of the interaction. In order to capture the flexible language practices of heritage speakers, especially in the UK, it is essential to adopt a social approach to bilingualism. The Turkish-speaking communities in the UK are comprised of Cypriot-Turks, Turks and Kurds from mainland Turkey and Northern Cyprus, and more recently Turkish-speaking peoples who have immigrated to the UK via other European Union countries. Around 500,000 Turkish-speaking people are estimated to live in the UK, mainly in the Greater London area. Regardless of the linguistic, cultural and ethnic diversity of the families, ST is used for literacy teaching in Turkish complementary schools and has developed into the *lingua franca* (Issa, 2005).

Nonetheless, children may have differential access and competence to ST and its regional varieties. Moreover, inter- and intra-group variations can also be found within the speech communities. For example, Cypriot-Turkish and its varieties diverge significantly from the standard in terms of vocabulary, syntax, morphology and phonology. Likewise, there are also three levels of varieties of Cypriot Turkish, these include: 1) Standard Turkish variety (written language), 2) Regional varieties of Cypriot Turkish, 3) Social varieties of Cypriot Turkish.

Challenge 3: Language Distance

The rationale for selecting bilingual lexicon is twofold. First, the elements stored in the lexical memory include meaning, syntax, morphology and phonological information (Levelt, 1993; Raman et al., 2004). Second, Turkish morphology is a special case since it is significantly different from English morphology. Based on Greenberg's Agglutination Index (1960), a language is characterized as 'analytic' if its synthesis index is low, 'synthetic' if it is higher, and 'polysynthetic' if it is very high. According to the degree of morphological fusion, English is predominantly an isolating language. Turkish, by contrast, is distinctive for its agglutinative morphology, which means that the word structures are formed by highly regular and productive affixations of derivational and inflectional suffixes to root words (Goksel & Kerslake, 2005).

This agglutination can be depicted in the following example in (3) from Lyovin, Kessler and Leben (2016) in where both verbs and nouns in Turkish may consist of long strings of morphemes. A Turkish speaker can generate several words from a single root word using a rich collection of morphological rules. In addition, while conversion of orthography to phonology in Turkish is documented to be completely predictable and rule based, the same cannot be said for English. For instance, English has a lot of irregular morphology, including 'suppletion' (basing different inflected forms on different roots, like *go* vs. *went*) and portmanteau allomorphs (e.g., *foot* vs. *feet*). Although these features make English look like a 'fusional' language, there are exceptions where some words contain long sequences of affixes (e.g. anti-dis-establish-ment-ari-an-ism). Hence, it is difficult to strictly categorize English into the typological morphology.

8.   Evlerimizden gelmiyordum

Ev-le-i-miz- +den +el-mi-jo-d-um

House-PL-1SG.POSS-PL.POSS-ABL come-NEG-PROG-PST-1SG

I was not coming from our houses

This specific property of Turkish morphology raises a further question: Are morphologically complex words as in (8) represented as full forms, or does the representation reflect their morphological structure? The former supports the full-listing hypothesis (Bybee, 1988), while the latter supports the morphemic (decompositional) hypothesis (Marslen-Wilson & Tyler, 1998). There is, in fact, a large body of research which supports the full-listing hypothesis for Turkish (e.g.,

Hankamer, 1989), whereas other studies support the partial decomposition hypothesis (e.g., Gürel, 1999). Previous studies have shown that Turkish children master Turkish morphology with considerable ease due to its regularity, yet the same does not hold for semantics and syntax (Aksu-Koç & Slobin, 1985).

In summary, this section has outlined three broad challenges in the literature of bilingual processing research specific to Turkish-English bilinguals. It has been highlighted that a prescriptive account of Turkish linguistics, which heavily depends on Standard Turkish as its reference point, cannot accurately capture the flexible language practices of heritages speakers. Despite the language distance between Turkish and English, it is likely that the rich collection of morphological processes in Turkish and the morphophonology interface of language processing can enrich the processing skills of English-Turkish bilinguals and can increase metalinguistic awareness and linguistic creativity in both languages.

FUTURE DIRECTIONS AND CONCLUSION

The following knowledge gap in the existing research on language processing are identified:

Turkish Speaking Monolinguals and Normative Data

In order to address this gap in the literature, multidisciplinary work is essential. Although previous research by Aksu-Koç (1988) and Aksu-Koç and Ketrez (2003) have documented that the past tense inflection and the present tense inflection are one of the first morphemes acquired before other tense inflection and before the evidential/past inflection, little research has addressed the development of cognitive processes beyond early years in typically and atypically developing children. For instance, in dyslexic monolingual adults' evidence suggests that the mental architecture is organised similar to nondyslexic adults in single word reading (Raman, 2011). However, there are currently no reports related to morphological processing in dyslexia in Turkish which subsequently hinders the development of effective intervention strategies to help children and adults with dyslexia and similar learning difficulties.

Research examining spontaneous speech data from three monolingual Turkish-speaking children between the ages 2;1 and 2;8 revealed that children produce bare lexical stems in ungrammatical contexts before they use grammatical morphemes productively. Given that root words are very rare in Turkish and that Turkish children produce them indicates that they are able to decompose multimorphemic words into root + grammatical affixes. For example, Kopkallı-Yavuz and Topbaş (2000) have examined 30 typically developing children's preferences for syllable and word forms

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in phonological acquisition when children reached the 15-word stage, 50-word stage, and 75-word stage. In line with above, it was found that Turkish children attempted disyllabic words more frequently than monosyllabic words.

One way for children to distinguish lexical roots from grammatical morphemes is to use phonological cues (Batmanian & Stromswold, 2017). In this respect, Selkirk (1996) argues that phonological contrasts in English between lexical roots and grammatical morphemes may make syntactic information accessible to children. Insofar as highly flexible morphological strategies between phonology and morphology (and subsequently orthography, as children become literate) mappings in Turkish are concerned, we postulate that it is this flexibility which leads to the development of a mental architecture that is strategic in cognitive processes both in monolingual Turkish (see Raman, Baluch, & Besner, 2004) and bilingual Turkish-English speakers.

Moreover, the development of normative data is central to both monolingual and bilingual research, especially where heritage speakers are concerned. Without standardised and appropriate norms for the population under investigation, there is a risk of overgeneralising findings from Standard Turkish to other linguistically diverse populations. In this respect, there has been a recent surge of published word (Goz, Tekcan, & Erciyes, 2017; Sezer & Sezer, 2013) and picture norms (Raman, Raman & Mertan, 2014) where the latter took into consideration and controlled for the disparity of name agreement between participants who spoke Cypriot Turkish and Standard Turkish. For example, asparagus translates to KUŞKONMAZ in Standard Turkish and to AYRELLİ in Cypriot Turkish. Data were subjected to an H-statistic and are available to fit purposes for research in both populations. Word norms are typically reported for Standard Turkish only and therefore need to be further standardised for Turkish heritage speakers who live in the UK and Europe.

Turkish- English Bilingual Neuropsychological Case Studies

Neuropsychological research in Turkish is still in its infancy and with an increasingly aging heritage speaker population across Europe and the UK, a much-needed field in applied psycholinguistics. In a series of papers, Raman and Weekes reported BRB, a neuropsychological case study with impaired Turkish-English bilingual language processing (Raman & Weekes, 2005, a,b; Weekes & Raman, 2008). BRB, a proficient Cypriot Turkish-English bilingual, suffered a cerebrovascular accident (CVA) which resulted in acquired dyslexia, dysgraphia and dysphasia in both of his languages. The longitudinal study addressed one of the empirical challenges in language distance and the orthography, phonology and morphology interface.

Indeed, the extent of impairment in each language was found to be specific to the orthography, phonology and morphology of either English or Turkish. For

example, while in English BRB was found to be surface dyslexic (an inability to read irregular words) there was no evidence of this in Turkish. Given the extreme transparency between orthography and phonology this was not surprising. Similarly, while word reading was preserved in Turkish, BRB's repetition of derived nouns was poor (Poncelet et al., 2008). There was also a significant difference in processing nouns and action verbs demonstrating that physical damage to the brain resulted in significant functional loss of neuronal pathways which manifested in subsequent observable behaviours.

It must be noted here that in the absence of Cypriot Turkish norms, materials were selected from standard Turkish. Historically, however, the educational curriculum in Cyprus, for the Turkish speaking community, is prescribed and monitored by the Ministry of Education, Turkey. Thus, literacy acquisition for the Turkish Cypriots is identical to other taught programmes in Turkey for 6-15 year olds. BRB acquired literacy under these conditions. Damage and loss of orthographic, phonological and morphological processing in disorders such as dementias as well as CVA's ought to be addressed in order to tackle the knowledge gap and to create effective intervention programmes.

Heritage Speakers in the UK

This population remains a largely understudied group of Turkish speakers in Europe and a lack of empirical research makes it difficult to understand the impact of speaking Turkish as a second, third and perhaps fourth generation of HS. It is suggested that future research examines heritage speakers from different Turkish-speaking communities (e.g., Cypriot-Turks, Turks, Kurds, Balkan Turks) in order to enhance our understanding of inter-speaker and intra-speaker language variation, as well as European-Turkish. Studies in early developmental linguistics needs closely examine the non-standard features of the child's linguistic repertoire, as in the same way as the Mehmet Corpus. This recommendation also extends to other bilingual communities across Europe (e.g., Arabic, Bengali, Russian, Spanish).

Fundamentally, what is important is to find the core similarities and differences between Turkish-speaking communities in the UK and other European countries. The implications of the widely observed phenomena 'speaking half-German half-Turkish' (Hinnenkamp, 2003, p. 33) needs to be explored by gathering further empirical data from other European contexts, especially with younger bilinguals. It is hoped that such data will allow early intervention strategies for heritage language and heritage culture maintenance, and biliteracy development. Biliteracy development will allow bilinguals to master the standard written and spoken varieties of the target languages.

Non-standard forms of Turkish and European-Turkish (as opposed to Turkey-Turkish) are less analysed. One exception is the study by Issa (2006) who investigated

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the factors influencing Cypriot Turkish in the UK in second and third generation adults in a naturalistic setting. It was observed that while Cypriot Turkish was functionally important in social interactions nevertheless language choice, code switching, and borrowing occurred towards English. Issa concluded by stating that 'language use in the Cypriot Community — as in other linguistic communities in the UK — is changing increasingly to adapt to new sociolinguistic paradigms.'

In conclusion, it is evident that multidisciplinary research involving structuralistic (interface), sociolinguistic, psycholinguistic, neuropsychological, normative data and corpus-linguistic approaches to language inquiry are needed if gaps in knowledge are to be filled. The theoretical and applied implications of understanding the relationship between orthography, phonology and morphology in Turkish are vast. A full-fledged investigation of the limits of morphophonological processing requires an extensive analysis on the diverse types of bilingual populations and synchronic variations which has thus far received very little attention. The implications of the lingua-franca status of English (Deniz, Özkan, & Bayyurt, 2016; Jenkins, 2013, 2015) and the wide-spread adoption of English-medium-instruction in the Turkish higher education system (Taquini, Finardi, & Amorim, 2017) also needs to be examined from a psycholinguistic perspective.

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Chapter 2

Foreign Language Acquisition, Bilingualism, and Biculturalism:
A New Theoretical Avenue for Organizational Research

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ABSTRACT

Biculturals (i.e., individuals who have experienced and internalized more than one culture) are recognized as a growing demographic, and as such will become important stakeholders in organizations. An emerging stream of research from psychology and organizational studies indicates that bicultural individuals have a particular set of cognitive skills and competencies that can contribute to the performance of international teams. However, research on biculturals in organizations is facing conceptual and methodological limits due to the complex nature of the construct of culture. While the constructs of culture and language are distinct, they are undoubtedly interwoven; hence, the latter may become a tool to analyze the phenomenon of biculturalism. In this chapter, the authors analyze the literature on social identity, foreign language acquisition, and bilingualism to find potential solutions for these critical challenges.

INTRODUCTION

The progressive liberalization of trade and international migration policies has led to a significant surge in the numbers of bicultural individuals, i.e. people with more than one ethnic identity (Nguyen & Benet-Martinez, 2007). It is estimated that biculturals are the largest ethnic group in Canada and by 2020 the largest ethnic group in the United States will be culturally mixed (Brannen & Thomas, 2010). This trend is also noticeable in Australia (21% of population is foreign born) and in Europe. The growing number of people of mixed cultural background provides organizations operating internationally with 'an unacknowledged opportunity to better bridge across cultural contexts and integrate and meld knowledge from around the world' (Brannen, Garcia, & Thomas, 2009: 207). Research evidence from psychology and sociology indicates that biculturals exhibit personal skills that could be of great importance to international organizations and may contribute positively to organizational performance (Brannen & Thomas, 2010). Hence, it should come as no surprise that the phenomenon is gaining significant traction in the international business (IB) and cross-cultural management literatures.

However, biculturalism research in organizational context is not free of conceptual and methodological limitations. For instance, while language is an important element of culture (Gomez-Mejia & Palich, 1997), the relationship between bilingualism and biculturalism and its impact on individual and team performance remain by and large unknown. Furthermore, research on language acquisition shows that the time when second language is learned plays a critical role on developing particular linguistic skills (e.g., Flege, Mackay, & Piske, 2002), but research on biculturalism is yet to develop a potential critical period hypothesis (Lenneberg, 1967).

In this chapter, the authors draw on existing literature on bilingualism and foreign language acquisition to propose new avenues for research on biculturals in the organizational context. The chapter develops as follows: first, the authors review the existing literature on biculturalism, the relationship between language and culture, and social identity theory, as these are the founding blocks for our subsequent theorizing. Second, potential research avenues using biculturalism and bilingualism relations, including: (1) a typology of individuals based on their biculturalism and bilingualism; (2) a typology of biculturals based on the time of second culture acquisition; and (3) methodological advantages of using bilingualism as a proxy of biculturalism, are discussed. This chapter ends with a call for more conceptual and empirical research at the confluence of biculturalism and bilingualism.

CURRENT STATE OF LITERATURE

Biculturalism

The biculturalism literature draws heavily from, and contributes significantly to, a number of extant literature streams in social sciences, including sociology, psychology, and organizational studies. It is based on an assumption that an individual's behaviours, attitudes and values are closely tied to his/her social identity, i.e. are based on the feeling of membership in an important social group (Tajfel & Turner, 1979; Devine & Monteith, 1999). Social identification leads to activities and behaviours that are consistent with the values of the social group (Ashforth & Meal, 1989). National, ethnic and cultural affiliations are important factors shaping the social self and may become a critical element for shared identity (Roccas & Brewer, 2002).

Individuals may have many social identities and thus may exhibit different sets of values and schemas of behaviours (Higgins, 1996; Fiske, 1998). Research on multiculturals has shown that multicultural individuals identify not only with countries as a source of cultural values, but also with nations (Lehman, Chiu, & Schaller, 2004), regions (Lu & Yang, 2006), and religious groups (Verkuyten, 2007). This potential conflict (or synergistic effect) of two or more cultures within one individual has received significant attention in the psychology, sociology and organizational studies literatures. Despite being a nascent field, the body of literature is extensive, and covers the theoretical foundations through research on mechanisms by which biculturals excel in multicultural settings. Empirically, research has focused on how organizations can leverage this potential resource.

Research on bi- or multicultural individuals can be traced back to the late 1920s when Park (1928) proposed an early conceptualization of biculturalism as an individually detrimental state, yet beneficial for the society, as bicultural individuals did not seem to be bound by cultural limitations. Park (1928) and Stonequist (1937) both believed that biculturalism had negative consequences for individuals as they could be marginalized in both cultures; hence, experiencing stress and anxiety. Noteworthy is that the early models and conceptualizations of biculturalism focused on negative individual consequences, mostly overlooking the potential benefits.

Conversely, more recent research on biculturals emphasizes many potential benefits of biculturalism for both the individuals and their organizations. Brannen, Garcia, and Thomas (2009) proposed that intercultural skills and cultural metacognition of bicultural individuals might be instrumental for organizations operating across cultural barriers and that biculturals could be useful for organizations because of their ability to integrate cultures and to mediate between them. Biculturals in multinational organizations may 1) excel as boundary spanners; 2) bridge culturally different contexts; 3) be catalysts for creativity and innovation. Similar potential effects of

biculturalism were proposed by Hong (2010) and Fitzsimmons, Miska, and Stahl (2011). Indeed, Gillespie, McBride, and Riddle found that bicultural managers are more likely to be in upper management positions in multinational organizations.

In summary, the phenomenon of biculturals in organizations is gaining significant traction in management literature but many areas and aspects remain under researched. One such area is the relationship between biculturalism and biculturalism and, in broader terms, between language and culture.

Language and Culture

A number of studies in management, sociology and linguistics have discussed the connection between culture and language, however the relationship can be summed by the following analogy:

If we compare the society to a swimming pool, language is a swimming skill and culture is the water. When both are present, people swim well (communicate successfully). They swim confidently and rapidly when they are familiar with the water (i.e. within their native culture), but cautiously and slowly when it is unfamiliar to them (within a foreign culture). (Jiang, 2000b, p. 332)

Anthropologist EB Taylor defined culture as 'that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired man as member of a society' (Taylor, 1874, p. 1). Culture and language are not indistinguishable constructs; language is one form of symbolic representation of the culture that is used to reflect upon and communicate one's beliefs, ideas, knowledge and cultural reality. It has previously been defined as a 'multifaceted, multilevel construct' comprising a communicative system of shared meanings (Astley & Zammuto, 1992; Brannen, Piekkari, & Tietze, 2014, p. 496), and Gomez-Mejia and Palich (1997) described language as one of the most visible components of culture, as cultural values are often reflected in the languages spoken (Selmer & Oh, 2013).

A culture cannot be acquired or expressed without an understanding of the relevant language connected to that culture as language is the primary tool in the transfer, expression and learning of a new culture (Kim, 2003). Brown (1994, p. 165) wrote that 'language is a part of a culture and culture is a part of a language; the two are intricately interwoven so that one cannot separate the two without losing the significance of either language or culture.' Linguistic and cultural skills can help in the creation of a common cognitive ground that can facilitate the understanding of diverse meaning systems (Brannen, 2004; Marschan-Piekkari, Welch, & Welch, 1999). Language is often a representation of our underlying values (Brown, 1990)

and it is a medium through which we 'know reality and orient our actions' (Boje, Oswick, & Ford, 2004, p. 571).

The relationship between language and culture, and how this interplay affects one's identity, is a fascinating research context. However, the bundling of language into the culture box masks its specific role in the various aspects of international business and management processes (Welch, Welch & Marschan – Piekkari, 2001). It is becoming indispensable to acknowledge and understand the role of language in organizational processes and team-work because of the increasing number of employees that speak and utilize different languages throughout the organizations, as multilingual settings can readily become the source of conflicts, and faultlines (Harzing & Feely, 2008; Kulkarni, 2015). While bicultural individuals have been found to contribute positively to team performance by acting as cultural bridges and facilitating the within-team negotiation of cultures (Kiesel & Haghirian, 2012; Friedman & Liu, 2009), it is unclear whether this is an effect of their biculturalism or bilingualism.

It has already been established that cross-cultural understanding is essential for the effective functioning of teams in global organizations (e.g., Matveev & Nelson, 2004), but it is language that provides the communicative frames to activate the expression and understanding of different complex social issues (e.g., Welch & Welch, 2008). Research in anthropology and linguistics suggests that language is not a culture-free code which is distinct from the way people think and behave; instead, it plays a major role in the perpetuation of culture, particularly in the verbal or written form (e.g., Kramsch, 1998). Non-native speakers who acquire a second language often cannot communicate effectively because their language usage is linked to the cultural structure of their native language (e.g., Maclean, 2006).

Such instances have often been noted amongst Japanese managers operating in Asia, who try to communicate with their American counterparts in English (Maclean, 2006). Japanese often tend to give importance to the environmental context of the issue, whereas the Americans preferred to talk directly about the issue at hand. This suggests that a common language does not necessarily imply a common culture, and vice-versa. Jiang (2000b) noted that the usage and structure of language is also linked to the cultural context of the individuals.

For example, the word food could refer to different things in different contexts (Jiang, 2000b): someone in North America could refer to a hamburger or a pizza, whereas, an individual in India might be referring to rice or curry. Even the more intricate details in the language structure are influenced by culture; for example, sociologists and linguists have found that the usage of certain pronouns is often a result of the cultural context (Ayyash-Abdo, 2001; Jiang, 2000a). For example, masculine societies tend to have more pronouns that refer to men in their language. Societies that are more hierarchical or have high power distance have more pronouns to refer

to superiors than societies that have more equality. Even the usage of 'I' versus 'We' pronouns varies between individualist and collectivist societies (Uz, 2014). This makes it difficult for a non-native speaker to grasp the cultural connection.

It also highlights the complexity in the relationship between language and culture that has not been analyzed in IB research in much depth. Basically, from an IB perspective, the understanding of cultural values and beliefs reflected in the languages used by individuals is important in the maintenance of long term relationships that require greater understanding between individuals, both in teams and in the larger organizational context.

Social Identity Theory and Language

Social Identity Theory (SIT) is a theory of social psychology that argues individuals derive their identities from group memberships, and explains group processes and intergroup behaviors (Tajfel 1974, 1981). It originated in Britain with the works of Henri Tajfel on social and cognitive and aspects related to the perceptions of prejudice and discrimination (Tajfel, 1959; 1974). Tajfel (1974) defined social identity as 'that part of an individual's self-concept which derives from his edge of his membership of a social group (or groups) together with the emotional significance attached to that membership' (p.69). An individual's behaviours, attitudes and values are closely tied to his/her social identity, i.e. the feeling of membership in an important social group (Tajfel & Turner, 1979; Devine & Monteith, 1999).

Social identification leads to activities and behaviours that are consistent with the values of the social group (Ashforth & Meal, 1989). The theoretical emphasis is on the 'multifaceted and dynamic self' that relates social structure and individual behavior (Hogg, et al., 1995, p. 255). People can classify themselves into different social categories such as organizational affiliations, gender, age and ethnicities (Tajfel & Turner, 1985) and they can use different cognitive schemas to define such classifications. Within an organizational context, employees can derive their social identity not only from the organization, but also from their department, team, age cohort and union (Ashforth & Mael, 1989). Language is one such source of identity. 'Language carries with it patterns of seeing, knowing, talking, and acting' (Agar, 1994, p. 71), and these patterns can facilitate the development of an individual's identities (Fasold, 1984).

National, ethnic, and cultural affiliations are important factors shaping the social self and may become a critical element for shared identity (Roccas & Brewer, 2002). Individuals may have many social identities and thus may exhibit different sets of values and schemas of behaviours (Higgins, 1996; Fiske, 2000), depending on the social context. Research on multiculturals has shown that multicultural individuals identify not only with countries as a source of cultural values, but also with nations

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(Lehman, Chiu, & Schaller, 2004), regions (Lu & Yang, 2006), and religious groups (Verkuyten, 2007). Language also has a strong influence when it comes to defining group boundaries and compositions (Harzing & Feely, 2008).

Speakers of a particular language often identify themselves through the usage of languages, as they view language as a symbol of their cultural identity (Kramsch, 1998). Language use can influence the cognitive schema of individuals working in a team and therefore, lead to divisions between the team members. Difference in languages and meanings attached to different words can lead to misunderstandings and therefore, activate and polarize identities (Harzing & Feely, 2008).

It has already been established that language, when used as a social tool, can create faultlines (Kulkarni, 2015) that could further divide the individuals working in a team. In fact, inter group distinctions can also be made based on accents and vocabulary. Consequently, it is crucial to consider the construct of language when discussing avenues about future research on biculturalism. Biculturalism scholars may use research on both social identity theory and language (e.g., Giles & Johnson, 1982; Harzing & Feely, 2008) to fuel future research on biculturalism in an organizational context.

SYNERGY OF BILINGUALISM AND BICULTURALISM RESEARCH

The purpose of this chapter is to outline potential areas of synergy between biculturalism and bilingualism research. As discussed above, the two areas already share a significant common ground, such as social identity, shared group cognition, and effect on teamwork. Unfortunately, the two streams of literature are rarely used together to fuel further research in organizational studies. In what follows, the authors discuss the relationship between biculturalism and bilingualism to develop a typology of bicultural/bilingual individuals, and move on to further present a typology of biculturals parallel to already existing typology of bilinguals. They then theorize about different skills and abilities acquired through learning a new culture and potential implications for performance in organizations. The authors conclude this section with a brief discussion of methodological advantages of using language to measure biculturalism.

Biculturalism and Bilingualism

Despite the overlap between culture and language, bilingualism and biculturalism are not identical terms. While many bilinguals are also bicultural, there are also biculturals who are monolingual (e.g., Americans living in Britain) or monoculturals

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who are bilingual (e.g., many French-Canadians living in other Canadian provinces). The effect of bicultural/bilingual team members and managers on within-team interactions and performance remains a fascinating research question. When all team members represent the same country and speak (at least one) common language, the difference between biculturalism and bilingualism plays a less important role.

The issue becomes more important when the manager is a foreign national who may need to overcome linguistic problems when dealing with his own team and/or when the team is culturally and linguistically mixed. Are bicultural team members treated the same way as monoculturals? Is there a difference between bilinguals and biculturals? What are the effects on long- and short-term team performance? These are just some of the important research questions that could be answered by integrating bilingualism and biculturalism literatures.

One could potentially theorize about differences among four different types of team members: (1) monolingual and monocultural; (2) monolingual and bicultural; (3) bilingual but monocultural; and (4) bilingual and bicultural. In the first case, there are neither cross-lingual nor cross-cultural fault lines which may cause process losses in teamwork, because of the common cultural and linguistic base. While other types of diversity, such as age diversity (e.g., Simons et al., 1999; Harrison et al., 1998) or ethnic diversity (e.g., Pelled et al., 1999) may affect team processes, common language and culture constitute a solid platform for effective teamwork.

However, these effects are plausible only when the team itself is culturally and linguistically homogeneous. When the team is more diverse, biculturalism and bilingualism come to play. In the second case – a monolingual and bicultural individual – the linguistic diversity of the team still constitutes a major challenge, but the cultural faultlines might be easier to overcome (Brannen & Thomas, 2010). The team members who belong to other cultures might be more willing to accept the bicultural individual as a member of their sub-group within the team, thus leading to improved team cohesion and, in turn, team performance (e.g., Watson et al., 1993; Pelled et al., 1999).

The third case – a bilingual monocultural individual – might not experience the benefits of common group identity, but the team would benefit from improve communication and thus limit process losses. In the final case of an individual who is *both* bilingual and bicultural, theoretically, the individual would benefit from both sources and could possibly excel as a cultural-broker (Fitzsimmons, 2013) and as an in-team negotiator (Kiesel & Haghirian, 2012). However, this simple two-dimensional categorization of individuals might not be enough to fully understand the effects of biculturals on teams. Fortunately, the bilingualism literature might offer more guidance here.

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Types of Bilingualism and Biculturalism

The bilingualism literature often distinguishes three types of bilingual individuals (e.g., Diller, 1970): (1) compound bilinguals, i.e. individual who develop two linguistic codes simultaneously while they process the world around them. A prime example would be a child born to parents coming from two cultures or a child migrant; (2) coordinate bilinguals, who work with two sets of concepts, often in compartmentalized environments. A prime example would be a child born to migrant parents, who learn one language at school, but use their parents' native language at home. Finally, the literature describes (3) subordinate bilinguals who learn and use their second language by filtering it with their primary language. Most adult second language learners would fall into this category (Wei, 2008).

Some recent research on biculturalism has revealed cognitive and identity differences among biculturals, depending on how (and when) they become bicultural. Martin and Shao (2016) differentiate innate biculturals (i.e., those who experienced early immersive culture mixing) and achieved biculturals (i.e., who experienced and internalized other cultures later on in their life). They found innate biculturals to be guided by a single cultural frame (a hybrid of the cultures to which they have been exposed), while achieved biculturals were able to switch between different cultural frames. In terms of cultural identities, innate biculturals reported more integrated cultural identities than achieved biculturals.

While it should be stressed again that culture and language are not synonyms, and any comparisons between language- and culture-learning processes must be made cautiously, there is a significant overlap between these two constructs. To push forward the research on biculturals in organizations, the research community might draw more parallels from the bilingualism literature on how and when individuals become bilingual, and what the outcomes are, in terms of acquired and developed skills and abilities.

Comparison of Language and Culture Acquisition, and Skills Developed in the Process

There is little research examining differences among biculturals stemming not from *how* they manage their cultural identities, but *how* and *when* they become bicultural. Sociology research has established that acculturation processes unfold differently in individuals of different ages and the timing of acculturation (for instance age of arrival to the new/host country) has a significant effect on individuals' self-identification (e.g., Marin, 1993).

Learning a new culture has been compared to learning a second language (e.g., Schumann, 1986); thus, research on language acquisition may be helpful in theorizing on biculturals' cross-cultural skills development. Scholars have found that in some areas of second language acquisition, such as accent and pronunciation, the age of the student plays a critical role (e.g., Flege, Mackay & Piske, 2002); however, research has also found that learning a second language at a later stage of life leads to development of more analytical skills (e.g., Munoz, 2006). Using the language acquisition literature, parallel conclusions related to the development of different cognitive skill sets depending on the time of second culture acquisition could be drawn.

A common misconception about bilingualism is the assumption that bilinguals acquire both languages in childhood (Grosjean, 1982); hence, monolingual adults can never become fully bilingual. While the critical period hypothesis (e.g., Birdsong, 1999) suggests that adult foreign language learners cannot acquire the native accent, research shows they can become fully bilingual (e.g., Hakuta, Bialystok, & Wiley, 2003). Similar to the biculturalism literature, early research on bilingualism indicated that teaching children two languages at the same time might be disorienting (e.g., Smith, 1942). However, these early findings have been rebutted and more recent studies have shown that bilingualism may restructure the brain (e.g., Green, Crinion, & Price, 2007) and the way in which it works (e.g., Bialystok, Craik, & Luk, 2012). Decades of research has shown that bilingual individuals are not more *intelligent* than monoculturals (Bialystok & Werker, 2017; Edwards, 2004), but some cognitive processes that are part of intelligence are more developed in bilinguals (Bialystok, 2005). Bilinguals have been found to better respond to confusing stimuli (Morales, Calvo, & Bialystok, 2013). Another common misconception about bilingualism is the belief that being bicultural is equal to the ability to efficiently translate between languages (Grosjean, 1985). Bilinguals tend to compartmentalize (or complement) languages, that is, learn and use each language in different domains of life (Grosjean, 2010), which would result in having different levels of language proficiency in different areas of personal and professional life.

The left brain hemisphere is more active in analytical and logical processes, while the right hemisphere is more active in emotional and social processes. Language acquisition requires all four types of functions, however brain plasticity and lateralization changes over time. The critical period hypothesis (Lenneberg, 1967) suggests that children acquire the second language faster than adults because the higher plasticity in the brains of children allows them to use both hemispheres more efficiently. Conversely, adult second language students are more likely to use one dominant brain hemisphere to learn a new language, usually the left one responsible for analytical thinking (Elliott, 1995).

While the research on this issue has not been conclusive, the age at which the language is acquired might play an important role in how it is acquired and what skills are developed in the process. If children use the right (emotional) hemisphere more than adults (e.g., Fox, 1991), it is likely that they will have a more holistic view of the language and a better understanding of the social context of its usage. On the other hand, people who learn a second language as adults show less emotional bias and exhibit more rational approach when confronted with problems in the second language (Keysar, Hayakawa, & An, 2012).

Based on the similarity of second language learning and second culture acquisition, one may theorize about the potential differences in skills and abilities of biculturals. If child second language learners develop more holistic and context-embedded language proficiency, the innate biculturals might develop similar skills. Almost by definition, they would possess deep tacit knowledge of the two cultures in which they are embedded; hence, within these two cultures their behaviour and attitudes would be close to the behaviour and attitudes of their monocultural peers. As a result, they would experience less cross-cultural conflict (both at the identity and social group levels) and would be more likely to serve effectively as cultural mediators. On the other hand, early exposure to both cultures results in deep embeddedness in both but, likely, would not lead to development of cross-cultural skills. In other words, biculturals who are placed in a third culture would experience the same difficulties as a monocultural placed in a second culture.

Conversely, achieved biculturals might experience more difficulties to fully immerse in the social context of the second culture. They might need more time and effort to achieve the state when they fully understand the subtlety of social interactions and to do that they might constantly compare the new culture to their home culture, similar to subordinate bilinguals who use their first language frameworks to learn the second one. While this process might take more time and result in less cultural familiarity than innate biculturals enjoy, the constant back and forth translation between the home and host cultures might lead to development of more complex metacognitive strategies related to cultural tasks.

The metacognitive skills could be useful when the individual is placed in yet another host culture. As a result, the achieved biculturals might develop skills that would benefit them in a multicultural environment, when they have to adapt to a variety of cultures. This might lead to achieved biculturals being effective boundary spanners across many cultures. In other words, achieved biculturals might not have as deep tacit knowledge of their host culture as the innate biculturals, but they would develop skills useful when move to another host culture.

Acquiring a New Culture Without Knowledge of Language

Language is not just grammar or vocabulary; it is how these are used in specific contexts to ensure meaningful communication. Language is a tool to connect with culture, and it is important to understand that language has the ability to influence our understanding of culture (Neuliep, 2017). Cultural values are often embedded in linguistic structures, which get reinforced through language speakers (Fausey, Long, Inamori, & Boroditsky, 2010). Therefore, acquiring a new culture without fully understanding the language associated with that culture can inhibit an individual's ability to understand the new context. An advantage of using language as a proxy for culture is that language use is rich in structure and this makes it relatively easy to measure patterns in language use, and therefore, analyze cross-cultural differences (Fausey et al., 2010).

Using Bilingualism as a Proxy for Biculturalism: Methodological Perspective

There are numerous definitions of bi- or multiculturalism coined by sociology and organizational studies scholars. The definitions range from general (i.e., based on demographic or ethnic characteristics) to psychological and sociological (i.e., based on cultural identifications or orientations). In the psychology literature, bicultural individuals are defined as those whose self-label and/or group self-categorization reflects their cultural dualism (Nguyen & Benet-Martinez, 2007).

However, the self-categorization approach to measuring biculturalism suffers from methodological (Stephan & Stephan, 2000) and ethical challenges (Blascovich, Wyer, Swart, & Kibler, 1997), and individual (self-)categorization biases (e.g., Hogg, 2000; Rosette, Leonardelli, & Phillips, 2008). Using an objective proxy of culture would allow researchers to avoid some of these challenges (Szymanski, 2017). Feliciano (2001) and Chen, Benet-Martinez and Bond (2008) considered using language proficiency as a proxy for culture.

Biculturalism in organizational studies research suffers from a limited number of large sample, quantitative studies to test and validate already existing theories (Szymanski, 2017). The unquestionable benefit of ethnographic studies of organizations and other qualitative methodologies is the possibility to examine not only individuals' experiences with the other cultures, but also how much they identify with both cultures. However, these in-depth methods of investigation are difficult to apply when conducting large sample studies. Some scholars have adopted a multiculturalism questionnaire (e.g., Verkuyten, 2005, Hrenyk et al., 2016) to measure identification with one or more cultures.

While it is a useful tool, it also limits research to those who *identify* with two cultures, which raises questions about individuals who have experienced and internalized two or more cultural schemas (Brannen & Thomas, 2010), but do not identify with both (Brannen, Thomas, & Garcia, 2009). In such a case, there might be a discrepancy between measured cultural identification and the actually existing cross-cultural skills stemming from exposure to two or more cultures. Using tools designed to measure bilingualism might not exactly capture biculturalism (Butler & Hakuta, 2004), but they could capture and measure the ability to speak two or more languages (especially when a native-like proficiency is achieved) and that might be an indicator of a close link to two or more cultures.

This way of measuring biculturalism will not solve all problems caused by lack of identification with a culture, but will provide researchers with a more stigma-free tool to capture the phenomenon (Rosette, Leonardelli, & Phillips, 2008; Szymanski, 2017).

RECOMMENDATIONS FOR FUTURE RESEARCH

Language and culture and, hence, bilingualism and biculturalism, are not synonyms, yet a significant overlap exists between these two phenomena. Bridging the fields of bilingualism and biculturalism can help solve some of the issues mentioned in the previous sections. It has been studied that bicultural individuals are more creative and that they can be the bridge in a team divided by cultural faultiness; however, biculturals could face discrimination because of their accents or vocabulary. Is linguistic ostracism true even for bicultural individuals? The literature on bilingualism and linguistic ostracism (e.g., Dotan-Eliaz, Sommer, & Rubin, 2009) can be used to analyze the role of linguistic barriers to collaboration, which hinder bicultural individuals from becoming efficient boundary spanners.

One way to analyze the presence of linguistic ostracism could be to use existing theories on social identity and/or social categorization. Most research has assumed that bicultural individuals are multilinguals or at the least bilinguals; however, that is not the case in many teams. Therefore, another interesting avenue for future research would be to analyze how language based identification interacts with the presence of biculturals in teams, and how that impacts the creation of faultiness and power dynamics within these teams.

In both the bilingualism and biculturalism literatures, research shows that bilinguals and biculturals are foster creativity in teams. But the two streams have not been linked very effectively yet. Is it possible that bilinguals foster creativity in teams only if they are bi/multiculturals? Literature from neurology, and sociolinguistics, and carefully designed laboratory experiments can be used to study this question. Another closely linked avenue for future research using laboratory experiments is testing whether the age of second language acquisition has an impact on the creativity levels that biculturals foster in their work. Although a challenging task, nonetheless, if the research on biculturalism and bilingualism is bridged, it will break new ground in culture and language related research in international business.

IMPLICATIONS FOR PRACTICE

In today's business world, organizations not only have to operate across national boundaries and adapt to more diverse external environments, but they also have to manage internal diversity. Organizations are increasingly becoming increasingly diverse, and such heterogeneity within organizations has significant effects on individual, team, and organizational performance (Chen et al., 2012; Webber & Donahue, 2001); therefore, understanding and effective managing of linguistic and cultural diversity (among numerous types of heterogeneity) is critical for organizational success.

Bicultural and bilingual individuals possess the potential to facilitate some cross-linguistic and cross-cultural processes within organizations (Fitzsimmons, 2013), but the positive effects can only be observed when the individuals are placed within a diverse environment (Szymanski, 2017). Similarly, bilingual individuals can be instrumental in bridging linguistic diversity within organizations, which in turn can enhance team cohesion and performance (Cohen & Kassis-Henderson, 2017). However, it is not sufficient to just add a bilingual and/or bicultural individual to a team to increase the cohesion, and eliminate the linguistic and cultural faultlines, the process must be carefully managed. In order to do so, a much better understanding of the similarities and differences between biculturals and bilinguals is necessary.

CONCLUSION

There should be little doubt that psycholinguistic literature, language acquisition, and multilingualism research have tremendous potential to fuel further research on biculturals in organizational settings. In this chapter, the authors outlined some research

opportunities that can be found at the confluence of linguistic and cultural research avenues. In the area of biculturalism research, there are still numerous fascinating research paths to be explored, such as the effects of the source of biculturalism on individual's skills and abilities, the interaction of biculturalism and bilingualism, and measuring biculturalism using bilingualism-related tools. The authors hope that this chapter provides a source of inspiration for other scholars interested in pursuing an active research agenda in these fields.

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KEY TERMS AND DEFINITIONS

Acculturation: A process of socialization, in which an individual who is a member of one culture adopts the values, customs, norms, attitudes, and behaviors of a new culture.

Biculturalism: A state of having or inheriting two or more cultures or two or more ethnic traditions.

Bilingualism: A phenomenon of speaking and understanding two or more languages. The term does not imply an equal level of fluency in both languages.

Cognitive Skills: A set of skills and abilities, allowing an individual to perform the various mental activities most closely associated with learning and problem solving.

Culture: An integrated system of shared values, beliefs, norms, behaviors in a given society (group of people), transmitted from generation to generation.

Global Leadership: A process of influencing the thinking, attitudes and behaviors of a global community to work together synergistically toward a common vision and common goals.

Language: A system that consists of the development, acquisition, maintenance, and use of complex communication.

Social Identity: The portion of an individual's self-concept derived from perceived membership in a relevant social group.

Chapter 3
Creative Discourse as a Means of Exploring and Developing Human Creativity

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ABSTRACT

The chapter explores and elucidates the ways in which the cultivation of creative discourse is associated with the formation of the necessary conditions that promote human creativity. The study focuses on revealing the mechanisms behind their attempts of personal expression which incite a multifaceted processing of reality and a redefinition of the relationship between pre-existing and newly acquired knowledge. These mechanisms are studied in order to identify the ways in which creative discourse, under specific conditions, can transform from an innate human capacity into a creative ability.

INTRODUCTION

Creativity has been considered a fundamental feature of human spirit since ancient times, while in more recent times the cultural significance it has acquired for the progress of societies is evident by the contemporary tendency to almost sanctify it. The concept of creativity is so broad that it encompasses all aspects of life from academic achievement and Art to entrepreneurship and everyday-life communication,

and is today studied from diverse perspectives through various disciplines. Our interpretation sees creative discourse as a problem-solving activity whose solution is given through the interaction among the language code, individual and social experiences, and information integrated into new shapes projected to language.

To this end, the first part of the chapter begins with an overview of evolution of the concept of creativity from antiquity to the Age of Enlightenment and the Romantic period until today. Concurrently, the chapter elaborates on the standard definition of creativity with the two characteristics of originality and effectiveness, regarded by research as prerequisites to anything that can be defined as creative, which we attest to, as well. The first part of the chapter also explores recurrent themes in creativity study, such as the binaries of high quality versus everyday quality creation and the product versus process perspective in creativity.

In the main part of the chapter, we focus on the study of creative discourse. Language, this unique human feature, has always been a means of interpreting the inner-self and the external world, and providing solutions and answers to major as well as minor life problems and questions, and in this sense, language entails creativity. Then, we clarify creativity of language in terms of deviation from the conventional use of language, which can be applied to both literary discourse and any other creative discourse. Linguistic creativity is further explicated through its components of generative creativity and lexical creativity, the latter usually expressed in figurative language, both of which interact with the subject's creativity and the social context, which transfuse the necessary value to the process.

Next, we elucidate the cognitive processes of convergent and divergent thinking both associated with creativity, by analyzing their features and the ways of measuring them. Finally, recommendations for further study on the point of convergence between literary and creative discourse and its implications in education are offered. Through all of the above we reach our aim of discussing creative discourse after placing it within the overall historical and theoretical background of creativity studies.

BACKGROUND

The concept of creation in many ancient civilizations – for instance, the role of the Muse in Homeric epics – has been associated with the Divine and has retained this mystic reception for centuries, since the creative product was not perceived so much as the product of human intelligence, but mostly as a transcendent intervention that guided the human spirit. Up to the 18th century, the concept of creativity was considered by both pagan and Jewish-Christian tradition to be a work of synthesis of the human and the divine element, as the creative subject could perform the process

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of "spiritual birth" through divine mediation; that is, through the assistance of the Creator of the world.

The concept of the Creator refers to the Creator-God who is the generator of the creative subject and bestows to him/her the ability to create (Pope, 2005). In general, this projection of inspiration to a heterogeneous subject is the tenet that will change throughout time on the concept of creativity.

With the term *heterogeneous subject* we mean the external force by whom/which the creative subject feels that he has been pushed towards creative expression in order to express something with aesthetic excellence (Derrida, 1992). In any case, the Age of Enlightenment was groundbreaking in the perception of creativity, since the rational understanding of human spirituality at that time led to a reassessment of who/what creation stems from; afterwards, human intellect has been regarded as capable of producing knowledge and discovering new fields of perceiving reality (Karakitsios, 2012).

Then, for the first time, creativity was recognized as an inherent human characteristic, although a theological dimension was still connoted, mainly in the way the mission of the creator was understood, his/her mission being to create something new and useful for the development of society. Therefore, already from these early times, *originality* and *usefulness/effectiveness* were identified as necessary components of creativity, elements which have been thoroughly studied in the 20th century. This is also the main distinction between the theological Judeo-Christian version of the Creation ex nihilo and the Europe-of- Enlightenment version that gradually begins to perceive creation as a continuous project of forming and reforming data, patterns and materials, which leads to new versions of the world's perception or aesthetic impression (Pope, 2005).

The Romantic period is considered a second intersection in the historical continuity of creativity for another reason: because the romantic worldview of the 19th century distinguishes two frameworks of action and manifestation of creativity, which foreshadow modernist thought about high art: a) creativity in the arts, which re-establishes the mystical dimension of the creator and, hence, elevates artistic production compared to other fields of human action and b) creativity in everyday life, meaning the utilitarian products of any kind. In this light, a key methodological issue of the 20th century, demanded by creativity researchers to answer, is the inclusion or not of other areas of life, beyond artistic practice and philosophical thought, into the creativity equation (Leahy, 2005).

Generally, studies of creativity have intensified since the 1930s and continued in the following decades, a time when the uses of the adjective creative multiplied and described qualities of people not only related to artistic production, while a sociocultural reference of the term was established and gradually became a

common ground for researchers (Deleuze & Guattari, 2004 [1994]; Stein, 1953). Interdisciplinary research from the very beginning, considered as the basis and principle for the perception of creativity, and especially of the creative discourse which concerns his chapter, that creation as a process and act is not subject to virgin birth but is instead based on deeper cultural and conscious projections involved in the artistic process (Csikszentmihalyi, 2014; Pope, 2005).

Within this framework, a tendency to synthesize different definitions of creativity was formed around two characteristics that were considered as indicators of the concept in each human activity: a) *originality* and b) *effectiveness*. *Originality* or *innovation* was considered to be vital to creativity, recognized as a prerequisite, but not the only necessary condition, in the sense that, while whatever is creative is original, not every originality constitutes creation.

A truly random process or a spontaneous experimentation could, according to experts, create something similar to an original product; however, this indicator is not sufficient to signify creativity (Hill & Bird, in press). Scholars agreed in the 20th century that original things should also be effective, appropriate, useful, in order to be creative (Runco, 1988, Runco & Jaeger, 2012). The term *effectiveness* implies also a type of value, since every original composition serves some visible or hidden needs of the social context it is born out of (Rubenson & Runco, 1992; Stein, 1953; Sternberg & Lubart, 1991).

On the other hand, there were contradictory views to the concepts of innovation/originality and effectiveness as indicators of creativity. These mostly questioned the emphasis on the product of creativity and not on the creative process, and the evaluation criterion: how would something be assessed as innovative and/or effective (Plucker & Makel, 2010)? Additionally, the concept of high quality/value and the evaluation process is extremely precarious and fluid, since it depends on societal and cultural contexts. It is also not clear who is eligible to make such evaluations or how a decision upon the evaluative criteria can be made.

However, the two concepts, originality and effectiveness, solved more problems than they created or did not answer. Originality did not exclude the process of creativity from the creativity equation; on the contrary, for the first time it illuminated it, while the two criteria were almost archetypically acceptable in cultural history, as we mentioned before. They did not reject the creator-subject factor, but they placed him within the historical experience and gave a practical and social dimension to aesthetics. The liquidity of the evaluation criteria, therefore, demonstrated the importance of the reference framework.

Thus, the standard definition of creativity with the two criteria of originality and effectiveness, is a good starting point for discussion, since without neglecting the creator's personality and uniqueness dimension, there is a dialectical element with the social and cultural sphere, which defines a new perception of the term

creativity. The creative subject, either a writer, a painter or a scholar, is shaped within an environment which he serves or complements with his ability to produce compositions of redefined knowledge and experience that are both original and practically beneficial (Barron, 1955; Hutchinson, 1931).

Historically, the standpoints of Barron (1955), Guilford (1950) and Stein (1953) have been vital to the understanding the concept of creativity as they very soon realized that innovation needs to be adaptable to reality in order to be creative and involves some restraint to revolutionary thinking, so that it continues to operate as a novel but comprehensible perception of social and cultural experience. Stein was the one who drew the transition of interest from the product obtained to the process that led to the product, since he considered the creative idea as the result of the synthesis of existing materials or knowledge, which, when it reaches completion, contains novel elements (Boden, 1994; Runco & Jaeger, 2012; Stein, 1953).

This way, we are gradually led to the formal creativity definitions of the 1960s with Bruner's (1962, p. 18) understanding of creativity as "effective surprise" and Jackson and Messick's (1965) demand for appropriateness, as necessary characteristics of a creative product (see also Runco & Jaeger, 2012). These attempts represent a cultural and socio-political perspective of creation as a process and result, as they illuminate a dialectical interaction between the creative subject and the social structure / cultural tradition that affects all stages of the creative synthesis from conception to mediation to the recipient of the creative product (Amabile, 1996; Runco & Jaeger, 2012).

The question, however, whether creativity arises from personal competence or is a network of relationships and a process in progress still puzzles experts. Concern is related both to factors involved in creation as a process of human cognition and to the dynamic interaction between the creative product and its "consumer", in a way that allows the recipient to transform into a second creator. At the same time, the other methodological concern was the difficulty of developing reliable methods of measuring and evaluating creativity (Sternberg & Lubart, 1999), as mentioned above.

This concern is further enhanced if one considers that human consciousness, to a large extent, is also a cultural product, which complicates the definition of creativity. Therefore, the most recent research constantly redefines the concept of creation and its relation to other structures of human cognition, generally insisting on a democratization of creativity (Pope, 2005; Runko, 2007). In any case, the expansion of the concept of creativity in all realms of human experience in the 20th century provoked many theoretical controversies over the meaning of the term and, thus, there have been attempts of degrading the concept. However, dogmatic approaches have shown that denial of creativity poses the risk of polarization rather than solving a problem (Williams, 1983; Pope, 2005).

Additionally, Deleuze's (1995 [1991]) positions helped to raise the concept to its original height by limiting creativity to three mental spaces: a) philosophy b) art-literature and c) science, although at the same time recognizes the potential for various interactions in these spaces, thus describing the dynamic cultural interaction within the historical continuum (see also Pope, 1994).

These findings helped to regain interest in the term but with the difference that now the vague concept of creativity refers not only to a final product but also to an evolutionary process involving the initial creative idea, the period of processing the creative idea and the final aesthetic product. Creation is a set of cognitive processes influenced by both external factors and obscure cognitive structures that construct human personality (Amabile, 2012; Deleuze, 1995; Michailidis, in press; Pope, 2005).

Consequently, each person can be creative in his own way in any field of the human sphere, but following the positions of Deleuze, it is accepted that human creativity can be better deciphered in the fields of philosophy, art, and science. This position does not reflect a mystical-romantic dimension, but is in accordance with the majority of interdisciplinary studies that explore creativity and consider the aforementioned human activities as privileged and demanding manifestations of creativity that are strongly culturally and socially charged.

Here it is imperative that we stress again the emphasis on the final product to be a restrictive form of the perception of the concept of creativity because it may identify it with its practical expression, indirectly eliminating creativity as an inherent feature of those who do not produce specific products that could be considered creative. This observation reveals the capacity of every person to operate or express oneself creatively, a characteristic established after the opening of the term in fields of daily life.

Within this context, creativity concerns all people who use their creative skills to solve a variety of difficulties/problems, and the areas of art, science and philosophy provide intellectually accessible areas for the average person, not by a professional standard, but in the sense of experimentation and self-expression. Thus, creativity may involve of a radical rearrangement of consciousness and may be seen as a form of transformation and self-evolution (Williams, 1983; Willis et al., 1990).

After all, creative thinking has evolved from a field of academic interest into a key anthropological issue. This is why extensive research on evolutionary biology, cognitive psychology, and education theory demanded the reconsideration of creative thinking and the study of its limits (Runko, 2007). At the same time, the recognition of creativity as an inherent feature of the average human, has allowed its exploration with the instruments of social and positive sciences, while it signaled a gradually increasing interest in training programs which sharpen human creativity (Maslow, 1963; Klausen, 2010).

Indeed, with regard to the field of creative discourse, which is the theme of this chapter, linguistic creativity is perceived as one aspect of cognitive creativity, both of which define the biological differentiation of humans and form the linguistic and social representation of consciousness (Bakhtin, 1977; Bohm, 1998). In this light, we can interpret the trend of the 20th and 21th centuries of many people in the West –without necessarily literary or academic interests – to participate in creative expression workshops, since creative discourse is now perceived as personal fulfillment (Eisner, 2002). However, this not being the aim of the chapter, in the next parts we will discuss creative discourse as a whole, incorporating literary discourse, creative writing and everyday creative discourse, written or oral.

MAIN FOCUS OF THE CHAPTER

From Linguistic Communication to the Defamiliarization of Creative Discourse

It is evident that the concept of creativity is extremely complex, as it involves a large part of human cognitive and mental skills and this, undoubtedly, makes it difficult to understand its manifestations. Although creativity can be studied from various perspectives (aesthetic, philosophical, and so forth), any form of its expression, either regarding the aesthetic perspective either the practical dimension, maintains the element of originality which captures and serves specific social, cultural and aesthetic sociopolitical needs. For this reason, creativity is seen by research as a type of problem-solving ability, since gifted individuals interact with both the external reality and its internal projection to the members of the group they belong to and undertake to reconfigure the network of experiences and information into new shapes (Bohm, 1998).

Within this dynamic power of creativity one cannot bypass the role and the association of the language code to the creative ability. How could the use of the communicative dynamics of language, a distinctive element of human nature, be excluded from the human struggle to express and act creatively? Language, as a constantly evolving structure and instrument of the human spirit, a living organism, became a means of the creative capacity of human from the beginning. This is why within the same language there is a variety of sociohistorical elements and traces of opposing mentalities, as the language evolved into an autonomous system which independently influences the communicative and synthetic capacity of every creative subject and interacts with time and space.

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Human speech, either in its oral or written form, has been a core element of cultures and has been used as a way of critically managing the structures that shaped the consciousness of each creator – writer, orator or even everyday speaker – and, hence, his/her concept of reality. From early on, legends and folktales (oral tradition) were considered types of creative discourse, which strongly suggest the prehistoric/ancient correlation among creativity, aesthetics, linguistic expression and social structure (Barthes, 1966; Delcroix & Hallyn, 2000).

According to Lévi-Strauss (1977), the creative thinking of common people produces myths in an attempt to interpret and formulate proposed ways of solving basic problems of life. Myth, thus, functions as a symbolic code of the attitudes towards and perceptions of the world, while certain fixed elements in their structure tend to repeat and transfer to other myths or traditions with the expected alterations and variations. This is the beginning of Bakhtin's (1977) position that the creative power of language transforms creative discourse into a network of dialectic juxtaposition and infiltration of cultural elements, during which a dynamic reshaping of "ego" in relation to the social context occurs (Bohm, 1998).

Creative discourse is, thus, perceived as a suitable field of expressing human creativity and constitutes a state of personal fulfillment, giving alternative interpretations and solutions within the constraints and characteristics of a situation (Eisner, 2002). Thus, in creative discourse, the process of creative expression is grounded partly on correlation processes that allow the development of a text as a conceptual chain, within the limits of a literary genre and the power of personal experiences.

These compositions arise from the correlation of both experiences and information in memory, confirming the idea of dialectical confrontation maintained by philosophers and art theorists. This is why researchers focusing on the process of creation have exposed the interactions of creative thinking with consciousness, unconsciousness, memory, imagination and critical ability (Runko, 2007; Csikszentmihalyi, 1996).

In this sense, creativity can be expressed in a variety of ways through linguistic expression, producing aspects of linguistic *defamiliarization*, which is defined as the unconventional use of language, and largely refers to the concept of literariness, a concept discussed by literary theorists (see Mukarovsky, 1964). Thus, we move to the positions of the Russian formalists who, together with the structuralists, have removed the focus of the theoretical analysis of aesthetics of literary language from the creative subject towards the text itself and explored the ways that the form of the text produces meaning(s).

Thus, formalism gave an inter-textual perspective to literary theory, while its effect was significant, even though it failed to give definitive answers to significant

problems in decoding creative/aesthetic discourse. The formalist school exaggerated the importance of the form of the product but it also offered convincing arguments on the relation between form and content, employing for the first time findings from linguistics, literary criticism and cultural studies (Selden et al., 2005).

The interest of scholars for the power of literary code and the study of the special tools needed to "tell a story" with aesthetic quality, promoted the exploration of the distinctive characteristics of literary discourse, which, in turn, led to the investigation of what features distinguish creative discourse from other forms of linguistic communication (Barthes, 1966). By extension, the formalists raised the issue of literariness or poetic language and showed that its analysis could only arise through the study of discourse/textual form.

According to them, literary texts, being creative products, are systems, and the study of their structures reveals the organization of their aesthetic identity, since each product does not balance each one of its elements, but it projects some more than others. These foregrounded elements, the dominant ones, shape the form and importance of literary texts (Todorov, 1995; Jakobson, 1998).

Through the study of the structural relationship of elements, within the formalist and structuralist theory, the deviant language of the literary, thus, creative discourse, is highlighted, since it is characterized by defamiliarization, compared to other communicative functions of language (Shklovsky, 1965). From this viewpoint, creative linguistic expression has been studied as dominant human trait, because it differentiates us from other living organisms, despite our shared elements.

The extent and the ways of converting our thoughts into a language code that mediates meanings and feelings makes us unique, while we can also produce special networks of linguistic labels that work reductively and can redefine our experience. Initially, linguistic creativity was simplistically associated with literature (literary discourse) and it was considered that literary language was unequivocally different from the language used in everyday contexts (Pope, 2005).

However, studies from the second half of the 20th century onwards in the fields of linguistic anthropology and sociolinguistics have revealed that human communication is more than language. The social, cultural and historical context in which communication takes place, interacts with the communication process, while for many, communication involves more complex structures where aesthetic language falls into, and serves the finest expressive and semantic needs. Therefore, communication is not just a simple transmission of information, but a way of building and maintaining relations and the demarcation of our identity and interaction within an existing framework.

Literature and everyday language use are recorded in social reality and interact with other fields of human experience. Aesthetic discourse is not only influenced by literary tradition and social structure but also by linguistic structure, which also functions as an autonomous system with historical-cultural influences that shape its course and its continuity. Consequently, creative discourse as an imprint of *creativity through language* indicates individuality with a social reference and is expressed creatively through a system with a social reference, as well.

We could, therefore, say that creative discourse is the union of two creative elements: a) the creativity of language as an element of the language system itself (its generative creativity + lexical creativity, see below), which of course is product of human intelligence and b) the subject's creativity as an inherent human characteristic. This is why studies have gradually turned towards the decoding of the interaction between these two principles and the factors that determine them.

The basis for exploring the creativity of language was literary theorists' work, as its study begins from the most observable and explicit manifestation, the literary text. Their work showed that the reason why our creativity is imprinted in language is related to the fact that forms of creativity are inherent in language. Thus, we refer to the terms *linguistic creativity* or *creativity of language* to describe the ability to communicate and understand new expressions and new ideas through language.

However, soon researchers disagreed on what is defined as linguistic creativity and its relation to creative discourse as aesthetic product. Others focused on the combinations of known elements in a new sentence (see Zawada, 2005), while others insist on lexical aspects of creativity, with which new concepts are created, e.g. through metaphor, wordplay or idioms (figurative language). Hudson (2000) explains the twofold creativity of language as the combination of these two features it exhibits: a) *recursion*, that is, the reuse of syntactic patterns within larger units, the so-called generative creativity) and b) *openness*, the ability to create new lexical items, that is, lexical creativity.

In any case, deciding on and examining the degree and the terms with which language involves the creative element can unravel the mystery of how creativity can be cultivated through creative linguistic expression. This is the task that each creative writing workshop is called upon to tackle in order to help individuals manage their creative powers and improve their linguistic creativity but not necessarily produce professional writers.

Therefore, in recent years, creative writing research, as an interdisciplinary meeting point of applied linguistics and literary studies, focuses on everyday creativity of language so as to develop taxonomies and methods that will allow for a deeper understanding of the association between creativity and language code. Thus, researchers have been studying the patterns of linguistic creativity in

a series of everyday instances of discourse to explore the possible similarities and differences between everyday and literary creativity and how they interact (Maybin & Swann, 2007).

Generally, it is not possible to understand the relationship between language and creativity and, consequently, how we can mediate it to learners in an educational framework that is set to enhance creativity through linguistic and aesthetic expression without analyzing the terms and ways that everyday discourse can be defamiliarized and transformed into creative discourse. Therefore, it is necessary to identify how common speech is elevated to a language that meets the aesthetic criteria of creative language and involves the dual dimension of creativity: originality and effectiveness. To make linguistic creativity transparent, we will proceed to a conceptual distinction that will prevent semantic confusion.

On the one hand, then, we have language as social product and a cultural object, as it is described in dictionaries and grammar books and on the other, the language as a communication process and a means of personal reflection or ideology (Burke et al., 2000). Therefore, it is desirable to separate language as an objective structure and language as the manner of organizing the reality of the user. These two realities interact, but they are not identical, because if they were, creativity would be exclusively the property of language and would not reflect the subject at all.

Consequently, creativity in the sense of aesthetic expression is both the property of the speaker and language. It is a synthesis, which is constantly activated and shaped by the intellect of writers and scholars but also any individual who are linguistically formed within a specific cultural environment (Maybin & Swann, 2007). A range of linguistic phenomena indicates the richness and range of choices that a creator -in a specific language- can exploit, subvert and use to re-create.

Literary forms of everyday speech, such as the manipulation of linguistic forms through wordplay, rhymes, connotations of metaphors and similes and other figurative speech forms, confirm the concept of the poetic function of language by Jacobson (1960) and Mukarovsky's (1964) poetic deviation. Tannen (2007 [1989], 2005) and Carter (2004), additionally, refer to the function of the repetition when speakers mirror the words and rhythm of their interlocutors and the creative construction of dialogue in the narrative.

More specifically, Tannen (2005), following Jakobson, maintains that everyday discourse offers linguistic strategies that are appropriately adopted and systematized (effectively and originally, thus, creatively) in literary genres. For Carter (2004), creativity of discourse is a matter of quantity; the more creative the discourse the more closer it is to literary and aesthetic discourse and literariness, while Cook (2000) insists more on language play and imagination than on literariness.

In this context, in language play, which is one manifestation of humor, any creative reformulation results from a shared database of references shared by the speakers. This common reference code enables them to recognize any deviation from the literal or conventional use, but it does not cancel the creative defamiliarization. In other words, the shared cultural context and knowledge that makes the wordplay or joke possible and understandable, and thus enjoyable, does not diminish or eliminate the creative deviation and defamiliarization.

In any case, the concept of creative discourse, either confined to literary conventions and genres, or open to other fields of linguistic communication, constitutes a renegotiation of concepts and perspectives of reality against an aesthetic, social and communicative gap, which the creative subject is called upon to complement and "heal" by activating inherent elements of the language code and his/her own intellect.

Language creativity is not a static and restrictive manipulation of rules but involves an element of reconstruction of the empirical conception of the world. This process, according to Deleuze & Guattari (2014 [1994]), constitutes a creative, chaotic and complex sequence of experiments and reformation of structures in such a way that the intervention of the creative subject implicates a set of skills and ideological traces of the language code, driving language creativity towards aesthetic and creative expression (*true human creation*, according to Chomsky, (1972).

The most reproductive and re-creative properties of language, which foster or contribute to creativity / literary discourse are, of course, metaphor and analogy. Creativity researchers and linguists particularly focus on these processes, because they redefine grammatical, syntactical and lexical structures of language, while allowing for unlimited experimentation which may correct deficiencies of the current semantic language system. To put it differently, metaphors and analogies produce new ways of thinking about familiar things and reveal convergences between the concepts we use to describe the external reality, but also the ways in which language represents reality in consciousness (Veale, 2006, 2012).

Therefore, metaphor and analogy are advantageous properties of linguistic creativity, since they show some fluidity in the boundaries of the code, which renovates language and allows it to operate creatively and, consequently, dynamically within the framework developed by the language code and the community that uses it. Thus, re-familiarization of concepts and reconstruction of meanings are facilitated, so that language evolves through the subjective intervention of the creative subject. That is the user of the language code, who becomes creator, a manufacturer of new meanings, or a remaker of old words. Indeed, the first record of the metaphor's dynamic capacity as a language feature is given in Aristotle's *Poetics*.

In any discussion of linguistic creativity, however, it is impossible not to mention Chomsky's positions (see, for example, 2009[1966], 1967, 1972) which updated Descartes' views on language and transcribed them in contemporary scholarship.

He emphasized the generative dimension of linguistic creativity, in other words, which is the ability of humans to generate innumerable sentences and the ability to understand them even if they hear them for the first time. The user of the language, according to Chomsky (1972), is inherently equipped to understand and construct the grammar of the various human languages, having assimilated a system of rules as human languages possess general structural characteristics common to all languages for the very reason that they reflect specific properties of human cognition (2009).

To describe this linguistic property, Chomsky used the term creative aspect of language, but distinguished normal creativity, that is ordinary language use, from true creativity, which he associated with "value as well as novelty" (2009, p. 75). However, he argues that the necessary condition for true creativity to occur is normal creativity, the inherent property of language which establishes "the constraints and the governing principles" (1973, p. 183). The premise that there is a set number of inherent cognitive rules common to all human languages and these govern a set number of language elements seemed somehow contradictory to some scholars, as it could not interpret the unpredictability and novelty of creativity of language (Fischer, 1997).

However, we maintain that, in terms of creativity, there is no inconsistency between the above premise and language creativity, since effectiveness, the second property of creativity, necessarily takes place within limits, as we have discussed previously. This assertion follows directly from the proposition that creative products are crafted solutions to problems and that problems are defined by constraints which set limits, within which a product is generated. Hence, we can conclude that it was more of a misconception of the terms creativity and productivity of language (see also Harris, 1997) than a contradiction within theory. Attempting to clarify and bring together the supposed contradictory premises, we can argue that language as a system possesses elements that interact with the creativity of the creative subject, a socially and culturally constructed individual, to express himself/herself creatively through language.

As Chomsky differentiates *true human creativity* from creativity manifested in everyday linguistic behavior, he consequently accepts the concept of defamiliarization of creative discourse. Acknowledging the specific innate features of linguistic creativity does not reject the creative process, as was shown by the examples of metaphor and analogy, but instead they can help the individual or a creative-writing workshop learner to develop his/her creativity by controlling the stages of the creative process in order to produce more systematic and effective creative discourse.

One way to achieve this is to focus on lexical creativity which is found in the ability of the creative subject to convey new concepts either by combining words in new ways or modifying concepts (Di Pietro, 1976; Zawada, 2005) though metaphor, analogy, metonymy and wordplay. According to Rossman & Fink (2010), the

distance between two unrelated words seems shorter to more creative individuals than to less creative individuals. In other words, in terms of language creativity, creative people can make experimental linguistic associations more easily than less creative individuals.

Another feature of language which tends to be observed in creative people is idea-generation and lexical complexity, which manifest in at least three ways: a) a wider range of descriptive choices (use of more adjectives and adverbs b) lexical sophistication (use of lower-frequency words) and c) less similarity of ideas between paragraphs (more quantity and variety of ideas, Skalicky et al., 2016, 2017). This shows a more general cultivation or linguistic sensitivity of people who work creatively with writing and, which testifies the proposition of interaction between discourse creativity and other cognitive factors, which we will analyze further on, such as critical thinking and memory. The extent to which a speaker activates these abilities, but also the way s/he achieves it, accounts for both the degree and the quality of her/his creative differentiation, moving from linguistic creativity to creative discourse.

Creative Discourse: A Complex Dialogue Between Convergent and Divergent Thinking

We have seen so far that the concept of creativity in general and creative discourse in particular is a multidimensional process whereby the creative subject renegotiates thinking structures and combines a variety of materials, forms and patterns of his/ her cultural reality and social experience in a novel and at the same time effective manner (Maybin & Swann, 2007). Creative expression, especially in writing, involves delving into the self and transforming structures that constitute our individual identity. Therefore, in a way, creative discourse requires some kind of critical reflection and evaluation of pre-existing knowledge as a prerequisite for the creation of new morphological and semantic indicators. This assumption has led many researchers to realize that no creative process can be achieved without the exploitation of fields associated with critical thinking (Mezirow, 2007).

We see, then, that creative processes involve a range of cognitive skills wider than traditional research on creativity had identified. Divergent thinking, which was traditionally equated to creativity, gradually regarded as simplistic and misleading as the sole influence of creativity (Runko, 1999, 2007; Sternberg & Lubart, 1996). It is now comprehended that the association of new with pre-existing schemata is a cognitive interaction between analytical-critical thinking and divergent thinking that refutes the conventional distinction of the two hemispheres. In other words, creativity is not located on one part of the brain only but operates through neural

synapses. These findings were made possible with developments in neuroimaging technology (Brophy, 2000; Dietrich, 2004; Lee & Therriault, 2013).

In this light, contemporary studies on creativity and creative discourse examine a series of factors and stages of the creative process, focusing on the cognitive interactions that occur within the human brain. These studies have also highlighted that the degree of consciousness involved in the creative process, especially at a level we recognize for important creators (e.g., inventors, artists, entrepreneurs), is such that shows that the creation is not an automatic result caused either by gene principle or a random moment, but rather a product of long-lasting incubation and conscious effort. This means that creativity does not only manifests in moments of transcendent conception (cf. Romanticism's perception of creativity), but can be practised, enhanced and systematized in certain ways, as it is true for professionals in writing and other fields of art and science (Fischera et al., 2016).

Studies conducted by the psychologist Csikszentmihalyi (2009 [1996]) demonstrated that creativity is the result of various factors and involves many different aspects of human cognition. Environmental criteria, personality traits, such as hard work, discipline, dedication, and cognitive-emotional skills (memory, imagination, knowledge, comparative thinking, etc.) interact for the cultivation of creative thinking. Similarly, the psychologist Sternberg (2012) argues that creativity is an attitude towards life which builds upon the inherent property of human nature and is strengthened and transformed by continual and systematic practice and arduous effort. Creative individuals gradually become more unconventional when solving problems, more willing to experiment and seek to maneuver among established structures and stereotypes on the one hand, and alternative resolutions and pathways on the other, either we refer to art, science, social ascent or everyday life management.

For the above reasons, we cannot refer to the creative process only in terms of divergent thinking, since deviation is a necessary stage or skill and is related to the final creative product but it is shaped in juxtaposition to existing materials and patterns of external and internal reality of the creative subject. These form the basis of knowledge upon which the creative subject structures his/her innovation by manipulating it. This manipulation and effective use of prior knowledge and realities is the role of convergent thinking (Cropley, 2006).

To return to our primary concern, creative discourse, the data that feeds the process, but also the stages of the process, from conception to the final production and evaluation of discourse, demand a wealth of mental synapses occurring through the wedding of divergent and convergent thinking. These two seemingly contradictory processes complement each other (Lee & Therriault, 2013) and work in synergy to generate innovative discourse, which shows that creative discourse maintains a delicate balance between defying standards and following the norm (Sawyer, 2007).

Guilford (1950) was probably the first to note that innovation through flexibility and originality does not ensure creativity, if one cannot evaluate its effect and, similarly, Ghiselin (1955) acknowledged that evaluation of a solution as final creative product is the key to creativity. Nonetheless, to say that creative thinking is a conjunction of convergent (critical) and divergent thinking (experimental) does not necessarily solve problems because both these spectra of human intelligence are not easy to define. It is safer to understand, define, and investigate the sub-categories of the cognitive processes that compose them.

What follows is an attempt to analyse the subcategories, first, of divergent and, then, of convergent thinking skills, usually taken into account when these thinking processes are used to explore and measure creativity, with an emphasis in creative discourse. Tasks that assess these thinking skills make use of language and so the investigation of features of language used in these tasks can provide assessments of creativity. Research has concluded that the main features of divergent thinking include: a) originality, b) flexibility, c) fluency and d) elaboration (Runco & Acar, 2012).

This applies to creative discourse as well, when one or more of the above properties are measured through one or more lexical creativity indicators, such as metaphor, simile, metonymy, wordplay, humour, irony, allegory and so forth. The tests usually involve the generation of lexical solutions/ideas to lexical problems/ prompts, which are then analyzed for the aforementioned features.

Originality measures the novelty and uniqueness of a solution/idea through its rarity. Elaboration measures the clarifications that might be given by the creative subject, concerning the associations s/he made to generate the idea. Although explanations of this kind are difficult to be provided by participants because ideational associations are not often conscious, sometimes they can be retrieved. Fluency is the quantity of different ideas for the same prompt and flexibility means the amount of diversity of the ideas produced (Skalicky et al., 2017).

On the other hand, convergent thinking skill is judged by the quality of deductive assumptions and the effectiveness of using facts and data to respond to a prompt or to answer a question. It requires reasoning and goal-oriented practicability, which means that its goal is to reach a conclusion towards the most appropriate/correct answer. From these, we can deduce that convergent processes are essential when narrowing down answers, eliminating the impossible ones and thus it is valuable towards the end of a task, finalizing the end-product.

Very often convergent skill is tested though multiple-choice questions, multiple matching tasks, or any other closed-ended task that demands only one correct reply, found in standardized tests in all types of formal education contexts. Guilford's model (1959), undoubtedly with its limitations, provides three convergent thinking tasks and these are word changes, word grouping and sequential association. A different type

of test designed to measure creative convergent thinking is the Remote Associates Test (RAT) by Mednick (1962) whereby three seemingly irrelevant words have to be associated to a fourth one.

Tasks similar to the RAT that require associative processes, or the Creative Reasoning Task (CRT, Jaarsveld et al., 2012), we maintain, minimize that gap between convergent and divergent thinking and cover the middle ground between them because they combine the closed-endedness of more standard convergent tasks but also the feature of self-generated answers. To recapitulate regarding the divergent, convergent and the intertwining processes or skills in discourse, it should be noted that linguistic experimentation alone does not suffice for creativity; therefore, judgment and appropriateness are necessary.

This combination of processes is somehow demonstrated in Wallas' stages of the creative writing process, who stresses the way in which the concept is born and becomes a written text: a) the preparation stage: the conscious activity to solve the problem; b) the incubation stage: the brain works unconsciously and rejects the unnecessary ideas; c) the illumination stage: the promising idea enters the consciousness for further processing, and d) the verification stage: the conscious evaluation and development of the idea – at this stage, data retrieval from other stages can also be made (Wallas in Amabile, 1996).

Towards the end of our analysis, we cannot avoid mentioning the link between creativity and two cognitive constructs, verbal intelligence and working memory. The relationship of creativity and intelligence has been widely researched. Results vary from the earlier correlations where creativity was seen as component of intelligence (see Cattell, 1971; Guillford, 1967) to theories where intelligence was identified as one of the characteristics that contribute to creativity (Sternberg & Lubart, 1996). Very often it has been argued that there is threshold in intelligence only above which creativity may occur (Ginsburg & Whittemore, 1968; Jauk et al., 2013).

Generally, studies show some correlation between intelligence and creativity (e.g Silvia, 2008) but the extent and the way they are related still continues to puzzle the scientific community. Working memory, one of the executive cognitive functions responsible for the processing of new information, is mainly indirectly related to creativity as it is strongly found to relate to intelligence (Conway et al., 2002; Unsworth & Engle, 2005).

In conclusion, the creative process involves in all of its stages a cognitive interplay of convergent and divergent thinking, a form of co-operative data processing (Martindale, 1999; Wallas, 1926). This processing of multiple information emphasizes the recombination of existing components into new products (novelty/originality), which is recognizable to the creative subject by activating or maintaining cognitive networks consisting of relevant concepts (effectiveness/suitability). This is the reason why, according to Mednick (1962), creative individuals have hierarchies that

allow them to make multiple associations among remote ideas, avoid interference of common choices, synthesize and create alternatives, by activating elements of linguistic (lexical) creativity, if we focus on creative discourse.

SOLUTIONS, RECOMMENDATIONS, AND FUTURE RESEARCH DIRECTIONS

The study of creativity constitutes a meeting space involving diverse fields of science and, thus, different methodological perspectives, principles and instruments. Literary theories, cultural theories, neurobiology, evolutionary psychology, applied linguistics and education are intertwined in the public interest of research. The investigation of creativity in discourse, and other distinct fields of human activity, as well as the identification of the specific stages of the creative process, contribute to an overall exploration of this human trait. Hence, a solution for advancing our knowledge on this complex phenomenon is interdisciplinary study through the collaboration of scientists from different disciplines in order to guide research towards results that cover the entire spectrum of the concept and, therefore, multiply confirm or refute claims and provide safer conclusions.

It is also necessary to further define and elaborate creativity with regard to the field of discourse, so that a comparative methodical study between literary and creative discourse is conducted and the differences, if any, are analyzed. It would be fruitful to explore the extent and the evidence that indicate the converging point between literary writing and creative discourse/writing.

Is literature differentiated only on the grounds that it is recognized as the escalation of creative expression, whereas creative discourse/writing focuses more on educational processes that cultivate creativity? Are there qualitative differences and which are they? Do they share common triggering mechanisms or not? Studies on creative discourse need to focus on the possible convergence between aesthetic discourse and language creativity, analyzing what techniques, characteristics and under what conditions creative subjects make use of creative processes.

From a different perspective but definitely utilizing results from the aforementioned potential research, it would be productive to specify the conditions that help the development of discourse creativity in educational settings, both in adults and minors. This knowledge would sensitize and familiarize instructors with the latest research and inform their educational practices in a way that they would become able to identify and cultivate discourse creativity (cf. Muletta et al., 2016).

If modern societies believe that creativity is a key factor in the development of science, art, entrepreneurship, among other fields of human activity, and at the same time, it is an indicator of a revision and transformation of stereotypical structures and perceptions in order to shape citizens capable of managing problems and finding alternatives, then educational systems need to enhance and cultivate creativity.

CONCLUSION

We should make clear once again that creativity is an inherent characteristic of human nature, but it can be enhanced and facilitated or diminished and hindered within the environment, as it involves not only genetic predisposition but also systematic and conscious investment. Accordingly, creative discourse is a major primordial form of human creativity as illustrated by the cultural history of societies, and it involves the generative and lexical capacity of the linguistic code, a dynamic function of language itself to produce indefinite instances as well as expressing concepts of cognitive, psychological and social structure. It can be cultivated, systematized and developed into ability through conscious practice, effort and appropriate techniques. Creative expression is not only an end-product but primarily a complex mental process involving a large part of human cognitive skills.

Creative discourse can be distinguished between literary creative discourse and everyday creative discourse. Literary discourse is defined by literariness, the aesthetic/poetic language or the philosophical language of scholars that fulfills a higher purpose while everyday discourse involves figurative uses of language (e.g., metaphor, analogy, wordplay, irony).

However, as features of the two branches of creative discourse overlap, the study of their qualitative differences and similarities, continuities and discontinuities functions as a common ground for different disciplines to interact and collaborate in their quest for convincing answers about the nature and the processes behind creative expression. The field of creative writing broadens the concept of creative discourse towards both ends, since it encompasses, but is not limited to literary genres, but also studies the ways and techniques of enhancing creativity within a formal or informal educational context.

Creative discourse is largely determined by the creativity of language itself. Linguists have demonstrated that language code has a creative character of its own, allowing for the association of concepts and words in a way that renews language. Therefore, the creative subject confabulates not only with social structure and cultural history that greatly shapes his/her identity but also with the structure and entries of the linguistic system. Research has shown that creative people, especially professional users/writers, tend to use specific language features.

This, nevertheless, does not mean that creativity in discourse is only found in literary discourse, since the first concept involves inherent capabilities of the code along with individual ability, and the second is a union of human spirituality and personal re-configuration of elements of experience, memory, as well as aspects of linguistic creativity.

As the standard definition of creativity demands two criteria to be met, originality and effectiveness, these apply to creative discourse, as well. A rhyme, a joke, a metaphor or analogy should be innovative to have some value but it should also be effective in terms of appropriateness of the specific situation, understandable by the interlocutors and efficient in its goal, whatever that goal may be: from an attempt to break the ice in a given social situation to an effort to elaborate on a demanding issue in a discussion. Lastly, in order for a creative remark, a series of remarks or even a dialogue, both convergent and divergent thinking come into play, as well as associative thinking, imagination, intelligence, working memory and other cognitive processes.

Reflections on the issues raised in the chapter that may have caused a sense of incompatibility among the aspects that constitute and define creativity and creative discourse in particular, should have been clarified and resolved by now. Creativity seems an elusive notion, constructed upon binaries of contradictory elements: convergent and divergent thinking skills, management of knowledge and challenge of knowledge, trained capability and inherent capability/intelligence. Nonetheless, the synthesis of these elements is what brings forward manifestations of creativity.

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KEY TERMS AND DEFINITIONS

Convergent Thinking: The cognitive processes related to critical and analytical thought that help the individual to classify, analyze and synthesize information in order to come up with one single answer/solution to a question/problem.

Creative Subject: The person who creates/acts creatively.

Creative Writing: Any writing used for personal expression, using ideas, emotions, imagination, and narrative techniques; also, the educational process aimed at cultivating and systematizing the creative discourse of trainees.

Creativity of Language/Linguistic Creativity: The inherent capacity of the language code that allows for the unlimited production of new meaningful sequences of language.

Critical Thinking: The complex mental process in which the individual distances him/herself from the experience and the social projections of consciousness, trying to reflect on their rational basis, but also their impact on his/her social and personal life.

Defamiliarization: The deviant, unconventional, and poetic use of language, found primarily in literary texts but also in any discourse considered creative.

Divergent Thinking: The cognitive processes that are related to the reconstruction and re-formation of information. The individual works experimentally and imaginatively to find multiple alternative answers/solutions to a question/problem.

Generative Creativity (or Productivity): The inherent property of language that allows humans to combine known words in new sentences; the ability of humans to understand every new sentence in a given language although they may have not heard it again before (emphasis on syntax).

Lexical Creativity: The inherent property of language that allows humans to create new meanings and concepts through figurative language (metaphor, simile, personification, hyperbole, onomatopoeia, idioms), irony, wordplay, humor (emphasis on lexis).

Literariness: The set of literary features that signify and organize literary discourse that produces the aesthetic function of the literary code.

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Chapter 4
English or Englishes?
A Question of Multilingual Reality

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ABSTRACT

The discipline of World Englishes has been one of the most thriving branches of English linguistics. This branch has become the focal focus of considerable debate. The chapter mainly aims to show the multilingual reality of English. It is an attempt to answer the question "Do we have English or Englishes?" The chapter tries to study the recent situation of English as a lingua franca. It first gives an overview of the spread of English and the emergence of new Englishes. Then, it presents the principals of traditional applied linguistics and second language acquisition. It also discusses the concepts of World Englishes, multilingualism, and pluralism. After that, the chapter presents the World Englishes debate to show the gap between monocentrists and pluralists. Finally, the study sheds light on the fact that Englishes reflect the multilingual reality of English.

INTRODUCTION

English has now become the "global language" (Crystal, 2003, p.1). Its spread has evolved into the emergence of world "Englishes" which raises a controversial debate between those who support traditional applied linguistics and those who argue for plural Englishes and multilingualism. Kachru (1990) discusses this point, as follows:

the limitations of traditional applied linguistics perspectives on world Englishes, suggesting that these had been skewed by the ethnocentrisms of inner-circle practitioners, reliance on interlanguage and error analysis frameworks, and misconceptions concerning the sociolinguistic realities of multilingual outer-circle societies. (as cited in Bolton, 2004, p. 389)

This debate shows that multilingual English has questioned monolingual bias. Multilingualism is for the idea of multilingual competence. Aronin and Singleton (2012) state that:

The whole history of multilingualism studies indicates that multilingualism cannot be understood simply by breaking phenomena down into their component parts and cannot be reduced to clear-cut rules, forms, and explanations. Rather, multilingualism has been shown to be a dynamic and self-organizing system, displaying emergent qualities. (p. 183)

This chapter is an attempt to explore the spread of English as an international language and the emergence of its new varieties. It is also an attempt to show the multilingual reality of English. It starts with an overview of applied linguistics and second language acquisition. It then tries to define world Englishes, multilingualism and plurilingualism. Finally, the chapter tries to discuss the plural reality of English.

THE SPREAD OF ENGLISH

Widdowson (1997) declared that "English has spread to become an international language" (p. 135). Platt, Weber and Lian (1984) express this idea, "the spread of English to so many parts of the world and the increase in the number of those learning it and using it has been the most striking example of 'language expansion' this century if not in all recorded history. It has far exceeded that other famous case, the spread of Latin during the Roman Empire" (p. 1).

Kachru (1996) states that the spread of English is attributed to a number of phases. The first phase involves the spread of English in Britain, including Scotland, Wales and Ireland. The second phase includes the expansion of English in North America and New Zealand. According to Kachru, the third phase has an immense impact on the sociolinguistic profile of English. During this phase, English became an integral language in South Asia and South West and East of Africa. Due to this spread, English is regarded as a pluricentric language. Kachru (1996) states that pluricentricity "is not merely demographic, it entails cultural, linguistic, and literary reincarnations of the English language" (pp. 136-137). In other words, the spread of

English could "be viewed in terms of three concentric circles representing the types of spread, the patterns of acquisition and the functional domains in which English is used across cultures and languages" (Kachru, 1985, p. 12).

In a similar research vein, Bhatt (2001) advocates that the spread of English is the result of "the economic conditions that created the commercial supremacy of the United Kingdom and the United States" (p. 533). The researcher argues that the "econocultural model" (p. 533) facilitates the spread of English. In this context, Brutt-Griffler (1998) sees that the econocultural model is "the center of gravity around which the varieties of World Englishes revolve" (p. 386). Thus, English becomes a global language. It is a means of communication.

Brutt-Griffler (2002, p. 110) lists four basic features of the development of global language: (1) Econocultural functions of the language; [i.e., World English is the product of the development of a world market and global developments in the fields of science, technology, culture and the media]; (2) The transcendence of the role of an elite lingua franca; [i.e., World English is learned by people at various levels of society, not just by the socio-economic elite]; (3) The stabilization of bilingualism through the coexistence of world language with other languages in bilingual/multilingual contexts; [i.e., World English tends to establish itself alongside local languages rather than replacing them, and so contributes to multilingualism rather than jeopardize it]; (4) Language change via the processes of world language convergence and world language divergence [i.e., World English spreads due to the fact that many people learn it rather than by speakers of English migrating to other areas; thus two processes happen concurrently: new varieties are created and unity in the world language is maintained].

Graddol (1997) also lists two historical forces that contribute to the spread of English:

First was the colonial expansion of Britain which resulted in settlements of English speakers in many parts of the world. This has provided a diasporic base for the language – which is probably a key factor in the adoption of a language as a lingua franca. In the 20th century, the role of the US has been more important than that of Britain and has helped ensure that the language is not only at the forefront of scientific and technical knowledge, but also leads consumer culture. (p. 14)

From the quotation, we can see that Graddol (1997) discusses the factors behind the spread of English. He points to two historical forces, namely the colonial expansion of Britain and the important role of the United States in the 20th century. This spread paves the way for the emergence of new varieties.

THE EMERGENCE OF ENGLISHES

World Englishes is originated into two basic literary schools, namely postcolonialism and postmodernism. Post colonialism emerges from the British colonization in the 19th century. During that period, Britain was considered as "the largest colonizer and imperial power" (p. 32). The main goal of this school is "to destabilize the stabilized institutions and in SLA, in particular, decolonizing the colonized TLT is its major concern". Postmodernism is a philosophy that believes in the universal truth, in a world with no center and this is the meaning of world Englishes. It means that there is no standard native English.

Davis (2004) defines World Englishes as a term used to "legitimate the Englishes spoken in the British non-white colonies". He further comments that the ideology behind world Englishes rejects the ownership of English (p. 442). Kachru and Smith (1985) provide the following definition:

"Englishes" symbolizes the functional and formal variation in the language, and its international acculturation, for example, in West Africa, in Southern Africa, in East Africa, in South Asia, in Southeast Asia, in the West Indies, in the Philippines, and in the traditional English-using countries: the USA, the UK, Australia, Canada, and New Zealand. The language now belongs to those who use it as their first language, and to those who use it as an additional language, whether in its standard form or in its localized forms. (p.210)

The emergence of new varieties of English is regarded as a gradual process. Schneider (2003) suggests a model that has five phases which shows the identity and linguistic changes that occur in this process:

1. **Foundation:** The colonizers bring English to a new territory and the use of English between the settlers and the locals is very limited, mainly restricted to trading.
2. **Exonormative Stabilization:** The increased contact between settlers and locals leads to an expansion of the use of English. English starts to be marked by local features, although an exonormative attitude still applies.
3. **Nativization:** The range of uses of English increases and nativization, i.e. changes in formal features at all linguistic levels, equates with the expression of a new identity.

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4. **Endonormative Stabilization:** This phase usually follows political independence of the territory and corresponds to the almost unanimous acceptance of local norms. The variety becomes codified and is used to express local identity.
5. **Differentiation:** This last phase corresponds to internal diversification of the variety, that is, to the emergence of dialects and local variants.

In the literature, many researchers have investigated the different varieties of English. In this context, Tunde-Awe (2014) studied the linguistic features of WEs, with a focus on Nigerian English. In the light of the findings, there are some phonological features that occur in Nigeria English. These include avoidance of dental fricatives, reduction of final consonant clusters and the use of syllable-based rhythm. The absence of dental fricatives is manifested in using /t/ in place of /θ/. Nigerian students often use syllable-timed instead of stress-timed rhythm. They also pronounce some silent consonants, in words such as *h*our, *h*onour, clim*b*, and so forth.

Safotso (2012) also conducted a study on the aspect of Cameroon francophone English phonology. The aim of the study is to show that French-speaking Cameroonians have a variety. The participants of the study were 50 students. The overall focus is on the third person singular markers, past participle morpheme 'ed', consonant clusters, word stress and the frenchified reading of some English words. Similarly, Belibi (2013) provides the phonological features of Camroon English. Based on the findings, Camroonians tend to replace voiced sounds by voiceless sounds. They also tend to shorten vowels and to turn diphthongs into monophthongs.

Moreover, Mbufong (2013) studied the effect of the spread of English on Cameroon, as a non-native environment. According to Mbufong (2013), thanks to this spread, 'English has had to take on local colorings'. At the phonological level, the researcher showed that home language influences Cameroon English. For instance, in Lamso, words with the diphthong /əʊ/ are pronounced as /ʊ/, the long /i: / is realized as /e/.

In Mokpe and Mungaka, the voiced alveolar consonant /r/ is realized as /l/. In Bafut, the voiceless bilabial plosive /p/ is pronounced as /b/. Based on the findings, the characteristics of Cameroon English are no longer seen as an error or a deviation but rather distinctive contributions to the English language.

The development of these varieties opens the door for a discussion about the status of English and then leads to a debate between two poles.

APPLIED LINGUISTICS, SECOND LANGUAGE ACQUISITION, AND WORLD ENGLISHES STUDIES

Applied linguistics is defined by the *International Encyclopedia of Linguistics* as follows: "Whenever knowledge about language is used to solve a basic language related problem, one may say that Applied Linguistics (AL) is being practiced. AL is a technology which makes abstract ideas and research findings accessible and relevant to the real world; it mediates between theory and practice" (Kaplan and Widdowson, 1992, p.76). This clearly shows that the role of applied linguistics is to investigate and find solutions to language-related real life problems. Applied linguistics is a kaleidoscope of disciplines. One of its focal concerns has been Second Language Acquisition (henceforth SLA). This theory focuses on studying learners' acquisition of second language and the problems that can hinder the process of acquisition.

In the field of SLA, there are three main theories that study learners' errors, namely Contrastive Analysis (henceforth CA), Error Analysis (henceforth EA) and Interlanguage (henceforth IL) analysis. CA theory developed in the 1950's and 1960's. It claimed that the difference between L1 and L2 is the only factor behind learners' errors. Therefore, 'transfer' is seen as the central notion of this theory. It is defined by psychologists as "the influence of old habits when new ones are being learned" (Dulay, Burt, & Krashen, 1982, p. 98). EA was developed in the 1970s. According to this theory, there are interlingual and intralingual sources of errors. In 1990, Larry Selinker proposed the theory of IL. Errors then became the result of many factors, other than Native Language (henceforth NL) and L1 interference.

According to Selinker (1972), IL refers to the language produced by the L2 learners, "both as a system which can be described at any one point in time as resulting from systematic rules, and as a series of interlocking systems that characterize learner progression" (Mitchell and Myles, 1998, p.31). Selinker also (1972) argues, "the sets of utterances from learners of a second language is not identical to the hypothesized corresponding sets of utterances which would have been produced by a native speaker of a target language had he attempted to express the same meaning as the learner" (p. 214). It is a central notion in the field of second language acquisition.

Stern (1983) states:

The concept of Interlanguage was suggested by Selinker in order to draw attention to the possibility that the learner's language can be regarded as a distinct language variety or system with its own particular characteristics and rules. (Cited in Tanaka, 2000, p.1)

From these theories, it seems clear that second or foreign language students generally fail to master native-like competence because they confront many

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problems that hinder their learning. A considerable amount of studies investigated these problems. Ahour and Muhundan (2012), for instance, carried out a study on grammatical errors made by Malay, Chinese and Indian students from the faculty of Educational Studies at the Universiti Putro Malayn. The findings showed different types of grammatical errors; they were basically related to noun phrases and verb phrases. Based on the findings, errors are principally resulted from first language interference and the different cultural backgrounds of the participants.

Similarly, Tanaka (2000) conducted a study on grammatical fossilization on eight Japanese learners. The study tried to show the fossilized grammatical errors of those eight Japanese learners. The results showed that three learners are responsible for most of the errors. However, the other learners made a number of grammatical errors namely, articles (9.89%), prepositions (10.98%), pronouns (4.39%), omission of verbs (10.98%), verb tense errors (14.28%), inappropriate verb choice (5.49%), auxiliary verbs (3.29%) and modal verbs (1.09%). The researcher claims that their IL appears to be fossilized. Fossilization is due to L1 transfer and overgeneralization. According to the researcher, the consciousness-raising approach can be used to reduce fossilization.

Catalan (1996), furthermore, studied the English prepositions in the compositions of Spanish students. The study was conducted in three different secondary schools. Qualitative analysis of the obtained data revealed that students' errors were classified into substitution, addition and omission. For substitution, they produced "in the bench" instead of "on the bench," "it depends for" in the place of "it depends on." For addition, they added "for" in unnecessary purpose clauses. Concerning omission, they omit "to" in sentences that contain an intransitive verb. The findings also showed that English prepositions present a difficulty for third year Spanish secondary school students. According to the findings, there is variability in the use of Preposition.

Another trend of researchers investigated learners' errors longitudinally. Rahal (2014), for example, studied the fossilized pronunciation of the schwa sound. The participants of the study were five Tunisian English students from the department of English of Gafsa, Tunisia. Based on the results, the subjects fossilized the /e/, /ɔ: / and /a: / sounds in place of the schwa sound. The findings also indicated that fossilization is attributed to a number of factors, including L1 interference, inconsistency of English vowels and lack of knowledge in the production of English phonetics.

In the same vein, Smaoui and Rahal (2015) conducted a research on the fossilized pronunciation of the /3:/ sound in the speech of intermediate Tunisian English students. The sample consisted of 10 students from the department of English of Kairouan, Tunisia. The findings demonstrated that most of the participants fossilized the /ɔ: / sound in place of the /3:/ sound. According to the results, fossilization is due to the effect of French sounds, limited exposure to L2 environment and lack of practice.

Moreover, Rahal (2016) investigated the fossilized pronunciation of Advanced Tunisian English students. The subjects of the research were 20 students from the English department of Kairouan. To reach the findings of the study, the researcher conducted an eighteen-month longitudinal study to show the existence of fossilization. The longitudinal study revealed that there are errors that disappeared and there are others that repeated in times 2 and 3.

The results showed that phonetic fossilization is the result of a number of factors, including mother tongue interference, effect of French sounds, inconsistency of English vowels, lack exposure to L2 environment, insufficient corrective feedback and insufficient knowledge of the production of English sounds. The study suggested a number of ways to reduce fossilization. These include the use of dictionaries to check the phonetic transcription, the adoption of new teaching methods, the integration of technology in teaching pronunciation and sufficient corrective feedback.

Furthermore, Nilawati (2008) conducted a study on fossilized phonetic errors. The participants were eight students from the English Department of the Faculty of Letter ANDALAS University. Based on the results, there are four types of fossilized phonetic errors; namely, consonant omission, error of consonant selection, error of vowel selection and diphthong selection. These errors are the result of three main causes, namely phonological interference with the mother tongue, the complexity of English and insufficient input and corrective feedback.

These studies showed some of the problems that learners of English can face. The question, which is worth being raised here, is as follows: Should we consider as these problems interlanguage or new varieties?

WORLD ENGLISHES DEBATE

"The stimulus given to the question of English used as an international or auxiliary language has led to the emergence of sharp and important issues that are in urgent need of investigation and action" (Smith, 1981). This quotation clearly shows that the spread of English as an international language raises a controversial debate about the status of English in its varieties. Monocentrists believe in the ethnocentrism of English which relies on error analysis, interlanguage (henceforth IL) theory and fossilization. They are for the "disclaimer of homogeneity" and "uniform competence" (Quirk, 1988, p. 235).

The concept of IL was introduced by Larry Selinker in 1972. It refers to a learner language. "The learner language is viewed as an independent social and psychological phenomenon…It is not a defective version of something else: a chrysalis is simply a chrysalis, not a deformed or defective butterfly" (Phillipson, et al., 1991, p. 61). According to IL theory, second language learners' competence is depended on a

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continuum between the first language and the second language. If learners produce an output which is different from Standard English, it is considered as an error and if they repeat producing the same error. This is known as fossilization. Selinker (1972) states that:

Not only can entire IL competences be fossilized in individual learners performing in their own interlingual situation, but also in whole groups of individuals, resulting in the emergence of a new dialect (here Indian English), where fossilized IL competences may be the normal situation. (p. 38)

Prator (1968) argues that non-native varieties of English cannot and should not be accepted as local standards. Similarly, Quirk (1989) states that the recognition of variation within a non-native variety is confusing. Quirk (1989) also argues that "the interest of varieties of English has got out of hand and has started blinding both teachers and taught to the central linguistic structure from which varieties might be seen varying" (p.15). Based on Quirk's quotation, it seems that the different varieties of English create a number of problems, namely pedagogic problems and intelligibility problems.

Quirk (1990) declares that "Of the latter, there are two: American English and British English; and there are one or two others with standards rather informally established, notably Australian English" (p. 6). Quirk then argues that making the difference between a "native" variety and a "non-native" variety is important, "the one that seems to be of the greatest importance educationally and linguistically" (p. 6). He also rejects the institutionalization of non-native varieties, arguing that "I exclude the possibility only because I am not aware of there being any institutionalized non-native varieties." He concludes that "the mass of ordinary native-English speakers have never lost their respect for Standard English, and it needs to be understood abroad too … that Standard English is alive and well, its existence and its value alike clearly recognized" (p. 10).

However, pluralists see that native language varieties become sociolinguistically unrealistic. They criticized applied linguists for not considering the multilingual context. Kachru (1985, and 1991), for instance, argues that the label 'error' may not be applied to the local Englishes. In other words, we cannot apply 'errors', 'interference' and 'fossilization' to the context of World Englishes. Moreover, Kachru (1993) argues against the concepts of "interlanguage" and "fossilization". He asks:

The question of why a stable system should be characterized as an 'interlanguage' is not answered. It is also not clear what the difference is between 'stable' and 'fossilized': that which is fossilized is surely unchanging and therefore stable. Additionally, if 'an entirely fossilized interlanguage competence' refers to a community … it is difficult

to see why it is an 'interlanguage' and why it is 'fossilized'. Presumably American English developed as an interlanguage among a large portion of the immigrant population from the non-English-speaking parts of Europe. Does this mean that American English represents an 'entirely fossilized interlanguage'? (p. 266)

The World Englishes literature rejects IL which refers to "a speaker's attempt to produce a foreign norm, i.e. both his errors and non-errors" (Selinker, 1969, p. 71). Davies (1989) and Mufwene (2001) support the idea that the term IL cannot be used to describe new varieties of English because it is, according to them, an individual phenomenon, whereas world Englishes are societal. Similarly, Sridhar (2012) criticizes SLA because it is "suffering in its very core… from the ailments that result from taking nativeness and monolingualism as natural organizing principles". Kachru (1985) suggested three circles to divide English-using world. They "represent three distinct types of speech fellowship of English, phases of the spread of the language, and particular characteristics of the uses of the language and of its acquisition and linguistic innovations" (Kachru, 1986, p. 122).

The first circle is the inner circle. It represents countries where English is the native language such as North America, the United Kingdom, and the former colonies of Britain – New Zealand and Australia. The second circle is the outer circle. It includes former colonies and countries that "have gone through extended periods of colonization, essentially by the users of the inner circle varieties" (Kachru, 1985, p. 12). The third one is the expanding circle where English becomes an integral subject in the educational system. Kachru's argument is concerned with the outer circle varieties that try to develop their norms and to become standards.

Kachru (1985) suggested challenging notions of standardization that are related to the Inner-Circle users.

the global diffusion of English has taken an interesting turn: the native speakers of this language seem to have lost the exclusive prerogative to control its standardization; in fact, if current statistics are any indication, they have become a minority. This sociolinguistics fact must be accepted and its implication recognized. What we need now are new paradigms and perspectives for linguistics and pedagogical research and for understanding the linguistic creativity in multilingual situations across cultures. (p. 30)

Widdowson (1994) agreed with Kachru's argument against the ownership of Standard English, claiming that English is the language of everyone:

How English develops in the world is no business whatsoever of native speakers in England, the United States, or anywhere else. They have no say in the matter,

no right to intervene or pass judgment. They are irrelevant. The very fact that English is an international language means that no nation can have custody over it. To grant such custody of the language is necessarily to arrest its development and so undermine its international status. It is a matter of considerable pride and satisfaction for native speakers of English that their language is an international means of communication. But the point is that it is only international to the extent that it is not their language. It is not a possession which they lease out to others, while retaining the freehold. Other people actually own it. (p. 385)

It is concluded that what has been problematised in applied linguistics is "the traditional monolingual conception of bilinguals as being two monolinguals rather than different people from monolinguals in L1" (Cook, 2013, pp. 37-38). Sridhar and Sridhar (1986) also point out, "what is needed is a reevaluation of the applicability of SLA theories to the particular circumstances in which [World Englishes] are acquired" (p.4).

DEFINITIONS

Multilingualism

According to the Council of Europe (2001), multilingualism refers to "the knowledge of a number of languages or the co-existence of different languages in a given society" (p. 4). This means that it refers to the existence of several languages in a given geographical area (Council of Europe, 2007). Multilingualism includes speaking more than one language. Trugil (1985) emphasizes the fact that multilingual refers to the existence of so many indigenous languages in a particular nation or frontier (as cited in Eze, 2010).

Appel and Muyeken (1987) make the distinction between two types of multilingualisms, namely individual multilingualism and societal multilingualism. The former is the result of contact between two or more languages. The latter refers to the ability of using and understanding two languages.

Plurilingualism

Plurilingualism is defined as "the fact that as an individual person's experience of language in its cultural context expands, from the language of the home to that of society at large and then to the languages of other peoples [...], he or she does not keep these languages and cultures in strictly separated mental compartments, but rather builds up a communicative competence to which all knowledge and experience

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of language contributes and in which languages interrelate and interact (Council of Europe, 2001, p. 4).

Based on the quotation, plurilingualism highlights the interaction between languages and the significance of accepting various levels of language acquisition. From the sociolinguistic perspective, plurilingualism is regarded as " the ability to use languages for the purposes of communication and to take part in intercultural interaction, where a person, viewed as a social actor has proficiency, of varying degrees, in several languages and experience of several cultures. This is not seen as the superposition or juxtaposition of distinct competences, but rather as the existence of a complex or even composite competence on which the social actor may draw" (Coste, Moore, and Zarate, 2009, p. v). This highlights the importance of plurilingual competence in facilitating communication and interaction between speakers of different languages and backgrounds.

MULTILINGUAL REALITY OF ENGLISH

Based on the debate between monocentrists and pluralists, we can advocate that multilingualism represents a functional reality in today's world. The debate shows the multilingual reality of English; "there is not one English language anymore, but there are many English languages…each of these Englishes is creating its own very special literature, which, because it doesn't feel oppressed by the immensely influential literary tradition in England, is somehow freer" (Iyer, 1993, p. 53).

The emergence of Englishes or the different varieties of English "English, when first recorded in the eighth century, was already a fissiparous language. It will continue to divide and subdivide, and to exhibit a thousand different faces in the centuries ahead ... The multifarious forms of English spoken within the British Isles and by native speakers abroad will continue to reshape and restyle themselves in the future. And they will become more and more at variance with the emerging Englishes of Europe and of the rest of the world" (Burchfield, 1985, pp. 160-173) is the beginning of its multilingual reality. The multifarious forms of English call the monolingual assumption into serious question. They oppose the claim that we have one English rather than different 'Englishes' because today's English "express (es) and embody (ies) the cultural conceptualizations of their speakers" (Sharifian, 2009, p. 454).

Multilingualism is, therefore, endorsed by the increasing spread of English. In fact, English is a multilingual language, "as a language always in translation, as a language always under negotiation" (Pennycook, 2010, p.435). "English . . . is no longer the monopoly of the British. We the excolonised have subjugated the

language, beaten it on its head and made it ours" (Sidhwa, 1996, p. 231) and "we have to stretch the language to adapt it to alien thoughts and values which have no precedent of expression in English, subject the language to a pressure that distorts, or, if you like, enlarges its scope and changes its shape" (Sidhwa, 1996, p. 240).

Canagarajah (2009) uses the concept 'plurilingualism' to show the multilingual situation of English. He talks about 'plurilingual English'. He argues that speakers of plurilingual English use an English that is "mixed with their own first languages and marked by influence of these languages" (p. 6). Canagarajah (2001) further argues, "plurilingual English is not an identifiable code or a systematized variety of English. It is a highly fluid and variable form of language practice". Makoni and Pennycook (2012) use the notion of multilingualism as a lingua franca' to refer to Englishes rather than English. According to them, "in lingua franca multilingualism languages are so deeply intertwined and fused into each other that the level of fluidity renders it difficult to determine any boundaries that may indicate that there are different languages involved" (p. 447). In a similar vein, Gorter (2006) comments that:

In a thorough sense of the word, our world at the beginning of the 21st century is a multilingual one. The idea of monolingualism by country – one state, one language – has become obsolete and has been overtaken by a complicated interplay of many languages. Truly monolingual countries were always an exception, but globalisation with its ensuing migration flows, spread of cultural products, and high speed communication has led to more multilingualism instead of less. [...] The process of 'glocalisation' in the international arena leads to new expressions of cultural mix in music, food and clothing, but also in languages. Innumerable language contact situations cause a high incidence of multiple forms of bilingualism. (p. 88)

Based on this quotation, Gorter (2006) rejects the monocentric idea of English. He questions the monolingual bias. There is an imminent need "to rethink current classifications of English in an attempt to see the interconnectedness of all English use" (Pennycook, 2010, p.685) and see how "languages co-exist in local and national linguistic ecosystems" (McLellan, 2010, p. 435).

The plural form of English shows the multifarious aspect of this language. Kachru (1985) argues that English comprises "a unique cultural pluralism, and a linguistic heterogeneity and diversity" (p. 14). English "is acquiring various international identities and thus acquiring multiple ownership (Foley, 1988, p. xii). Kachru (1984) further explains that his use of "Englishes" introduces a vital concept of pluralism, of linguistic heterogeneity, of cultural diversity, and of dramatically different theoretical and methodological foundations for teaching and research in English (p. 26).

In his article "From English Native-Speakerism to Multilingualism: A Conceptual Note," Ishikana (2018) argues that global English is multilingualism. The researcher agrees with Baker's (2011) argument that English is characterized by its diversity; it includes a number of varieties; it is also the language of everyone. It is not "native to one and foreign to others" (Baker, 2011, p.210). A similar view has been expressed by Jenkins (2017) who believes that with the spread of English, its situation has changed. It becomes the language of non-natives. Thus, English is multilingual by definition.

This discussion demonstrates the sociolinguistic reality of English. This language is colored by various identities and cultures. It is a mix of both native and non-native speakers. The plural 'Englishes' is an umbrella term that includes 'multicompetence'.

FUTURE RESEARCH DIRECTIONS

Many questions remain unanswered. The pluralism of English raises crucial questions surrounding world Englishes pedagogy, namely which language varieties of English should be taught? Are the current teaching methods and materials appropriate to teach English as a Lingua Franca? Researchers (Jenkins, 2006 and Dewey, 2012) claim that there is a definite need for developing principles and methods appropriate for teaching varieties of English or English as an international Language. Mackay (2002) argues that "the teaching and learning of an international language must be based on an entirely different set of assumptions than the teaching and learning of any other second or foreign language" (p. 1).

It is recommended that researchers should develop pedagogical ways to integrate the different varieties of English in the classroom because "it is not enough to simply say that ELF has implications for pedagogy" (Dewey, 2012, p. 143). Other issues are in need of more complete answers, such as the multilingual nature of English. Future studies should identify the ways to bridge the gap between theory and practice. Moreover, there is a pressing need that future endeavor should focus more on ways of assessing multilingual classroom.

CONCLUSION

In light of the above discussion, the chapter has reviewed the literature relevant to this question "do we have English or Englishes?" It has raised an issue relating to the recent sociolinguistic situation of English. The chapter also sheds light on the multilingual reality of this language. It stresses the pluricentric nature of English.

Based on the study results, teachers should consider all varieties of English. We cannot avoid the new forms of English. "Languages are quasi-organic entities. They evolve, change and die like other more biological organisms" (Laver &Roukens, 1996, p. 7). Similarly, Hung (2009) agrees that variation "is both natural and inevitable for varieties of the same language to develop differently over time in different localities and communities" (Hung, 2009). Therefore, teaching the different new varieties of English is a way to prepare learners for global communication.

The discussion of World Englishes has raised questions about awareness and intelligibility. It is recommended that future studies should pay special attention to the ways that can develop teachers' and learners' awareness. Researchers should also investigate intelligibility issues that can occur.

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KEY TERMS AND DEFINITIONS

Multilingualism: Multilingualism refers to the existence of many languages in one context. According to this study, multilingualism is the outcome of the increased spread of English.

Plurilingualism: Plurilingualism refers to pluricultural competence. It is the ability to use more than one language and switch easily in communication and interaction.

World Englishes: World Englishes refers to forms of English that have been developed by non-native speakers. The plural form Englishes shows the diverse aspect of English today. This term is used to describe the different varieties of English in the multifarious sociolinguistic context.

Chapter 5

Multimodal Narrative Texts, Creativity, and English Teaching as a Foreign Language

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ABSTRACT

The chapter explores a methodological approach where creativity is encouraged through the production of multimodal iPad-mediated narrative texts in the English as a foreign language classroom (EFL) in secondary education. The study, which is based on creativity of human language, evaluates the multimodal productions of a group of students of secondary education (Year 7) in Spain, who work with iPads (1:1 context) within a cooperative learning approach, and analyzes this learning experience from the students' point of view. The results show the impact multimodality has on the own students and on their way of working with the foreign language. The quality of their productions, not only regarding language but also as an act of creation, and the way they appropriate the different semiotic modes multimodality offers will also be examined. Finally, the authors suggest some guidelines to encourage multimodal production and creativity in the EFL secondary classroom and show examples which would help teachers and researchers to develop new didactic proposals at this stage.

INTRODUCTION

Humans use language not only to communicate with each other but also to express themselves and create meaning. 'Teaching the rules of language does not mean the end of creative uses of language' (Kress & van Leeuwen, 1996, p. 3). However, the creative uses of language are frequently forgotten or set aside. In second language instruction, the primary focus of writing tasks is mainly on grammar and text structure. Educators often forget the integration of other semiotic modes, such as images, sound, music, colour, which can be used to complement or add extra value to the written word, while learning and being creative at the same time. The New London Group (1996) identified six different modes of meaning: linguistic, visual, audio, gestural, and spatial. Multimodality describes how these modes interact to create meaning.

The advent of new technologies – mobile devices in particular – changed the educational arena profoundly. These devices opened endless possibilities in education due to their portability; immediacy; data access; communication beyond the classroom walls; in-built facilities, and a wealth of resources. As a result of these developments, there has been an increasing interest in involving and engaging students with multimodality in recent years.

Today, multimodal ways of expression are increasingly being used both in the academic world – digital course books, PowerPoint presentations, educational and professional platforms; MOOC, etc.-, and in our daily lives – video tutorials, audiobooks, podcasts, etc. However it must be considered that new technologies *per se* do not generate meaningful learning experiences (Kukulska-Hulme, Lee, & Norris, 2017; Zhao & Lai, 2007), educators need to integrate them into the curriculum and design learning tasks in such a way that they provide meaningful learning experiences, and the devices' full potential can be properly exploited in the classrooms.

The case study presented in this chapter shows the productions of 28 students from Secondary Education (Year 7) in Spain who created a narrative piece of writing in the ELT classroom using multimodality. The writing task goes beyond the traditional drilling of grammatical structures. The students are invited to design, create, and convey meaning through the multimodal functions the iPad offers. Letting the students use multimodality fosters creative thinking since they have to plan; imagine; design, and generate a final product. At the same time, multimodal iPad-mediated narratives strengthen their knowledge of the target language by combining the four skills of the language – reading, writing, listening, and speaking – in the same task generating meaningful communicative situations (Ellis, 2003; Nunan, 1998b; Oxford, 2001).

The introduction of a multimodal approach in this study addresses two aims. On the one hand, for language development to be well-rounded, the students must integrate the four skills of the foreign language simultaneously, which is the natural way in which humans use language to communicate (Ellis, 2003; Nunan, 1998a; Oxford, 2001). On the other hand, and apart from the linguistic value of the experience described here, multimodality engages the students and motivates them to focus on the task from a different perspective. They are meaning-makers, they are creators of their narratives, and they are involved in their learning process (Kukulska-Hulme, Lee, & Norris, 2017).

As a general hypothesis of work, we assume the iPad engages the students in a series of meaningful and motivating learning processes, in such a way that they get involved in the creation of narrative texts in the English as a Foreign Language (EFL) classroom working in cooperative teams, increasing, thus, the quantity and quality of their learning. Taking the narrative as an integrated text (Kress, 2010), where the different systems of representation are used to interact and convey meaning, we would like:

1. To understand how the students "live" the process of creation and recreation of meaning by studying the value the students grant to the semiotic resources present in their compositions and determine the relationship among them;
2. To analyse the value the students give to this way of learning a second language.

Finally, we will suggest new lines for future research to encourage multimodal production and creativity in the EFL secondary classroom which would help teachers and researchers to develop new didactic proposals at this stage.

BACKGROUND

The present chapter is based on two lines of work: first, the studies on language, creativity and narration in English Language Training (ELT), and second, the high-value m-learning grants to multimodal narratives. Based on our first line of investigation and according to Gimeno (2001) language offers three meaningful experiences from the perspective of education: i) being the instrument of thought, or thought itself, as we think with words; ii) Language, especially that which is established through writing and reading, is a fundamental tool for the creation, transmission and learning of culture; a means to communicate with others and ourselves; iii) Language, primarily written language, is the key to access the thoughts and feelings of others (p. 55).

Language allows us to think, deliberate, discuss, and express ourselves. Language, mainly written language, enables us to perceive reality from other perspectives, and approach other worlds as well as enjoy new experiences. It also implies reflecting on our thoughts; reasoning; meditating and evaluating the way content will be transmitted (Gimeno, 2001, p. 148). Therefore, language can be understood as a narrative (Bruner, 1998), as a way of cognitive functioning, a way of thinking, which endows meaning to experience. From these foundations, language as a narrative is a creative process because it allows us to materialise new communicative alternatives, imagine new realities and think out-of-the-box (Duffy, 1998).

Research on English Language Teaching (ELT) methodology based on narrative tasks reveals that these tasks develop creativity as an elaborate act of producing an idea from different points of view. It entails flexibility, divergent thinking and originality to analyse and express oneself (Carroll, 1993). From a communicative point of view, narrative tasks contribute to deepening in language knowledge and different text structures. Sak (2004); Scalon (2006), and Smith, Paradise, and Smith (2000) state that creativity is present in writing skills. The free communication of ideas (Torrance, 1992) and divergent thinking to create stories can be worked out in the classroom (Harrington, Bloque & Bloque, 1983).

Written or oral narrative stories provide the students with creative experiences and multiple opportunities to practise and produce meaningful outputs, which contribute to the acquisition of a second language (Albert, 2007; Albert & Kormos, 2011; Swain, 1985). Creativity is also dependent upon the interpretation of the writer, who creates meaning, and the understanding of the reader, who redesigns and reinterprets this meaning. In this respect, Hallet (2009) observes five shifts where multimodal literature deviates from traditional literature: (1) the author does not only write but designs. Designing involves the act of considering the different semiotic modes and resources present in multimodality and their combination to convey meaning (IOE, 2012). (2) The second shift deals with the way the text is conceived, from monomodal to multimodal. (3) The writer is also a collector since he/she collects modes and resources to present them to the audience. Finally, shifts (4) and (5) are for the reader, who has to integrate modes and resources and construct/reconstruct meaning as he/she interacts with the text.

In general English instruction, traditional ELT focus on writing is mainly limited to teaching text structure and retelling what the students have read by drilling specific grammar patterns and using particular lexis related to the topic in question. There are courses on creative writing targeted to university students, who are enrolled in English for specific purposes, for example, literature, marketing, and so forth. It is not the purpose of this chapter to analyze and evaluate creative writing. However, taking Duffy's (1998) assumption into account of thinking-out-of-the box and

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following Tin (2016), we understand creative writing as any writing that goes outside the bounds of normal, and it can be taught at any level.

Working with narratives in the EFL classroom should be contemplated as an opportunity to manipulate and play with and language to create new meanings (Crystal, 1998; Gibbons, 2016). It also involves learning since 'creativity drives human desire to develop and learn complex language' (Tin, 2016, p. 433). The current experience aims at orienting narrative practices towards a process with creative and communicative purposes in which teachers highlight narrative itself and the description of the authors' intentions and mental processes, on the first place.

Second is the behaviour of the characters of the stories and the relationships between the details and the global sense of the text. Writing narratives in ELT should also allow for understanding written language as a social activity, which results in the development of creative skills. These creative skills enable the design of different text structures, and the appropriation of innovative means to represent what it is being told using the modes and resources (technology, in our case) that the writer needs to convey meaning. In this manner, the students will not only be aware of a narrative text structure and grammar patterns of the target language, but will also use the multimodal resources the iPad places at their fingertips.

Our second line of work about creating written texts using mobile devices in second language teaching configures the other series of previous studies related to our case. The new London Group (1996) became interested in the creation and communication of written texts using multimedia resources. In the same line of work, Warschauer, Knobel, and Stone, (2004) seek a connection between the school and the digital and multilingual context where the students are integrating media and computer literacy with traditional literacy. Sharples, Taylor, and Vavoula, (2005) claim the importance of M-learning in education and explain the outstanding potential of M-learning devices to design tasks which empower learning in formal contexts from a lifelong learning perspective.

According to Lankshear and Knobel (2003), Livingstone and Bovill, (2001), and Rideout, Roberts, and Foehr, (2005) mobile technology has become a core component of almost every facet of our daily lives. It is obvious the role of mobile technologies to give teaching the value of a meaningful learning experience is connected with the students' real world. In the same line of work, Gliskman (2011) emphasizes the implications generated using mobile devices in the students' learning processes and advocates the situated and connected character of learning with the students' reality and their social context. It constitutes an experience of situated learning (Lave & Wenger, 1991) since it generates meaningful tasks for meaningful learning using non-academic resources. Sharples et al. (2005) state the use of mobile devices for learning enables a shared construction of knowledge using learning tasks included in the community as an integral part of it.

Given this digital landscape, multimodality is being encouraged in education due to the possibilities digital media offers for text construction. Its wealth of resources caters for different learning styles and needs. It is also a motivational element since it engages learners in the use of digital tools to construct texts in multiple semiotic modes. Following Selfe, (2007) digital multimodal forms better prepare learners for their future (longlife learning) matches learner's literacy practices in out-of-class environments – informal instruction – and engages them to participate in language and literacy instruction. Multimodal practices can be highly motivational because they foster learner's autonomy, teamwork, creativity, and interaction with an authentic audience.

However, few studies investigate the pedagogical value of multimodal composition in ELT, and they are mainly focused on English for specific purposes (Nelson, 2006) rather than on the early stages of secondary education. Some educators reject multimodal production in their approaches because of the eternal question of the institutional pressures of syllabi which overwhelm the creative possibilities offered by multimodality (Early, Kendrick, & Poots, 2015).

Therefore, it is essential to explore and analyse didactic proposals which incorporate formative tasks in the ELT classroom working with multimodal technology-mediated compositions, such as this case.

METHOD

Data analysis is carried out in two planes, on the one hand evaluating the students' perceptions and the value they grant to the multimodal task (phenomenological description). On the other hand, the interpretation of the multimodal products is obtained, paying attention to the semiotic relationship between written and audiovisual text in the resulting narratives (hermeneutic description). Three types of data, which define the data collection and the triangulation of information, include:

1. The systematic observation of the sessions, in which the e-books are shared, with the whole group in the classroom. All the students watch the multimodal productions, and the authors explain the process of generating the narrative and the meanings they give to the accompanying audiovisual. These sessions are called '*Meet the Authors'*.
2. Each student's point of view to understand the value he/she gives to this new learning experience. At this point, the key is to understand how the students, as individuals, have built meaning using multimodality.

3. The analysis of the content of the ebooks, where the relationship between the written and the audiovisual text is studied, attending to the linguistic structures used and the kind of audiovisual text which completes them.

Hence, the present study is a small-scale case study which combines observational and narrative strategies, as stated by Cohen, Manion, and Morrison (2009) and Stake (2008), and content analysis. These strategies enable the holistic understanding of the posed problem, not only regarding results but also processes. An open-ended questionnaire for exploratory purposes, two focus-groups with the students, the teacher's research diary, and the students' productions are the data collection and triangulation techniques employed. Understanding the educational value of the iPad in ESL requires the use of procedures and techniques to discover and understand what happens in the classroom considering two perspectives of analysis, the teacher (ETIC) and the students (EMIC).

PEDAGOGICAL CONTEXT AND COURSE DESIGN

The case study described here lasted for two weeks (eight 1-hour sessions) at Colegio LaSalle Maravillas, a private institution in Madrid (Spain), during the academic year 2014/15. It was taken by 28 students, Year 7 (12-13 years old). To understand the pedagogical context, it is important to highlight that all the students in years 7 and 8 started using iPads in a 1:1 format (one student, one iPad) in the academic year 2013/14. Introducing the iPads implied other dramatic changes: the blackboards were substituted by digital screen boards in all the classrooms; traditional paper-based course books were replaced by their digital versions; notebooks were also substituted since the students preferred text-editors, where different semiotic modes – images and pictures, diagrams, voice – other than words could be integrated. This new setting required a new teaching approach. For the purpose of this project, the iPad is an excellent device to using multimodality due to the inbuilt facilities it offers Internet connection, adding/editing images, sound and voice, as well as recording facilities, and a wealth of applications.

The focal project on this study is general English in which students create a multimodal iPad-mediated composition focusing on narrative tenses and conditional sentences. On the one hand, the study adopts a project-based learning approach (PBL) (Beckett, 2006), which requires the students to use diverse skills (researching, writing and collaborating) to produce their iPad-mediated multimodal composition. On the other hand, it also seeks for the integration of the four skills of the language -listening, speaking, reading and writing- to create a product aimed at a real audience

and foster language proficiency among the students (Ellis, 2003; Nunan, 1998a, b; Oxford, 2001).

The content of narrative and conditional sentences in the ESL Spanish curriculum is only studied from its grammatical point of view. It was decided that rather than practicing the narrative tenses and conditional sentences in the traditional manner (i.e., gap-filling and drilling tasks, and based on the literature reviewed), the students wrote free short narrative stories in their cooperative teams using the cooperative learning strategy 'Collaborative Writing' (CoLT 28), as shown in Barkley, Cross, and Major (2007). The project was titled, *'We can be heroes'*.

The role of the teacher was one of organiser and planner of learning experiences, designing the project task, and guiding the students through their writing process. With the idea of making the students participants of their learning process and following Buckingham (2013) '[…] students already have a great knowledge of the media – almost certainly more than they have of other areas of the curriculum […] teachers are no longer the experts' (p.198), the students were asked to bring part of their informal learning –learning taking place outside the school – with the device to the classroom and recommended the teacher some of the Apps they knew to work with music and voice; images; video; etc, as the integration of formal and informal learning promotes creativity and motivation, essential features of situated learning (Lave & Wenger, 1991).

The students used BookCreator to write their compositions because it integrates media facilities such as recording from the iTunes library and from outside; images and video can also be added to the book; text can either be typed, with different letter fonts, sizes and colours, or handwritten, and the resulting books can be exported to other Apps, for example, iBooks. This aspect is particularly interesting because the books created with BookCreator, when exported, are real ebooks, which can be stored in their iBooks library.

This aspect is also highly motivational for the students because they become the authors of their digital content (Kukulska-Hulme, Lee, & Norris, 2017; Zhao & Lai, 2007) and the writers of their own stories. Showbie was used to deliver material and for proofreading purposes. The teacher submitted a template for the teams to organise themselves and to assign individual responsibility within the members of the group (Barkley et al. 2007; Johnson, 1984; Slavin, 1983; Stake, 2008).

The students had four sessions for this stage. After each session the secretary of each team uploaded the team's piece of work to Showbie for teacher revision and proofreading. Once the stories were outlined and the responsibilities assigned, the students started to use Book Creator. The decision to use multimedia was left to the students. They were free to add images, music, background noises, and so forth. Writing was the only mandatory requisite. They could enlighten their stories

the way they liked. For this stage, the students had another four sessions. Table 1 shows the phases and stages of the project as well as the skills and Apps involved.

Action Movie FX is the App the students recommended. It creates and adds special effects to any recording done with the iPad. Five groups voluntarily decided to insert videos within their ebooks using this App. Figure 1 shows the detail of one of the videos recorded with this App.

As already mentioned, Action Movie FX was brought to the classroom by one of the students who taught the rest of the group the way it worked and added an extra motivational value. By using this App, the students became actors of their narratives since they planned, organised, rehearsed, and recorded the scenes in the corridor of the school or empty classrooms resulting in a wealth of making-off scenes which were viewed at the end of the project.

RESULTS

The seven teams completed their multimodal stories in a well-organised manner, and most of them revealed a range of quality in the students' work. Although all the groups were successful in working with multimodality, not all the compositions met the standards of a narrative structure. The better narratives, *'Now we are the super heroes', 'Superheroes', 'Fireball' and 'SuperSimpsons'* combined the features of a narrative.

Table 1.

Phase of the project	Project stage	Language skills involved	Other skills involved	App
Phase 1	Organising	Writing	Negotiating, Collaborating, Planning	Showbie
Phase 2	Creating the story	Writing, Reading, Listening, Speaking	Negotiating, Collaborating Planning, Editing, Recording.	BookCreator iMovies Action Movie FX
Phase 3	Sharing the composition	Listening, Speaking	Public speaking	iBooks BookCreator

Figure 1. Recording with action movie FX

That is, the authors told a story with a plot, setting, characters and structure; used both grammar structures (narrative tenses and conditionals or one of them), and included different semiotic resources in their ebooks. *'Now we are the superheroes',* and *'Superheroes'* also included short videos where the students acted out the situations or complemented what was being told in the story (IOE, 2012). In contrast, the same problem was observed with the weaker narratives; the authors did not follow a narrative structure; that is, they did not write a story but drilled the grammar patterns with the characters the authors invented. Table 2 shows the features of each narrative.

For the purpose of this study, two ebooks have been selected for detailed analysis: *'Now we are the super heroes'* and *'Superheroes'*. The procedure used for selection was the entire class and the teacher's nomination during the first elicitation session. Both ebooks demonstrated the integration of multimodal resources, which accompany and complement the written text, as well as following the conventions of text structure. Focusing on the creative process of design, the content of the ebooks introduces illogical imaginary elements, which work well with real ones. This is a creative resource of infant and teen narratives, which are used as critical aspects in the elaboration of the story. Their union makes imagination start working.

Ebook 1: 'Now We Are the Superheroes'

This is a 5-page ebook, including the cover, with a total of six videos, which range from 01:04 to 00:04 minutes. The narrative has the elements of a narrative composition: a setting, plot, characters and ending, and is full of cultural references

Table 2. Ebooks and their features

EBOOK TITLE	NARRATIVE STRUCTURE	INBUILT VIDEO	IMAGE	SEPARATE PRODUCT
Now we are the superheroes	Yes	Yes	Yes	No
Superheroes	Yes	Yes	Yes	No
Supersimpsons	Yes	No	Yes	No
Fireball	Yes	No	Yes	Trailer
Superheroes: the savers	No	Yes	No	No
We could be heroes	No	Yes	No	No
We could be superheroes	No	Yes	No	No

(Gimeno, 2001). It tells the story of a group of teens who are in a Chemistry session at school when there is an explosion, and they get superpowers; they can control the water; move objects with their minds, and control spiders. The cover is an image of the X-Men Patrol from Marvel. The students edited an image they found in the Internet and added the picture of their faces to the superhero of their preference. They also added the song 'Heroes (We Could Be)' by Alesso Feat to complete the meaning. Figure 2 shows the cover of the ebook[1].

The first question which arose in the elicitation session was a possible mistake naming the subject: the students had used 'Alchemy' for 'Chemistry' on purpose. The authors explained that they had used 'Alchemy' as an artistic licence, which adds the composition a strong cultural reference getting closer to the Harry Potter fiction books. The term 'Alchemy' is full of cultural connotations: esoterism and experimentation with chemical substances. It engages the reader in an activity, which consists of the experimental study of chemical phenomena, developed from ancient times and seeks to discover the constitutive elements of the universe, the power of transmutation that converts base metals into gold, and the elixir of life.

The ebook starts with a trailer, which introduces the characters, the own students, and summarizes the story to situate the readers. The fact that the writers are the actors is another crucial creative resource which allows them to connect reality and fantasy. The trailer consists of edited still images and video recordings done with Action Movie FX to add special effects. There are five more videos in the ebook all of them accompanying and completing the written text. The videos show the fight scenes full of special effects. The authors decided not to describe these scenes because it would have been difficult for them to express it in words due to their command of English. It is important to highlight the story occurs at school.

The images let them contextualise the written composition where it happens, their school. The reader can visualise the very instant the characters become superheroes and the kind of 'magic' they can perform. The special effects, which technology makes available to the students, introduce the fantasy elements tightly intertwined with the real ones: the students -acting out- and the setting –the school corridors. Two completely different realities meet in a world resulting in an unusual plot.

Two narratives can be seen in the ebook: the written narrative and the audiovisual. However, there is a third narrative which results from the synergies between both and which allows the reader to participate in the whole story differently as if there were just written or audiovisual text. They finally put the images, recordings and background music together with iMovie. By doing so, they generated a narrative, and it is within (Davidson et al., 2010) names cross-media storytelling, an integrated narrative which 'occur across multiple media, with multiple authors and have multiple styles' (p. ix).

Roig (2009) states that cross-media storytelling is composed of elements around a narrative universe; these elements should form a coherent canon in their multiple interpretations. Even though the students have no instruction in Media studies, there is a clear intention on their behalf of giving the ebook a professional intention since they introduce the trailer inventing and naming a studio '*Studios Goldwings'* as shown in Figure 3. This fictional resource gives the ebook a function which goes beyond the school context, and the initial purpose for which it was thought, the study of two grammar structures. The students generated a product thinking about an audience, a more extensive context than the ESL classroom initially defines.

From a creative point of view, the students develop a complex reality combining means and systems of representation. Second language acquisition became in creating a story which cannot be explored from just one system of representation. From a linguistic point of view, narrative tenses and conditional sentences are appropriately used, with very few mistakes. The lexis is also adequate and related to the story as the beginning of the story shows:

It was a normal day in our alchemy class, but something exploded, that thing covered us. All the students in he class had to go out. When the day ended, we went to our houses like nothing happened, but we were wrong.

Figure 2. Now we are the superheroes. Promotional trailer.
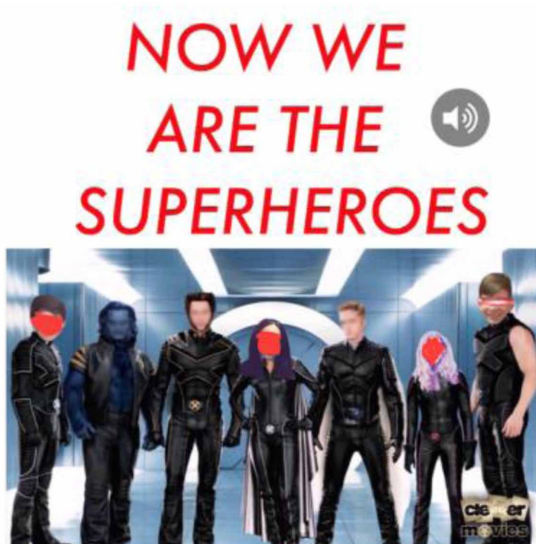
Next day at school, weird things started happening. We started thinking that it was because of the explosion of yesterday in the alchemy class. It was amazing!! we could move water, run through nature, control spiders and levitate objects. (Excerpt From: A. N. Author. "Now we are the superheroes." iBooks, p.2)

They venture to use new verb patterns, such as 'start + -ing', or use modal auxiliary verbs in the right context, as in 'they could move water'.

Ebook 2: Superheroes

Superhero is a 15-page ebook with cover included. The students have used written text and video recordings, as shown in Table 2. However, just the video recording on page 8 was recorded with Action Movies FX and includes special effects. The rest of the recordings were done with the camera of the iPad, and the students act out all the scenes. This ebook has no pictures from the Internet, but the students are the superheroes and adopt a superheroes pose (gestural meaning, The New London Group, 1996).

The plot is more straightforward than the previous story, but still has a setting, plot, characters, and ending. Meaning is carried only partly by writing; in this ebook, video increases their load. Even though the students have a good command of English, they decided to support mainly on video because they intended to recreate silent films from the beginning of the XX century. That is why their gestures are so exaggerated, they explained.

Figure 3. Superheroes. Cover.
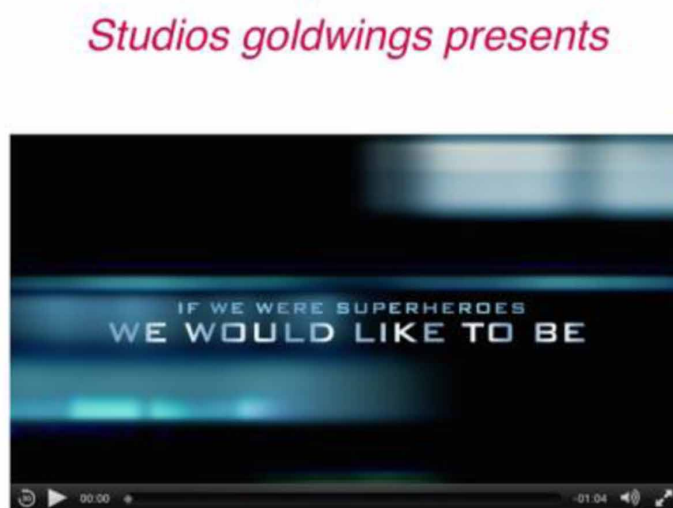
The scarcity of written text and the fact that the students are conveying meaning with their actions demands from the reader a higher degree of interpretation and resignification of the plot. The video at the end of the composition retells the whole story, as a resource to resituate the audience. From the linguistic point of view, conditional sentences are appropriately used with very few mistakes. The lexis is also adequate and related to the story. However, the students did not use complex structures but the ones that were required.

DISCUSSION

With regards to our first objective, the students highly value the fact of working with different semiotic modes: image, video, and written text. They pointed out multimodality is vital when dealing with creativity and imagination. In this respect, the role of the iPad is essential since it facilitates the creation of the ebooks due to its multimodal resources. They also highlight the fact of using non-academic Apps at school, as well as being able to recommend them to the teacher and teach their peers in their usage.

It is particularly significant to contemplate how the students move from the instructional use of the iPad to a more creative one with different Apps, whose aim can be educative or not, as it is the case of Action Movie FX. The students use image and video not only to make their stories more realistic and vivid but also to illustrate those details or aspects they consider essential to impact on the audience. Video is also used to complement the written text where the students feel crucial for the reader to understand the meaning they want to convey and they cannot or are not able to express with words.

Their role of authors/writers/actors is evident since some of them confessed in the elicitation sessions to have created their ebooks to be shared with a real audience, not just with the teacher who is the ultimate goal of their productions. The 28 students (100%) enjoyed the project and would like to repeat it. The reasons they give are they have worked in groups, sharing ideas and creating together, which has, subsequently, empowered their compositions. They admit that using different semiotic modes is a source of enjoyment and engagement. It is particularly significant to contemplate how easily the students move from mode to mode.

According to our second objective, the learning task has not been contemplated as a traditional writing task because it has been done with the iPad (multimodal) and it was not only writing but looking for images (researching), recording, planning, organising their work, rehearsing and acting out. The students admit that learning in this way is very funny and motivational because they can contribute to the group and the final product with their stronger points, which do not have to be merely academic.

Apart from working out the narrative tenses and conditional sentences, the students have also included other grammar patterns which become part of their background knowledge of the language. They have also 'played' with language (Crystal, 1998) boosting creativity at a lexical level.

CONCLUSION

In this piece of research, the students turn the act of creating a narrative written text into an elaborated communicative process where several systems of representation are employed to convey meaning. One of the key conclusions is that multimodality has given the students the freedom to decide what to narrate and how to do it. Multimodality has revealed as a resource which helps construct a learning context attending to the diversity of the students, with their different ways of expressing and communicating by using various modes. Multimodality improves the production of narrative texts focusing on the competences that creative acts generate; we can state that multimodal compositions promote a series of complex thinking processes on the students, they invent, construct and write a short story; they act out scenes edit and make the layout of the pages.

To promote creativity, the opening to the processes where the final products are not predetermined is crucial because creativity implies not to determine a final product but grant the students the liberty to create their own products because creative processes are open. The students should work on their products or outputs the way they have thought, imagine and investigated them with their m-learning devices. Only in this way will they discover the practicality and new uses M-learning devices can offer in a formal context.

With regards to the analysis of our second objective, the students enjoyed this new way of learning. They do not perceive the task as a traditional one; they feel as if they were 'playing' while learning at the same time. From the linguistic point of view, the students use the grammar structures and lexis correctly, while working with the four skills of the language simultaneously, and generating a task with explicit communicative purposes. The process of learning should not just deal with mastering content but also with creating, generating and communicating ideas and thoughts.

PRACTICAL IMPLICATIONS

As mentioned throughout the chapter, M-learning and multimodality offer new opportunities for the educational world in general and ELT in particular. They place teachers in a new scenario which requires new ways of teaching. Yet many issues

remain. The inclusion of M-learning and multimodality in the curricula involves a series of changes and challenges that policymakers, institutions, educators and learners should face to ensure the success of the resulting approaches. The following questions could be considered as a starting point for future research in this area.

The main challenges teachers may face when adopting this approach are deciding why, how and when to include M-learning devices in the classroom; their new role; the autonomy of the students; how to incorporate multimodal experiences in the rigid syllabus, and the evaluation of the processes versus the traditional exam-based assessment.

It should be emphasized that M-learning does not generate learning *per se* as teachers should create meaningful learning experiences in which the students can explore, investigate, create and manipulate the content of their subjects – language in our case – with their devices. Teachers should move from the almost exclusive focus on grammar given by the rigid curricula to incorporate M-learning-driven multimodal experiences in their syllabi. In this regard, teachers need to master not only the content of their subjects, but also must know the means/technologies to offer their students these meaningful learning contexts.

A shift in the role of the teachers is also necessary. They are no longer the bearers of knowledge but be ready to guide, organise and give advice to their students. They should lose the fear of their students using m-learning devices in class time to investigate and create new ways of making meaning while promoting their students' active participation at the same time. Evaluation is crucial. Multimodality calls for new tools for assessing the students' performance, which it cannot rely on a traditional grammar-based exam. Instead, evaluation should be contemplated as a process of learning, as a process of metacognition. Students should also be included in this process with coherent elicitation strategies, peer assessment and self-assessment.

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KEY TERMS AND DEFINITIONS

Elicitation Process: A data collection technique used in social science to gather information from the participants in a study. Elicitation techniques include interviews, focus groups, questionnaires, observation, surveys.

M-Learning: Learning done using portable electronic devices such as tablets, smart phones, laptop computers, etc.

Mode: Resources to make meaning material. These include linguistic, visual, audio, gestural, and spatial.

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Multimodal Compositions/Narratives: Narrative compositions where written text, images, sound, movies are combined to make meaning.

Multimodality: Theory which studies how people communicate interact with each other not just through written text but with multiple modes such as images, gesture, color, music, posture, and so forth.

Semiotic Resource: The means we use for communicative purposes, for example, facial expressions, the tone of voice, a piece of software, and so forth.

Situated Learning: Methodological approach which states that students learn by participating in the learning experience by creating meaning from the real activities of daily living.

ENDNOTE

[1]   The faces of the students have been covered according to Data Protection Law.

Chapter 6
Cultural Indoctrination and Open Innovation in Human Creativity

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ABSTRACT

This chapter explores the connection between cultural indoctrination (CI) and open innovation in human creativity and its importance in an era of global hypercompetition. As organizations are confronted with the need to engage with stakeholders from a variety of different cultural backgrounds, the need to understand the ways in which cultural imperatives play into individual and collective performances becomes increasingly important. Based on an integrated literature review, this chapter examines the following eight factors included in CI: child development, cultural institutionalization, cultural intelligence, language structure and acquisition, social learning theory, religion, social capital, and values orientation theory (VOT). It is from these factors that a conceptual framework is developed for future application in theory and practice in open innovation.

INTRODUCTION

This chapter explores the connection between cultural indoctrination (CI) and open innovation in human creativity and its importance in an era of global hypercompetition. While it is established that scientific knowledge and technical expertise promote the wealth of nations in general, the scientific productivity of a country correlates more strongly with gross national income (GNI) per capita for advanced economies than does technological sophistication which is fundamentally more critical – and achievable – for developing nations (Jaffe, 2014). However, creativity is required for both areas with regards to open innovation which plays a critical role in achieving competitive advantage today (Chatzoglo & Chatzoudes, 2018; Ionescu & Dumitru, 2015). Later in this chapter we will briefly examine a current list of the most innovative cities in the world in connection with open innovation which is described below.

Cultural origins can permit the prediction of individual behavior in an organizational environment under various situations (Trompenaars & Hampden-Turner, 2010; Hofstede, 1985, 2001; Hall, 1976). Therefore, as organizations are confronted with the need to engage with stakeholders from a variety of different cultural backgrounds, the need to understand the ways in which cultural imperatives play into individual and collective performances becomes increasingly paramount (Hannah et al., 2013). This need ultimately provides the ability for organizations to sustain a competitive advantage and to remain profitable over time (Chatterji & Patro, 2014; Teece, 2014; Barney, 1991). This chapter links cultural origins, open innovation, and competitive advantage via a Cultural Indoctrination (CI) conceptual framework presented below to encourage further research in open innovation and to advance other areas such as business, education, management, and psychology. This is the major contribution of this work.

This chapter is organized below in the following manner. First is a Background covering the subjects of open innovation, realities in contemporary globalism, and competitive advantage. Second is an integrated Literature Review covering a range of work by established theorists in fields such as cultural anthropology, language structure and acquisition, social learning theory, cultural intelligence, social capital, and decision-making theory. Third is a Cultural Indoctrination Conceptual Framework that is a result of the Literature Review. Fourth is an Analysis section followed by Future Research Directions. Last is the Conclusion.

BACKGROUND

The globalization of today has placed many different demands on business, government, and society that simply did not exist even 10 years ago (WEF, 2018).

There are four major global forces today which are largely behind this reality that are self-explanatory (McKinsey Global Institute, 2015): accelerating technological change worldwide, urbanization, a globally and rapidly aging population, and greater worldwide connections including trade, people, finance, and data. Disruptive technologies such as 3D printing, advanced robotics, next generation genomics, and renewable energy are also a significant part of the mix (McKinsey Global Institute, 2013). Anderson and Wong (2013) state that obtaining competitive advantage in the digital economy of the 21st century requires focusing on intangible factors such as firm strategy and positioning, radical innovation and first mover advantages, intangible resources and competencies, organizational ambidexterity, network effects and externalities, transaction cost efficiency, and relational optimality. *These factors will make destabilizing cycles of volatility more likely than ever before in this century* (McKinsey Quarterly, 2010). Associated effects include global inflation, drastically altered business and product life cycles, and the need for corporations to increase liquidity buffers for unexpected changes in global markets (Global Research Society LLC, 2018).

One key factor to overcome these real world issues is open innovation which is defined here (University of Cambridge Institute for Manufacturing, 2009): Open Innovation: A strategy by which organizations allow a flow of knowledge across their boundaries as they seek ways to enhance their innovation capability. de Jong, Marston, and Roth (2015) have established eight tests for innovation which can be used within the context of this chapter: Aspire, Choose, Discover, Evolve, Accelerate, Scale, Extend, and Mobilize. There is some empirical evidence that potentially demonstrates how these tests are met can depend largely on the creativity and innovation of the executives and managers involved based on their domestic *and* international experiences as well as language structure (Godart et al., 2015; Berman, Mudambi, & Shoham, 2017; Lauring & Selmer, 2012). The CI conceptual framework below attempts to support such studies further by investigating the following areas: Child Development, Cultural Intelligence (CQ), Language Structure and Acquisition, Social Learning Theory, Cultural Institutionalization, Religion, Social Capital, and Values Orientation Theory (VOT).

These factors were carefully selected via an integrated literature review that covered psychology, human resource management, sociology, and organizational theory, among others. They were chosen because other factors involved in human behavior (e.g., personality) were not deemed to have as significant an impact as the ones chosen based on the results from the literature review that long preceded the development of this chapter. In any case, it is important to reiterate here that scant literature exists regarding CI or even its connection with other aspects of human activity such as architecture, business, or sociology (see Koç, Claes, & Christiansen, 2016 and Christiansen & Koeman, 2015).

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The reader should consider this definition of CI before continuing with the Literature Review: *Cultural Indoctrination (CI) is the process of inculcating ideas, attitudes, beliefs, and cognitive strategies during the transfer of cultural traditions from one generation to the next with the expectation that such traditions will be practiced and not questioned in the future.*

The major contribution of this chapter to the extant literature is to provide a springboard for future research which can have an impact on a variety of additional fields such as homeland security, human resources, information systems, or sales & marketing (Bartunek, 2007). This work is not designed to be an empirical piece with specific solutions or answers; instead, that effort is left to those researchers who will use the conceptual framework for that purpose (see Bloom et al., 2012; Mudambi et al., 2012).

LITERATURE REVIEW

Major Theories Pertaining to CI

The following theorists are all certainly highly regarded individuals in their particular fields; however, none of them examine or connect their work with the topic of CI. Following is a summary of their major, relevant contributions for the CI conceptual framework below.

The cultural anthropologist Clyde Kluckhohn (1949, 1951, 1962) argued that humans share biological traits and characteristics which form the basis for the development of culture and that people normally believe their own cultural beliefs are natural, but consider those of others as inferior or abnormal (Hills, 2002). Building on Kluckhohn's theory were Florence Kluckhohn and Fred Strodtbeck (1961) who developed three basic assumptions: 1) There is a limited number of common human problems for which all people must at all times find some solution; 2) While there is variablility in solutions of all the problems, it is neither limitless nor random but it is definitely variable within a range of possible solutions; 3) All alternatives of all solutions are present in societies at all times but are differentially preferred. These assumptions formed the foundation of their Values Orientation Theory (VOT) which is is incorporated into the proposed framework below because VOT is a culmination of the other factors involved in CI.

Dutch social psychologist Geert Hofstede departed from the anthropologists' interpretive methodology for comparing cultures by presenting the first large-scale quantitative study of national cultural dimensions via an extensive survey of 144,000 IBM employees in 50 countries and three multi-country regions (Hartmann, 2012). Using factor analysis on the data, Hofstede (1980) developed four dimensions of

culture: 1) power distance; 2) individualism vs. collectivism; 3) masculinity vs. femininity; and 4) uncertainty avoidance. He later added a fifth dimension: long-term vs. short-term orientation. Hofstede's work continues to be the foundation of cultural studies or dimensions as it remains the most highly cited in the extant literature. However, his work has been challenged or enhanced by a number of other notable theorists such as Schwartz (1994, 1999), Triandis (1995, 1996, 2002), Nakata (2000), Kirkman, Lowe, and Gibson (2006), and Trompenaars and Hampden-Turner (2010).

Decision-making is a multivariate and complex endeavor that can be greatly influenced by cultural behaviors and is a critical business activity in today's global hypercompetition due largely to technology (Ang et al., 2007; Gates & Hemingway, 1999; Drucker, 2002). How well this core function is conducted can significantly alter corporate success in the long-term (Hannah et al., 2013). Styhre et al. (2010) argue that uncertainty in industries is leading to more risk-taking in companies which, in turn, is affecting decision-making quality, cost, and speed. Game theory, which simply stated is a mathematical model of optimality considering benefits less costs in interaction between participants, can assist in decision-making to capture strategic situations of the involved parties and their mutual behaviors (Küçükmehmetoğlu et al., 2010). Dadkhah (2011) stresses that many mathematical theories in economics and industrial organization require modeling the behavior and interactions of many decision-makers.

Şen (2013) believes organizations of all types must adopt globalization patterns for their decision-making success. However, these must be based on effective, rational, logical, and systematic treatment of all possible inputs via fuzzy logic modeling which involves the development of models used for decision-making under uncertainty. If human decision-making is modeled as a search for global optimization simply by using rigorous mathematical rules, it will be incomplete in terms of offering a fair representation of reality. Therefore, it is necessary to consider qualitative as well as quantitative issues regarding corporate decision-making in an era of hypercompetition (Verplanken & Holland, 2002). Cultural factors based on CI is at the center of effective decision-making as is incorporated into the framework below.

Cultural intelligence (CQ) remains an emerging field (Gelfand et al., 2008) that includes four subdimensions: metacognitive, motivational, cognitive, and behavioral (Earley & Ang, 2003; Van Dyne et al., 2012). CQ has a definite impact on an organization's "financial bottom line" (Chen et. al., 2012), so its importance within the context of this article cannot be underestimated due to the effects of global hypercompetition on operations. Templer et al. (2006) state that contemporary globalism highly encourages mobility of labor across cultural and national boundaries, but operating in different cultures is a major obstacle for most people (Redmond, 2000). Therefore, motivational CQ is of particular note as individuals with high motivational CQ levels are more likely than others to engage in the intercultural

interactions that all of us face increasingly both at home and abroad via work and pleasure (Black et al., 1991; Deci & Ryan, 1985; Molinsky, 2007). Dessler (2012) notes that extensive empirical research indicates there are high "hidden costs" of hiring people with inappropriate backgrounds to engage them in assignments which require finesse in multicultural settings.

Language structure differs significantly with regards to time, gender, hierarchies, and individual or collective emphases (Berman, Mudambi, & Shoham, 2017). Whorf (1956) was a pioneer in the study of linguistics and the role of languages in forming societies and their behaviors. Since his time some significant studies have been published on the role of language in various areas of human behavior (e.g., Chen, 2013; Brannen, Piekkari, & Tietze, 2014; Santacreu-Vasut, Shenkar, & Shoham, 2014; Tenzer & Pudelko, 2017). One example regarding language structure can be found in the Japanese *katakana* writing system which was originally developed in the ninth century and eventually used for official government documents and religious texts (Seely, 2000). The *katakana* syllables permitted the easy assimilation of foreign concepts and loanwords into the Japanese language, especially from Dutch, English, and German, which was largely credited with allowing Japan to develop its enormous military capabilities for World War II following the Meiji Restoration of 1868.

Language acquisition has abundant extant literature (e.g., Blume & Lust, 2017; Loewen & Sato, 2017; Christiansen, Chatter, & Culicover, 2016). According to the concept of linguistic relativity, or more commonly known as the Sapir-Whorf Hypothesis, the manner in which people think is strongly affected by their native language(s). This concept has both strong and weak aspects; the former is associated with language determining thought while the latter is associated with language limiting thought . However, this hypothesis has been challenged repeatedly over the years and remains a highly controversial subject in the field of linguistics. Gumperz and Levinson (1996) reinvestigated linguistic relativity in light of new evidence within the fields of anthropology and cognitive science while Wolff and Holmes (2011) concluded there is growing support for the view that language has a profound effect on thought. Other related works on this subject include Leavitt (2015) and Everett (2016). The author's personal experience regarding language is covered in the Analysis section below.

It is worth briefly mentioning three additional concepts regarding language that was considered when developing the CI framework:

- **Central Language Hypothesis** by Buğa (2016) states that in the minds of bilingual and multilingual individuals one language is more supressive than the other(s) as it dominates reflexes, emotions, and senses as it is located at the center of the libic cortex of the brain.

- **Critical Period Hypothesis** by Lenneburg (1967) suggests there is a sensitive or critical period in humans to acquire a first language, usually before the onset of puberty in order for the language acquisition to develop fully. This work remains a classic source on this topic although it is still a highly controversial subject.
- **Age Constraints on Second Language Acquisition** by Flege, Yeni-Komshian, and Liu (1999) evaluated the Critical Period Hypothesis for Second Language (L2) Acquisition and found mixed results regarding support for the Critical Period Hypothesis.

Social capital has earned an increasingly important place in economic development over the past 20 years (Cartwright & Singh, 2014). Sobel (2002) states that social capital is an attribute of an individual in a social context which can be transformed into conventional economic gains. Social capital varies from country to country, and can also act as a conduit for non-economic benefits (Woolcock, 1998). Nonetheless, an individual's overall socioeconomic status can still depend greatly on her or his social capita, so it is included in the CI framework as it relates to socioeconomic status.

Religion can influence economic growth and economic growth can influence religiosity (Barro & Mitchell, 2004; Barro & McCleary, 2003; McCleary, 2007). However, Chandan (2014) notes that since Hofstede's (1980) national culture dimensions and economic growth rates vary among nations, religion alone is not sufficient to explain (for example) higher economic growth of emerging markets. Therefore, due to these conflicting yet established viewpoints, religion is included in the proposed CI framework as an important mediating factor.

Bandura's (1977) social learning theory states that learning is a cognitive process which occurs in a social context via observation or direct instruction. Possibly the most influential theory of learning and development, Bandura's added a social element to the field in which he argued that people can learn new information and behaviors by observing other people. This aspect is included in the proposed framework due to the increased interaction between people as the world becomes more interconnected—especially via technology (Gates & Hemingway, 1999; McKinsey Global Institute, 2015).

Bronfenbrenner's ecological systems theory (Papalia & Feldman, 2012) explains how everything within an individual and her or his physical environment impacts and influences a person's growth and development. This is in line with Erikson's (1993, 1994) extensive work on childhood, identity, and the life cycle. A developmental psychologist who served as a professor at Harvard and Yale Universities even though he lacked even an undergraduate degree, Erikson established the eight stages of life-stage virtues ranging from infancy to old age. These stages include: basic trust vs. basic mistrust, autonomy vs. shame, purpose, competence, fidelity, intimacy

vs. isolation, generativity vs. stagnation, and finally ego integrity vs. despair. All of these stages are critical aspects of CI and are included in the child development section of the proposed framework.

Institutionalization, initiation, and indoctrination are often confused with education and training (McDonough, 2011), although some theorists believe all education emits from a particular ideological perspective with the intent that a person will adopt that ideology. Hocutt (2005) states that current disputes in academia raise the philosophical question regarding how education differs from indoctrination, and it is the author's viewpoint there is a definable difference between the two.

Indoctrination

It might be surprising to read that nearly 100 years ago the terms indoctrination and education were considered nearly synonymous (Gatchel, 1972), although there should be little doubt today this is simply not the case. Indoctrination covers multiple aspects of human existence such as rationality, moral education, religion, freedom, and even intentions (Snook, 1972). The term often carries the negative connotation of "brainwashing" which was first coined by Edward Hunter in 1950 from the Chinese word "hsi nao" or "cleansing of the mind" (Winn, 1983), but this is not the context in which the word "indoctrination" is used in this chapter.

An etymological investigation of "indoctrination" shows the following (Gatchel, 1972): 1) the word indoctrination meant in its incipient phase the implanting of doctrines. In the Middle Ages under the autonomous control of the Roman Catholic Church, medieval European education became synonymous with the implanting of Christian doctrine; 2) although indoctrination originally indicated a liberal concept of implantation, it gradually assumed the connotations of a coercive type of education; 3) since about the 17th century, increasing expression of and experimentation with concepts of democracy have brought with them considerably different ideas about Education; and 4) the present truncated definitions of indoctrination make it inadequate to describe the highly developed processes of democratic education. Another word—enculturation—shows promise of filling this need, but even 'enculturation' carries some implications of 'indoctrination's' limitations.

CULTURAL INDOCTRINATION CONCEPTUAL FRAMEWORK

Cultural norms vary widely and possess both concrete and abstract components such as clothing acceptable for certain occasions or religious beliefs, respectively (Hills, 2002). As mentioned in the Introduction, cultural origins can permit the prediction of individual behavior in an organizational environment under various

situations. Ang and Inkpen (2008) state there is an increasing consensus regarding the complexity of managing cross-cultural interactions effectively, and cultural adaptation is an important dimension of this complexity (Yamazaki & Kayes, 2004). Campbell et al. (2012) proposed a comprehensive framework of human capital-based advantage which can be considered with the proposed CI conceptual framework because scholars have acknowledged that general skills may actually lead to (higher) organizational-level performance. The connection here is that CI is an integral part of human capital within the context of open innovation as described earlier.

Because there are extensive, long-term changes occurring in the world today, such radical changes mean organizational management can no longer rely on traditional and tangible sources of value creation such as land, labor and capital, and raw material to drive competitiveness; instead, these entities must now embrace "intangibility" such as that found in open innovation of which knowledge is at the heart (Andersen & Wong, 2013; Oberg & Alexander, in press). CI is one of those intangibles, and the proposed framework represents one link between global hypercompetition and open innovation theory and practice. Engaging both scholars and practitioners in the further development of the proposed framework below via effective collaboration is suggested as it is no secret the research-practice gap is widely recognized and lamented (Bansal et al., 2012).

Ultimately, the transitional mechanism from the individual to the organization is to answer from the proposed conceptual framework above how an organization mediates or moderates, enhances or restrains the CI of an individual? What systems, routines, and processes that comprise the organization work upon which individual characteristcs, traits, and beliefs? What among dozens of personal variables will the organization influence so the macro-level issues (e.g., the organization-environment interaction) can be addressed? These and other transitional questions are to be answered by future analysts; namely, scholars and practitioners collaborating together in empirical research efforts.

ANALYSIS

Open innovation is a strategy that requires the free flow of knowledge to improve the organization's innovative capabilities which, in turn, enhances competitive advantage. Porter's original 1990 study, *The Competitive Advantage of Nations*, was a major breakthrough regarding the differences in economic development between 10 international trading countries and their natural competitive advantage in various industries such as car manufacturing and textiles. Translated into 12 languages and now in its eleventh printing, the book has transformed our concept of sustainable prosperity in the modern global economy. While Porter's "diamond

Figure 1. A conceptual framework for cultural indoctrination
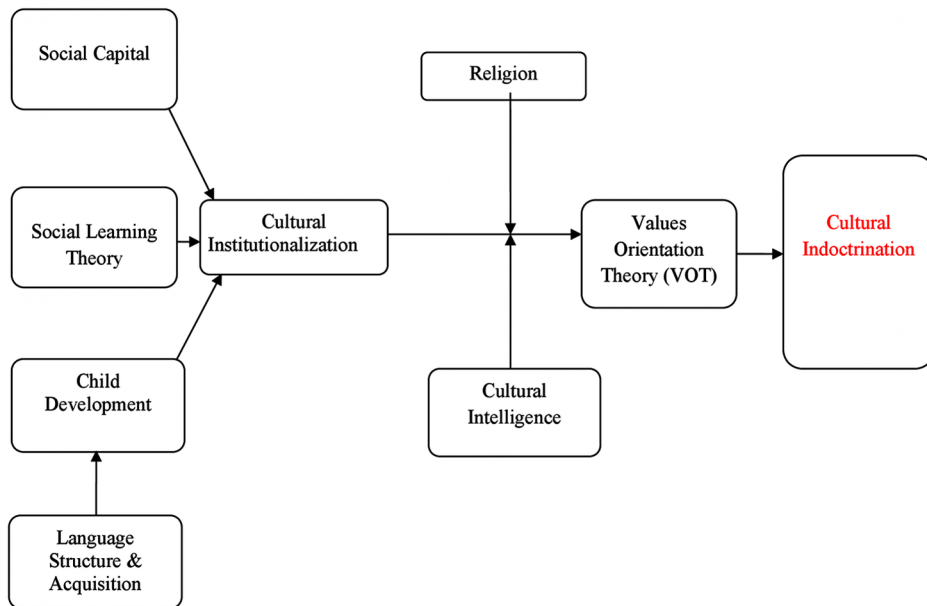
theory" offers a model to help understand the competitive position of a nation in global competition, it does not consider the tenets of cultural indoctrination presented in this chapter. The same can be said regarding the works of relevant others. Herein lies an opportunity for the CI framework above to be applied constructively (e.g., Koç, Claes, & Christiansen, 2016).

Open innovation began in the 1980s in response to transcending the traditional "closed innovation" practices of manufacturing firms at the time. Tidd and Bessant (2009) state that open innovation is driven by the following factors: cost reduction for technology development, promoting shared learning, reducing lead times for product or service development, and achieving economies of scale. Bessant and Moslein (2011) forward that the ability to exploit shared creativity is a key component of the open innovation context. It is here that the author contends the CI framework is effective in understanding how to better cultivate such "shared creativity" today, especially in Research and Development (R&D)-intensive industries that require close collaboration – often across national boundaries – to be successful. In an era where companies have employees and customers from different cultural and linguistic backgrounds both domestically and internationally, the role of languages within the CI framework assumes particular importance.

Berman, Budambi, and Shoham (2017) conducted empirical research suggesting there is an association between language structure and innovation. Their study is purportedly relevant to both theoretical and practical aspects of innovation and international business; nonetheless, they state much additional research is needed and the author forwards that such research consider the CI conceptual framework from which to launch this effort. The author has extensive experience in international business involving most aspects of the field such as accounting/finance, product development, export/import, sales & marketing, and trade development conducted in Chinese, Japanese, Spanish, and Turkish as well as English. This practical background over a period of 35 years has allowed the author to understand the highly influential role of language in international business and innovation that was the foundation for the development of the CI framework.

Knowledge management or KM, being a major component of open innovation is rather dependent on the social and political values of a given country. An established discipline since 1991, KM is supposed to be a strategic organizational objective (Nag & Gioia, 2012). However, both author business experience and academic research indicates both organizational and national culture can highly affect how KM is employed (Leidner, Alavi, & Kayworth, 2006; Kor & Mayden, 2013; Iles, Ramgutty-Wong, & Yolles, 2004). The CI framework is a potential a tool to better understand how the backgrounds of employees involved in open innovation and KM, among other fields, can improve the flow of information throughout an organization for enhanced performance as the framework incorporates more robust variables than are common in many other cultural models (Bennardo & de Munck, 2014; Kristiansen & Dirven, 2008).

The CI framework, open innovation which includes KM, and competitive advantage form a foundation from which organizations can develop sustainable business development and related programs for long-term success. The list below shows in order the world's most innovative cities based largely on commercial breakthroughs by world-class multinational companies and ground-breaking research by universities which share a critical mass of knowledge and expertise (WEF, 2018b):

- New York, New York, USA
- Tokyo, Japan
- London, England, United Kingdom
- Austin, Texas, USA
- Berlin, Germany
- Boston, Massachusetts, USA
- Stockholm, Sweden
- Shenzen, China
- Banglaore, India

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The reader will want to investigate these cities in detail why and how they continue to dominate this list and consider the CI framework in future analysis and development.

FUTURE RESEARCH DIRECTIONS

Academics and practitioners should attempt to enhance the CI framework by developing an algorithm, possibly via fuzzy logic or Structural Equation Modeling (SEM), to explain mathematically how the model can work in practice or in academia. Second, additional research into motivational CQ is suggested as this aspect of CQ appears to be the most promising (and manageable) within the CI framework with regards to improving and sustaining organizational "financial bottom lines". Last, further research into how language structure affects innovation and creativity would be highly beneficial to scholars and practitioners alike. In connection with this subject it would be worthwhile to include study of multilinguals and Third Culture Individuals (TCIs).

CONCLUSION

The global marketplace today is characterized by profound social, economical, and technological changes (Denktas-Sakar, Karatas-Cetin, & Saatgioğlu, 2014). In addition, contemporary globalism is redefining how people work together (Thomas & Rablin, 1995). Therefore, one of the consequences of today's globalism is more contact between cultures than has ever been common. Examples can include interacting with people across cultures as expatriates, managers, business travelers, and global leaders (Bücker et al., 2014). In this chapter, we have covered how CI can potentially affect such interaction (Tolentino, 2008; Hofstede, 1985) and provided a proposed framework for future research in open innovation.

This chapter has provided a Conceptual Framework that includes an integrated Literature Review in areas deemed pertinent such as cultural anthropology, social learning theory, language structure and acquisition, cultural intelligence, social capital, and decision-making. Decision-making should be highlighted here because it is how executives engage in this activity that has a huge bearing on the performance of open innovation. Executives must make decisions in increasingly complex situations today that involve dynamic social systems and networks, and these changing situations create an unpredictability previously unknown (Hannah et. al., 2013).

As previously mentioned, scholars should view this chapter as an initial foundation upon which to base future empirical and theoretical investigation and development, preferably in collaboration with practitioners (see Mohrman & Lawler, 2012; Waldman et al., 2012; Mohrman et al., 2001).

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KEY TERMS AND DEFINITIONS

Competitive Advantage: The attribute that allows an organization to outperform its competitors. A competitive advantage may include access to natural resources, highly skilled labor, geographic location, high entry barriers, and access to new technology.

Cultural Indoctrination: The process of inculcating ideas, attitudes, beliefs, and cognitive strategies during the transfer of cultural traditions from one generation to the next with the expectation that such traditions will not be questioned but practiced in the future.

Disruptive Technologies: Technologies which significantly alter the manner in which businesses or entire industries operate.

Fuzzy Logic: Fuzzy logic is an approach to computing based on "degrees of truth" rather than the usual "true or false" (1 or 0) Boolean logic on which the modern computer is based.

Language Acquisition: The process by which humans acquire the capacity to perceive and comprehend, as well as to produce and use and to communicate.

Open Innovation: A strategy by which organizations allow a flow of knowledge across their boundaries as they seek ways to enhance their innovation capability.

Sustainability: The capability to continue a business organization or process over a long period of time at an acceptable rate of profitability.

Chapter 7

Methodology for Developing a Usability Assessment Questionnaire in Spanish as a Bilingual Strategy for Software Improvement:
A Validation Approach

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ABSTRACT

Usability is the characteristic of a software product of being effective and efficient and producing satisfaction for users and traditionally is assessed through questionnaires but most of them are only available in English. A software usability assessment questionnaire (SUAQ) is proposed in two languages: Spanish and English. The methodology comprises four stages: 1) questionnaire development, 2) administration, 3) statistical validation, and 4) sample size determination. Twenty items were evaluated in terms of clarity, consistency, and relevancy. Then, the SUAQ was administered to 95 respondents. Overall, reliability values were acceptable in

Spanish and English version, respectively. The factor analysis was feasible since the KMO index, and the Bartlett sphericity test was statistically significant. Both versions of SUAQ were tested to determine their validity. The findings show that the proposed methodology is an effective usability assessment instrument and thus an effective software improvement tool from a bilingual approach.

INTRODUCTION

Currently, an increasing number of companies do business internationally, settle across different countries, and have customers overseas. When a company has a computer program design process that will be used by people of different nationalities and languages, it is necessary to evaluate the usability of the computer programs being developed. In English-speaking environments, it is more accessible to assess the usability of computer programs and software products since assessment instruments are generally available in English. Unfortunately, when designers and developers wish to test the usability of their products in non-English speaking environments, one of the main obstacles to overcome is the restricted number of assessment instruments available in other languages.

BACKGROUND

Usability is a quality attribute in software engineering (Pressman & Maxim, 2015), and its definition varies across sources. For example, according to the international standards ISO/IEC 25010:2011 (ISO/IEC, 2011) and ISO 9241-11:1998 1998 (International Organization for Standardization, 1998), usability is a characteristic that allows a product to be used effectively, efficiently, and satisfactorily. Similarly, to Jakob Nielsen (Nielsen, 1993), usability refers to characteristics in a product, such as learnability, efficiency, memorability, low error levels, and satisfaction. However, even though organizations such as the International Organization for Standardization and the European Telecommunications Standards Institute (International Organization for Standardization, 1998; ISO/IEC, 2011) recognize the importance of usability in software development, none of them have proposed a usability assessment instrument. Developers thus have had to select among a series of available instruments, such as field observations, heuristic evaluations, focus groups, surveys, and questionnaires.

Questionnaires are perhaps the most popular usability assessment instruments. Examples of well-known usability assessment questionnaires are the Questionnaire for User Interface Satisfaction (QUIS), developed by Ben Shneiderman in 1987

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(Shneiderman, 1987), the Perceived Usefulness and Ease of Use (PUEU) instrument, proposed by Fred Davis in 1989, the Software Usability Measurement Inventory (SUMI), developed by Jurek Kirakowski in 1993 (Kirakowski, 1999), the Computer System Usability Questionnaire (CSUQ), employed by IBM and tested by James R. Lewis in 1995 (Lewis, 1995), the Purdue Usability Testing Questionnaire (PUTQ), developed by Han X. Lin, et al, in 1997 (Lin, Choong, & Salvendy, 1997), and the System Usability Scales, used at DEC and tested in 1991 by N. M. Lucey (Kirakowski, 1999). All these questionnaires are available in English, but their versions in other languages are rare or restricted.

With regards to the usability assessment questionnaires, they consist of different types of questions. General questions, usually known as demographic or sociodemographic questions, allow researchers to make inferences in terms of user age, gender, and experience, among others. However, the level of flexibility in general questions can compromise the data analysis. Next, open ended questions are generally less reliable than closed-ended questions, which is why they should be used only when the scope of the responses cannot be covered through pre-established options. On the other hand, close ended questions can be answered with "yes" or "no" or have a restricted set of possible answers (i.e., A, B, C, All of the above).

Perhaps the main disadvantage of close ended questions is that they might force respondents to make choices they would not make in the real world; nonetheless, they are time-efficient and statistically easy to analyze (European Telecommunications Standards Institute, 2000). In addition, every questionnaire must include instructions and an explanation of its goal, so that researchers can obtain clearer results. Similarly, before being administered, the instrument must be validated from a series of perspectives such as content validity, internal consistency, and construct validity (Aliaga Tovar, 2006; Faan, Polit, & Beck, 2013; Hernández, Fernández, & Baptista, 2010).

Content validity is usually ensured through a panel of experts who provide their judgments on the construct to be measured. When using a nominal scale, content validity is measured with the Kappa (k) statistic, whereas for ordinal scales, Kendall's coefficient is estimated (Escobar-Pérez & Cuervo-Martínez, 2008). Internal consistency reliability is based on the correlations between different items of the same questionnaire. If the points on a scale measure the same construct, they must feature a high correlation; that is, the scale must feature a high level of homogeneity (Henson, 2001). Internal consistency reliability can also be measured with the Kuder-Richardson Formula 20, for dichotomous scales; the ordinal alpha, for polynomial scales with less than five points; and the Cronbach's alpha (α), for five-point polynomial scales. Typically, any Cronbach's alpha value higher than 0.70 is acceptable (Henson, 2001; Tavakol & Dennick, 2011).

Additionally, according to Streiner (2003), the reliability measured with the Cronbach's alpha is the score of a questionnaire for a particular population, which is why it is not necessary to estimate the reliability of the same questionnaire every time there is a change in the sample. Table 1 shows the level of reliability of six well-known usability assessment questionnaires in their original, English-written versions.

Finally, construct validity is a unifying concept that combines content validity and criterion validity into a common framework to test the appropriateness of inferences made on relationships that are theoretically relevant. In construct validity, factor analysis is usually employed (Hair, Black, Babin, & Anderson, 2014; Pérez Gil, Chacón Moscoso, & Moreno Rodríguez, 2000) to determine the right number of items in a variable and to find out whether such items can measure a given construct. In factor analysis, all the variables fulfill the same role: they are independent as there isn't any *a priori* conceptual dependence between them (De la Fuentes Fernández, 2011; Tabachnick & Fidell, 2001).

Factorial analysis works with factors, which are in actuality an abstract concept, and which represent the weights of each variable. If there are x factors, then it is interpreted that the original instrument can be broken down into x instruments (each composed of all elements) although in each instrument the elements have a different "specific weight," depending on their relationship to the factor. These weights can be large or small and positive or negative. Generally, in each factor there are items with large weights and others with weights close to zero; the items that weigh more in each factor are those that define it.

Within factorial analysis models, there are three main techniques for determining the right number of factors in a study (Brown, 2015; Fabrigar & Wegener, 2011; Hair et al., 2014; Morales Vallejo, 2013):

Table 1. Reliability of usability assessment instruments

Questionnaire	Date	Reliability (Cronbach's alpha)	Latest version	Reference
QUIS	1988	0.98	2016	(Shneiderman et al., 2016)
PUEU	1989	0.94	N/A	
SUMI	1993	0.98	N/A	(Kirakowsky, 2003)
CSUQ	1995	0.89	2012	(Sauro & Lewis, 2012)
PUTQ	1997	0.7	N/A	
SUS	1991	0.85	2011	(Sauro & Lewis, 2011)

N/A: Not Available

Source: Prepared by the authors

1. The most commonly used procedure is the Gutman-Kaiser, where only those factors from the first analysis, before rotations, with an eigenvalue (characteristic root, or variance) greater than 1 are rotated. Because it is operated by typical scores, and the variance of any variable is then equal to the unit, only those factors explaining a greater variance than any other variable are retained in the study. This is a prudent, though very conservative and controversial rule. This procedure tends to yield an excessive number of factors especially in large matrices: between one-third and one-fifth of the number of variables. On the other hand, it is a criterion based on differences that may be very small, for example the difference between a factor with an eigenvalue of 1.01 and a factor with an eigenvalue of 99. Thus, numerous studies show a tendency for this method to overestimate the number of factors.

2. There are several criteria which can be found to reduce the number of factors in a non-arbitrary way, for example eliminating those factors in which none of their variables have a weight greater than 0.30. However, perhaps the most accepted procedure is the Cattell Screen Test, which entails a simple, more intuitive graphical procedure to provide similar results. The corresponding scree graph shows the number of factors or components (on the X-axis, where the number of components must coincide with the number of items) and the eigenvalues or variance explained by each factor (on the Y-axis). The cut-off point for determining the number of factors to be rotated can be determined using the inflection point shown in the eigenvalues graph. Occasionally, this inflection point may not be easily viewed, thus the values to consider should be those where the plot's incline starts to descend. For example, Figure 1 shows a graph where the eigenvalue to be considered can be seen.

3. The third technique is Horn's Parallel Analysis, which is recommended by some journals' editorial policies and supported by several investigations. In this method, it is acceptable to rotate different numbers of factors, compare the results and finally decide on the right number of factors to be used, based on their interpretation and on the context of the research.

Although the design and validation of questionnaires has been continuously used, their usage for usability assessment requires of a more detailed analysis. In the following section some disadvantages related with their limitations for evaluating usability in non-English languages are presented.

Issues, Controversies and Problems

All the aforementioned questionnaires are available in English. However, only the CSUQ, QUIS, SUMI, and SUS are available in other languages such as Spanish.

Additionally, the QUIS and the SUMI are commercial questionnaires, whose availability is constrained as they must be purchased if they are to be administered in any commercial or non-educational context ("How to get the SUMI service," 2017; "Questionnaire For User Interaction Satisfaction," 2017). This restricts its administration in developing countries. As for the Spanish versions of the CSUQ and the SUS, they were validated for Web pages, and experts do not recommend using the same questionnaire to assess the usability of Web pages nor that of computer programs since the end user is not the same.

Another disadvantage of these translated questionnaires is that there is no clear definition of usability used in their development. Thus, developing easy-to-use software is an important endeavor as confusing or complicated computer programs make users feel frustrated and stressed, and increase their mental load (Dalmau Pons, 2008). The best way to avoid such feelings is to ensure software usability by means of questionnaires although they are complex due to the very concept of usability.

According to Harkness & Schoua-Glusberg (1998), the complexity of questionnaires impacts their translation. Because different findings are obtained for different research purposes, translated questionnaires must be able to ask the same questions and provide the same options as the original questionnaire in the source language. The main reason for translating a research questionnaire is to field an instrument not available in the language required for fielding (Harkness & Schoua-Glusberg, 1998). However, translating a questionnaire is not merely a mechanical change of words (Banville, Desrosiers, & Genet-Volet, 2000); it is a comprehensive task of rebuilding, modifying, or adapting each questionnaire item. A high-quality translation takes into account and incorporates the social, cultural, and linguistic elements of the target language to match the respondents' experience and guarantee the quality of the data (Pan & Fond, 2014).

Questionnaire-translation processes can vary. For instance, as Pan and Found (2014) describe, the United States Government first develops a questionnaire in a source language, typically in English. Then, it translates the questionnaire into several target languages, such as Spanish. From a different perspective, the European Social Survey considers cross-linguistic and cross-cultural aspects since the planning stage and incorporates drafts of translations before the source questionnaire is even completed. Machine translation (i.e., the use of automated translation tools) can also be used in the translation process, yet it provides word-for-word or literal translations. Since machines cannot translate context, automated translations usually fail to convey the sense of the original message and thus provide low levels of accuracy of response. As a consequence, questionnaires in the target language can be confusing, incongruent, or even unintelligible. Therefore, to ensure high-quality translations, it is more convenient to rely on professional translators.

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It could be assumed that having staff in bilingual companies would provide better support when creating evaluation elements or any kind that should be translated, whether of usability or any other kind, since they would know the original material and the translated version as well as the operation of the company. However, it has been stated in various publications that although compared to monolinguals they show a higher cognitive capacity, bilingual people have a lower linguistic ability (Bialystok, 2009; Mindt et al., 2008; Pelham & Abrams, 2013); thus, they are not the most suitable agents to perform this task since, as mentioned above, the translation of questionnaires entails more than just translating words. Nonetheless, including bilingual people in the validation stage can be beneficial because their cognitive skills are more developed, and they can help to find possible omissions or defects in the process.

This research proposes a methodology for developing and validating a usability assessment questionnaire for computer programs. The questionnaire is named CEUPC (the Spanish acronym for computer program usability assessment questionnaire) and relies on the concepts defined by ISO 9241-11:1998 since many of the usability assessment questionnaires in Spanish make use of other usability concepts. In addition, the questionnaire developed in Spanish was translated into English following an established methodology. The methodology here proposed can be applied in any other context to develop other types of usability assessment questionnaires in other languages. In this sense, the methodology represents a successful strategy for software improvement.

METHODOLOGY

The methodology proposed to develop the CEUPC comprises the following stages: questionnaire design, source language questionnaire validation, questionnaire translation, target language questionnaire validation and the requirements of field implementation. These stages are depicted in Figure 1.

Design of the CEUPC

This stage involved formulating the questionnaire questions in the source language. The CEUPC (in Spanish Cuestionario de Evaluación de Usabilidad de Programas de Computadora) has two sections: demographic information and usability assessment. The demographic section was designed to help us characterize the sample and understand which factors, such as gender, age, and user experience, can influence the participants' responses. On the other hand, the usability assessment section

Figure 1. Research methodology
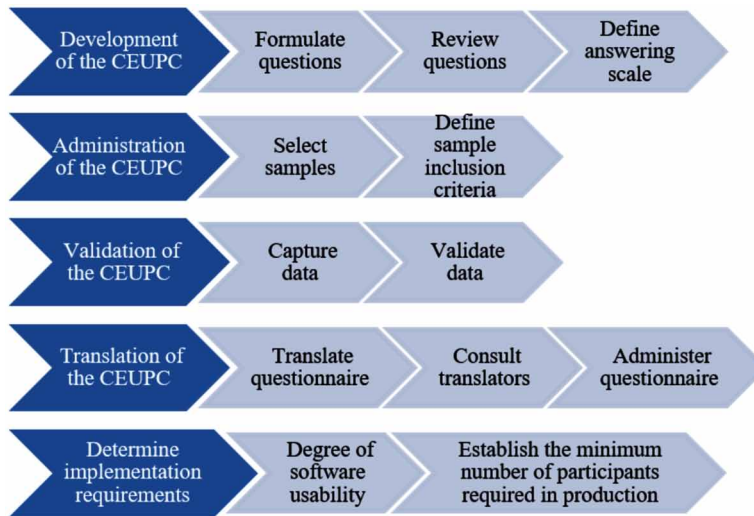
was designed to measure the level of effectiveness, efficiency, and satisfaction of computer programs.

Once formulated, the questions from each section were reviewed by an expert panel composed of ergonomists and usability experts and researchers. The panel assessed the items in terms of clarity, coherence, and relevance. Then, a Kendall's coefficient with α=0.05 was estimated to determine the significance of each item. Finally, the CEUPC includes the following five-point Likert scale: Never = 1, Rarely = 2, Sometimes = 3, Usually = 4, and Always = 5. Likert scales are largely employed in research questionnaires as they are easy to use and design (Hernández et al., 2010).

Administration of the CEUPC

To determine how many samples were necessary to validate the CEUPC, the study resorted to convenience sampling (Faan et al., 2013), and the number of participants was restricted to 50. Although 20 participants are usually enough for usability studies (Alroobaea & Mayhew, 2014), any factor analysis requires at least 50 participants (Hair et al., 2014). All participants having used the computer program before and with enough experience in the use of computers were included.

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Validity of the CEUPC

The validation of the questionnaire comprised three stages: data uploading, screening, and validation. The data collected with the CEUPC was uploaded onto SPSS 20, a statistical program used to analyze data and run statistical tests. Then the database was screened to detect errors. Any missing values were replaced by the median value if they did not exceed 10% of the total values in each administered questionnaire (Hair et al., 2014). We also analyzed those questionnaires with a standard deviation of 0, due to their small contribution to the variance (García, Maldonado, Alvarado, & Rivera, 2014).

To measure the reliability of the CEUPC, the Cronbach's alpha was estimated for each dimension, setting 0.70 as the minimum acceptable value. A factor analysis was also performed to measure construct validity (Morales Vallejo, 2013). To determine the feasibility of factor analysis, both the Bartlett's sphericity test and the Kaiser-Meyer-Olkin (KMO) test were performed, setting 0.05 as the minimum acceptable value (Hair et al., 2014). Next, the screen test was conducted to determine the number of factors to retain in the factor analysis. Finally, once the number of factors was decided on, a Varimax rotation was used to remove all the items that did not seem to belong. One of the advantages of the Varimax rotation is that it maximizes the sum of the variances of the squared loadings. In this research, in the rotated component matrix, those items with a loading value lower than 0.4 were removed (Hair et al., 2014).

Translation of CEUPC: The CPUAQ

The CEUPC was initially designed and validated in Spanish. At this stage of the methodology, a first translation of the questionnaire into the English language was carried out by the "direct translation" method (Harkness & Schoua-Glusberg, 1998), using an expert translator. The English version of the CEUPC was named CPUAQ, which stands for Computer Program Usability Assessment Questionnaire. The CPUAQ draft was administered to some participants with linguistic as well as communicative competence in both English and Spanish (Bilinguals). The participants compared both versions to assess their consistency and the quality of the translation. The collected feedback was used to correct the draft questionnaire and compose a final translated version of the CEUPC; that is, a final version of the CPUAQ. The reliability of the CPUAQ was also measured with the Cronbach's alpha index.

Implementation Criteria

This stage involved determining the usability scale, based on the score obtained, from the Likert-scale used to answer the questionnaire. To find the appropriate sample size for the questionnaire, in a production environment, two computer programs with different degrees of usability were assessed: Microsoft Excel 2013 © and AutoCAD 2012 © The total sample was randomly divided into five subsamples: sample size of 5, sample size of 10, sample size of 15, sample size of 20, and sample size of 25. Then, a series of t-tests were conducted to determine the right sample size.

RESULTS

Design of CEUPC

Five domain experts participated in the content validation of the CEUPC. All of them have a PhD degree, four are ergonomists, and three are members of Mexico's National Research System (SNI for its Spanish acronym). Similarly, most of them have participated in national and international conferences on ergonomics. Initially, 34 questions were formulated for the second section of the questionnaire, taking as basis the definition of usability provided by ISO 9241-11. Namely, 12 questions were initially formulated for the section of efficiency, 12 for effectiveness, and 10 for satisfaction. The experts rated the items in terms of clarity, coherence, and relevance and assigned them a value on a scale from 0 to 4. Those items with the highest average score remained in the questionnaire, whereas the others were removed. In the end, only eight questions were necessary for measuring efficiency, eight questions for effectiveness, and six for satisfaction. These questions can be consulted in Appendix 1.

Table 2 shows the overall score of the CEUPC in terms of clarity, coherence, and relevance. As can be observed, the highest Kendall's coefficient was obtained in the aspect of clarity, which is then followed by coherence, and lastly by relevance. In terms of significance, clarity shows a value of 0.040, coherence a value of 0.031, and relevance a value of 0.007. Such estimations prove that the 22 items in the CEUPC draft are clear, coherent, and relevant enough. Also, the fact that the three evaluation aspects showed high Kendall's coefficient values suggests that the domain experts had similar assessment criteria.

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Table 2. Kendall's coefficients obtained from the expert panel

Section	Kendall's coefficient	Significance
Clarity	0.820	0.040
Coherence	0.728	0.031
Relevance	0.881	0.007

Source: Prepared by the authors

Administration of the CEUPC

To measure its validity, the CEUPC was administered in two colleges located in Ciudad Juárez, Chihuahua. The sample's characteristics can be discussed as follows: 95% of the sample comprised volunteer participants; 60% were men and 40% women; 18.9% were highly experienced users, 69.5% were moderately experienced users, and 11.6% were little experienced users. Likewise, 21.1% of the sample reported having some experience with similar computer programs, while 78.9% reported they did not know other software programs similar to those being assessed. Finally, 90.5% of the sample included undergraduate students; 88.4% were 19-25 years old, and 3.2% were 36 years old or older.

Validity of the CEUPC

The collected data were processed and validated using IBM SPSS© v.24 which is a statistical program widely used in statistical analyses. To measure the reliability of the CEUPC, we estimated the Cronbach's alpha (α). The overall reliability of the questionnaire had a value of $\alpha=0.843$, which according to Streiner (2003), is an acceptable value. However, when the usability attributes were measured individually, their level of reliability decreased, especially because some items were removed from them. As shown in Table 3, satisfaction showed a Cronbach's alpha value lower than 0.7. That said, none of the six items from this variable were removed since the experts had assigned them high scores, which means all of them are important in measuring satisfaction as a usability attribute.

As Table 4 reveals, the CEUPC has lower reliability if compared with other usability assessment questionnaires available in Spanish, yet according to experts, a Cronbach's alpha value around 0.8 is usually desired, otherwise the coefficient would suggest item redundancy or duplicity (Celina Oviedo & Campo Arias, 2005; Streiner, 2003). Table 5 shows the Cronbach's alpha value of the questionnaire, and thus its reliability value, if one of the 22 items is removed.

Table 3. Validity and significance of usability attributes

	Number of items	**Cronbach's alpha**	**Experts' weight**
Effectiveness	8	0.712	3.67
Efficiency	8	0.745	3.65
Satisfaction	6	0.526	3.44

Source: Prepared by the authors

Table 4. Reliability of usability assessment questionnaires in Spanish

Questionnaire	**Cronbach's alpha**	**Reference**
QUIS	0.98	("QUIS," 2016)
SUMI	0.98	(Kirakowsky, 2003)
CSUQ	0.96	(Aguilar, González, Miranda, & Villegas, 2015)
SUS	0.92	(Aguilar & Villegas, 2016)

Source: Prepared by the authors

The results of Bartlett's sphericity test and the KMO test confirmed the feasibility of factor analysis since KMO=0.757, and the critical value of Bartlett's sphericity test was 0.000. According to the scree plot presented in Figure 2, the inflection point is on component 3. Next, a Varimax rotation was performed.

The rotated component matrix obtained with the Varimax rotation can be consulted in Table 6. Item 22.c notated in bold style was removed since its loading value was lower than 0.4.

Once item 22.c was removed, a new rotated matrix component was created (see Appendix 2). In this matrix, only item 6.a had a loading value lower than 0.4 and was thus removed. In the third rotated matrix component (see Table 7) developed next, all the items showed loading values higher than 0.4. In conclusion, the reliability of the questionnaire as measured by the Cronbach's alpha increased up to 0.839 after two items – item 22.c and item 6.a – were removed. The final number of items selected for the CEUPC can be consulted in Appendix 3.

Translation of the CEUPC: The CPUAQ

Having received the feedback from the bilingual participants, the validity of the CPUAQ (i.e. the English translated version of the CEUPC) was measured with the Cronbach's alpha after being administered to 32 participants. The CPUAQ showed lower validity than the CEUPC, namely $\alpha = 0.78$, yet the value is acceptable since it

Table 5. Reliability after removing items

Item	Cronbach's alpha without item
1.a	0.837
2.a	0.838
3.a	0.83
4.a	0.838
5.a	0.835
6.a	0.835
7.a	0.835
8.a	0.839
9.b	0.838
10.b	0.838
11.b	0.838
12.b	0.832
13.b	0.833
14.b	0.833
15.b	0.833
16.b	0.833
17.c	0.841
18.c	0.839
19.c	0.841
20.c	0.84
21.c	0.838
22.c	0.847

Source: Prepared by the authors

is higher than 0.70. We did not perform any factor analysis on the CPUAQ since we did not have the minimum samples required (50). Moreover, a factor analysis had already been performed on the CEUPC, in addition, usability experts' comments expressed that the size of the questionnaire was considered adequate, so a new factor analysis was discarded.

Implementation Criteria

To determine the degree of usability of the programs evaluated with this questionnaire, taking into account that the maximum score to be obtained when weighting the Likert scale is 100, and based on the opinion of usability experts, a usability scale of 6 levels was established, as shown in Table 8.

Figure 2. Scree plot where inflection points can be appreciated
Source: Prepared by the authors
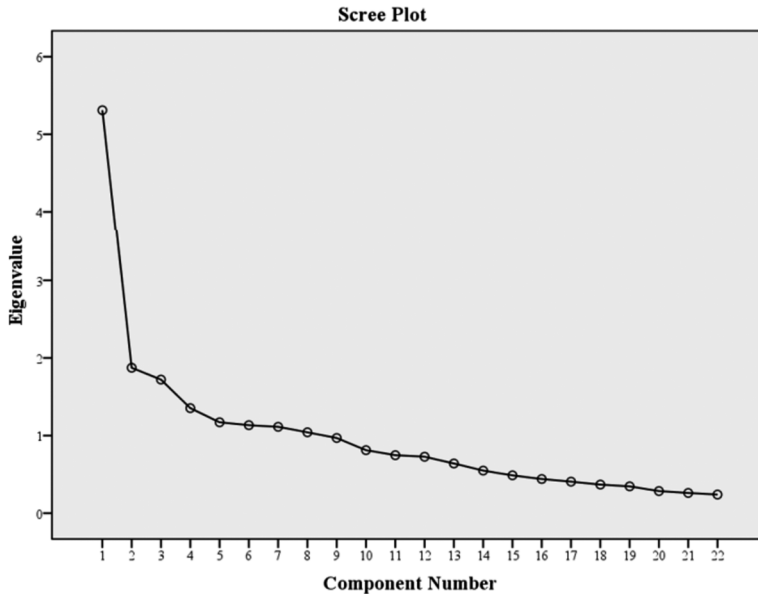
To validate the proposed scale, two different programs were evaluated, each with a different level of usability; both programs are available at the computer labs of the two colleges where the CEUPC was administered. The sample included 38 respondents, who assessed the usability of Microsoft Excel 2013©, and 35 participants, who assessed the usability of AutoCAD 2012©, for total of 73 different participants. Once the data were collected, the reliability of each administered survey was measured through the Cronbach's alpha method. The surveys reported acceptable reliability values. The Microsoft Excel 2013© questionnaire showed a Cronbach's alpha value of $\alpha=0.784$, whereas the AutoCAD 2012© questionnaire showed this same index with a value of $\alpha=0.822$. As for the degree of usability, Microsoft Excel 2013© showed an overall usability score of 87.37%, while AutoCAD 2012© reported an overall usability score of 87.37%. According to the CPUAQ's usability scale shown in Table 8, Microsoft Excel 2013© reported a high level of usability, and AutoCAD 2012© reported a good level of usability. After conducting a series of t-tests and finding a significance value of 0.000, which is lower than $\alpha=0.05$, a significant difference in usability between Microsoft Excel 2013© and AutoCAD 2012© was confirmed.

Finally, to determine whether the number of samples was adequate, 10 samples were selected. Upon selecting them randomly (i.e. samples of size 5, size 10, size 15, size 20, and size 25), a series of t-tests were performed to compare the usability

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Table 6. Rotated component matrix

Item	Component		
	1	**2**	**3**
1.a	0.487	0.148	0.077
2.a	0.578	-0.098	0.23
3.a	0.507	0.411	0.135
4.a	0.13	0.57	0.111
5.a	0.418	0.046	0.591
6.a	0.442	0.171	0.27
7.a	0.549	0.407	-0.253
8.a	0.34	0.008	0.464
9.b	0.123	0.491	0.211
10.b	0.151	0.483	0.185
11.b	0.03	0.691	0.079
12.b	0.44	0.438	0.112
13.b	0.78	-0.018	0.074
14.b	0.587	0.063	0.322
15.b	0.689	0.224	-0.137
16.b	0.612	0.152	0.07
17.c	-0.034	0.647	0.007
18.c	0.136	0.459	0.184
19.c	0.336	0.456	-0.385
20.c	-0.02	0.322	0.632
21.c	0.196	0.154	0.626
22.c	-0.03	0.157	0.372

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 6 iterations.Source: Prepared by the authors

measures of the two computer programs and determine whether there was a significant difference. A graph was built to determine how many times this happened. The results are introduced in Figure 3, whereas the P-values of the tests can be consulted in Appendix 4. As can be observed, by using only 5 questionnaires, there is 20% of probability of reaching the correct conclusion; that is, AutoCAD 2012© has lower usability than Microsoft Excel 2013©. The percentage of probability increases as the number of samples increases as well. Therefore, it is concluded that to conduct a computer program usability study in a production environment, with the questionnaire developed by this work, the minimum number of required samples is 20.

Table 7. Rotated component matrix

Item	Component		
	1	**2**	**3**
1.a	0.499	0.132	0.111
2.a	0.524	-0.087	0.304
3.a	0.492	0.412	0.163
4.a	0.111	0.589	0.098
5.a	0.313	0.099	0.669
7.a	0.586	0.37	-0.164
8.a	0.263	0.043	0.506
9.b	0.1	0.51	0.19
10.b	0.161	0.488	0.168
11.b	0.066	0.684	0.023
12.b	0.452	0.429	0.147
13.b	0.762	-0.038	0.225
14.b	0.55	0.066	0.42
15.b	0.717	0.179	-0.066
16.b	0.61	0.132	0.137
17.c	0.017	0.634	-0.083
18.c	0.108	0.483	0.175
19.c	0.409	0.406	-0.383
20.c	-0.116	0.394	0.573
21.c	0.096	0.217	0.67

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 7 iterations.
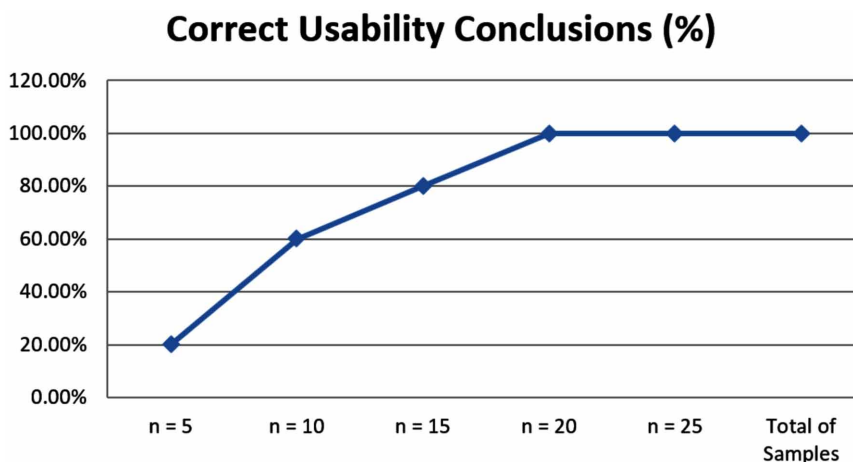Source: Prepared by the authors

Table 8. Usability scale with CEUPC and CPUAQ

Percentage	Usability level
0-50	Not acceptable
51-60	Low
61-70	Medium
71-80	Good
81-90	High
91-100	Excellent

Source: Prepared by the authors

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Figure 3. Percentage of correct conclusions
Source: Prepared by the authors

CONCLUSION AND RECOMMENDATIONS

This research develops a bilingual questionnaire for computer program usability assessment. The questionnaire shows an overall reliability score of 0.843, as measured by the Cronbach's alpha. In order to improve this score, the questionnaire should be extended, especially for the attribute of satisfaction, whose reliability was the lowest. Similarly, it is important to validate the questionnaire in other domains, where experts can also reassess the clarity, coherence, and relevance of the questions to improve their suitability. Even though our findings demonstrate that both, the original language questionnaire – CEUPC – and the target language questionnaire – CPUAQ – have appropriate reliability, other computer programs should be assessed to increase the overall reliability of the instrument.

Using bilingual people during the process of validating the English version of this questionnaire proved to be very useful as they had access to both versions of the questionnaire, thus being able to provide several points of view that helped to obtain the final English version.

The main contribution of this research is the development of a bilingual computer program usability assessment questionnaire as an attempt to address the little availability of usability assessment questionnaires in other languages but English. Both questionnaires (CEUPC and CPUAQ) has already been used for computer program development. Its administration both at the beginning and at the end of the computer program development phases has helped increase the level of usability

of the assessed programs, as it has helped to identify elements of the programs that could be improved, generating an increase in their users' performance. Even though the questionnaire was initially developed in Spanish, this has not been a limiting factor in the development of English programs.

FUTURE RESEARCH DIRECTIONS

Developing bilingual or multilingual usability assessment questionnaires is a challenging endeavor, yet it must be a priority in the software development domain. Developers and marketers provide websites, applications, and computer programs in various languages to penetrate local markets. As a result, the use of multilingual usability assessment tools is increasing exponentially.

This study did not find the translation of items difficult primarily because it was carried out in the city of Ciudad Juarez, Chihuahua, Mexico a border with El Paso, Texas, US, where it is common to find bilingual people, yet in other contexts requiring translation/validation and where only a minority speak the target language, it is recommendable to look for support from institutions working with such minority groups.

Some authors argue that the role of translators and language experts in the development of multilingual assessment instruments will decrease over time (Sanz Villa, 2015), mainly because current automated translation tools, enhanced by artificial intelligence techniques, are becoming increasingly accurate in their translations. For instance, Google's neuronal network has demonstrated a greater comprehension of the language, especially in the domains of Physics and Politics (Aslerasouli & Abbasian, 2015), thereby leaving transliteration behind and focusing more on understanding meaning.

Despite the increase in the use of automated translation tools, it must be kept in mind that the validation of the different evaluation or data-collection tools will remain an endeavor of utmost importance. The appearance of new tools does not exempt the researcher from conducting the due statistical validation of the data collected.

CONCLUSION

The extensive use of our questionnaire at the computer program development stage, especially for those programs developed in Spanish and English, can increase software usability and decrease software errors and user frustration. Similarly, the

questionnaire allows developers to streamline and improve program development tasks since the training process is shorter. As for users, the questionnaire proposed in this research contributes to their wellbeing by reducing the stress caused by the use of poorly usable computer programs.

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KEY TERMS AND DEFINITIONS

Assessment: The process of making a judgement after appreciating or calculating the importance of a given thing or matter.

Bilingualism: A person's ability to use two languages indistinctly, whether native or acquired.

Cognitive: Related to knowledge acquisition, processing, and storage of information, available thanks to a learning process or experience.

Computer Programs: Normally includes several elements. For the purposes of this work, only the elements that interact with the user are considered, mainly the user interface where the information is displayed.

Questionnaire: A set of questions, or items, designed to obtain information for a specific purpose. There are numerous of styles and formats of questionnaires, according to a specific purpose.

Software: A set of computer programs, instructions and rules that allow you to perform different tasks on a computer.

Software Engineering: A discipline formed by a set of methods, tools, and techniques that are used in the development of software.

Translating: The action and effect of expressing in one language something that has been previously expressed or written in another language.

Usability: Relates to the product or software characteristic that deals with the easiness of use in order to achieve a certain objective.

Validation: The action and effect of turning something into something valid, giving it strength or determination.

APPENDIX 1

Table 9. Items in the draft version approved by the experts of the CEUPC (In Spanish)

a. Efectividad	
1.a	El programa es fácil de aprender a usar.
2.a	Los elementos mostrados en la interfaz de usuario de este programa son los necesarios para su uso.
3.a	El programa presenta una consistencia visual de todos los elementos mostrados.
4.a	En este programa es fácil cambiar de operación.
5.a	La ayuda proporcionada por este programa contiene información relevante.
6.a	Los elementos de la interfaz de usuario de este programa son los necesarios para su correcto funcionamiento.
7.a	El programa presenta una opción de ayuda.
8.a	El programa proporciona un nivel suficiente de información para su correcto uso.
b. Eficiencia	
9.b	Obtener los resultados adecuados por medio de este programa es fácil.
10.b	Por medio de este programa se obtienen los resultados en forma más rápida que usando algún programa alternativo.
11.b	El programa presenta los mismos resultados con base en los mismos datos.
12.b	Sólo se debe de introducir la información una sola vez para obtener los resultados.
13.b	El programa presenta de forma clara si se presenta un error.
14.b	El programa presenta la opción de cancelar la ejecución actual.
15.b	Es posible volver al estado anterior durante el uso del programa.
16.b	El programa proporciona información del proceso actual.
c. Satisfacción	
17.c	Usted recomendaría el uso de este programa.
18.c	Usted frecuentemente muestra satisfacción con el programa.
19.c	El programa funciona de forma adecuada.
20.c	La interfaz de usuario de este programa es agradable.
21.c	El programa estimula su uso prolongado.
22.c	El programa presenta una forma atractiva de trabajar.

Source: Prepared by the authors

APPENDIX 2

Table 10. Rotated component matrix

Item	Component		
	1	**2**	**3**
1.a	0.493	0.126	0.12
2.a	0.523	-0.102	0.334
3.a	0.492	0.402	0.198
4.a	0.114	0.583	0.13
5.a	0.303	0.081	0.667
6.a	0.377	0.183	0.361
7.a	0.585	0.374	-0.153
8.a	0.26	0.03	0.509
9.b	0.102	0.506	0.208
10.b	0.151	0.486	0.16
11.b	0.063	0.689	0.017
12.b	0.442	0.425	0.146
13.b	0.754	-0.041	0.21
14.b	0.538	0.06	0.395
15.b	0.724	0.181	-0.048
16.b	0.609	0.128	0.146
17.c	0.017	0.637	-0.072
18.c	0.109	0.475	0.198
19.c	0.417	0.413	-0.349
20.c	-0.118	0.373	0.606
21.c	0.083	0.201	0.658

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 8 iterations.
Source: Prepared by the authors

APPENDIX 3

Table 11. Questions of the final version of CPUAQ, in this version, the items 6.a and 22.c where removed

	a. Effectiveness
1.a	The program is easy to use.
2.a	All the elements showed in the program's user interface are necessary.
3.a	All the elements are visually consistent.
4.a	It is easy to switch from one operation to another.
5.a	The Help tool contains relevant information.
7.a	The program presents a Help option.
8.a	The program provides enough information for its correct use.
	b. Efficiency
9.b	It is easy to obtain the right results with this program.
10.b	The program calculates the results faster if compared to alternative programs.
11.b	The program displays the same results based on the same data.
12.b	To obtain the results, you only have to enter the information once.
13.b	The program clearly shows if an error occurs.
14.b	The program allows you to cancel the current execution.
15.b	The program allows you to return to the previous state.
16.b	The program provides information on the current process.
	c. Satisfaction
17.c	You would recommend the program.
18.c	You often feel satisfied with the program.
19.c	The program works well.
20.c	The program's user interface is nice.
21.c	The program encourages prolonged use.

APPENDIX 4

P-values obtained in the t-test.

Table 12. Samples of size 5

Sample number	P-Value
1	0.276
2	0.425
3	0.013
4	0.056
5	0.151
6	0.205
7	0.012
8	0.151
9	0.07
10	0.349

Source: Prepared by the authors

Table 13. Samples of size 10

Sample number	P-Value
1	0.152
2	0
3	0.015
4	0.008
5	0.007
6	0.105
7	0.064
8	0.143
9	0.004
10	0.023

Source: Prepared by the authors

Table 14. Samples of size 15

Sample number	P-Value
1	0.033
2	0.001
3	0.004
4	0.003
5	0.085
6	0.012
7	0
8	0.008
9	0.094
10	0.002

Source: Prepared by the authors

Table 15. Samples of size 20

Sample number	P-Value
1	0.039
2	0.019
3	0.049
4	0.01
5	0.046
6	0.02
7	0.009
8	0.016
9	0.026
10	0.023

Source: Prepared by the authors

Table 16. Samples of size 25

Sample number	P-Value
1	0.024
2	0.028
3	0.016
4	0.041
5	0.041
6	0.029
7	0.038
8	0.005
9	0.017
10	0.039

Source: Prepared by the authors

Chapter 8
Multilingualism in International Business

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ABSTRACT

Language situations vary in different nations. In some countries, a variety of languages are spoken; in others, a single language is used. People who have the linguistic competence to speak several languages are multilingual. What role does multilingualism play in multinational corporations? Is multilingualism a problem or a solution for international business? Does English as a lingua franca play a role in international business? How business leaders react to multilingualism or Englishization? Opinions are divided. Multilingualism has been the focus of interest in recent decades due to globalization, tourism, technology advancement, international trade, and so forth. Language barriers and linguistic diversity surfaced which may impact corporate communications in international business. Specific language policies might be needed for corporate communications. The aims of this chapter are to explore the roles of multilingualism and Englishization in international business, and to seek approaches for better corporate communications. Associated issues and problems as well as solutions and recommendations will be explored and discussed.

INTRODUCTION

Psycholinguistics is the study of language processing and mental representations in perception, comprehension, acquisition, storage, and production of language. Over the decades, many psycholinguists have devoted efforts to understand how various aspects of linguistic processing work together and how language is done in

listening, speaking, reading, and writing. Thus, language processing was illustrated by a psycholinguistics model to include phonological processing, lexical access, syntactic parsing, representation pruning, and conscious interpretation (O'Grady, Dobrovolsky, & Aronoff, 1997). Since psycholinguistics involves the study of the relationships between linguistic behavior and language processing, it can be applied to many fields of language study. In examining languages in social contexts, multilingualism surfaced as one of the interesting fields for exploration.

Multilingualism is "the use of three or more languages by an individual or by a group of speakers such as the inhabitants of a particular region or a nation" (Richards, Platt, & Platt, 1998, p. 299). For example, Leo Apotheker (former German CEO at SAP and Hewlett Packard) can speak German, Dutch, French, English and Hebrew; Paul Bulcke (CEO of Nestle) can speak Dutch, French, English, Spanish, Portuguese, German; and Tidjane Thiam (Chief Executive of Credit Suisse) can speak French, German and English (Shoshan, 2015). According to Forbes news, though inconclusive, people who can speak more than one language have more job opportunities, can do better work, can work more efficiently, and are better multitaskers (Money Builder, 2012). Three benefits of being multilingual (i.e., more business opportunities, better customer service, and understanding different cultures leading to international business) were proposed for international business careers by New Jersey Institute of Technology (NJIT, 2017).

The importance of multilingualism has been exemplified by many researchers. For instance, Gunnarsson (2013) described that,

In today's economy, it is not only managers and elite staff who need to be linguistically flexible. Factory floor workers come in contact with different languages during the workday. They have to be prepared to interact with group leaders and fellow workers with a different linguistic background than they have themselves. (p.162)

The staff who are multilingual has a direct impact on its success with winning international work (The Guardian, 2014). Levy (2015) identified three reasons people need to have a multilingual international marketing strategy: (a) over 50% of Google search results are sent to people outside of the U.S.; (b) customers respond more favorably to content in their own native languages; (c) it avoids misunderstanding of the messages. "It cannot be denied that a multilingual approach could increase a company's chances of findings new markets" and "a multilingual company has a competitive advantage when selling its products and services" (Pierini, 2016, p.50). On the contrary, "the UK economy is already losing around £50bn a year in lost contracts because of lack of language skills in the workplace, says Baroness Coussins" (The Guardian, 2014, para. 1), and the languages most in demand in Wolfestone are

German, French, Arabic, Spanish, and Mandarin Chinese (The Guardian, 2014). In a word, multilingualism, globalization, and international business are all related.

Multilingualism and transnationalism are closely tied to globalization, which has an impact on policies related to citizenship, education, language assessment, applied linguistics, and society (Duff, 2015). Languages, such as English, Chinese, French, Spanish, and hundreds of others are transnational, and are used as *lingua franca*, national majority or minority languages, and colonial heritage languages (Duff, 2015). In fact, global businesses are finding new ways to penetrate local markets in the indigenous language instead of using English an international *lingua franca* (Pierini, 2016). It is apparent that people all over the world have a better understanding of the complexity of the roles that language and culture play in the international business nowadays. Stein-Smith (2016) believed that,

In order to foster and encourage global citizenship and a sustainable world, society needs to view multilingualism as normal and desirable, and government, educators, and the private sector need to work together to develop the learning opportunities, accessible to all, and the curricula to make multilingualism a reality. (p. 2258)

In this chapter, the roles of multilingualism as well as English as a *lingua franca* in international business will be examined in further detail, and strategies for better corporate communications will be explored.

BACKGROUND

With the advancement of technology, people can communicate with others all over the world at any time. Buyers and sellers could make a deal online efficiently. What languages do they use to complete their transaction? What is the current status of multilingualism in the business world? Lew (2014) indicated that the top nine most multilingual countries in the world were Aruba, Luxembourg, Singapore, Malaysia, South Africa, Mauritius, India, Suriname, and East Timor. The United States, Australia, United Kingdom, and Canada are listed as the least multilingual countries in the world (Celebrating International Mother Language Day, 2015). In fact, English is an official language in 32 of the 50 states (Central Intelligence Agency, 2017). A total of 75% of all Americans are monolingual in English (Lew, 2014).

Though the U.S. is not the most multilingual country, language diversity is significant. Based on the World Factbook of the Central Intelligence Agency (2017), the languages used at home in the U.S. include English (79%), Spanish (13%), other Indo-European (3.7%), Asian and Pacific island (3.4%), and other (1%). The top

10 multilingual states in the USA are California, Texas, New Mexico, New York, New Jersey, Nevada, Florida, Arizona, Hawaii, and Illinois and Massachusetts (tie) (Accredited Language, 2016). In California, English, Spanish, Chinese, Korean, Vietnamese, Arabic, Armenian, and Tagalog contribute to the language diversity (Accredited Language, 2016).

English is a global language. Based on Statista (2018), languages with most speakers worldwide are (1) English with 1,500 million speakers (of whom 375 million are native speakers); (2) Chinese with 1,100 million speakers (982 million native speakers); (3) Hindi with 650 million speakers (460 million native speakers); (4) Spanish with 420 million speakers (330 native speakers); and so forth. Additionally, the top-ten most common languages used on the Internet as of June, 2017 were: English (25.3%), Chinese (19.8%), Spanish (8%), Arabic (4.8%), Portuguese (4.1%), Malaysian (4.1%), Japanese (3%), Russian (2.8%), French (2.8%), and German (2.2%). The top 10 languages in higher demand for business in 2017 were: English, Chinese, Spanish, Arabic, German, Portuguese, Russian, French, Japanese, and Hindi (Pimentel, 2017). In other words, English has surpassed other languages to be the most popular and the most used language in the world.

The issue is whether one language fits all or multilingual model serves better. It seems that multilingualism has a positive impact on social and cultural composition of the USA. As Cui and Cui (2015) indicated, "multilingualism contributes to higher education and social expression while monolingualism depresses cultural identification" (p. 889). Yanaprasart (2016) stated that "one language fits all could impoverish innovation and creativity, leading to business monoculture and standardized patterns of thinking. A multilingual model in action affords a plurality of perspectives and ensures that objects and phenomena are seen through different prisms" (p.91).

Should people promote multilingualism for doing international business? What problems exist if people all over the world do the business in English language or their own foreign languages? What challenges do businessmen who are multilingual encounter? What language policies are appropriate for multinational companies? These inquiries will be the focus of the chapter. In the following, research studies on multilingualism and Englishization in international business will be reviewed.

LITERATURE REVIEW

Multilingualism has been an interesting research topic for more than two decades. Over the years, many researchers have investigated how multilingualism works in various fields. Some researchers explored the definitions of multilingualism (e.g., Cenoz, 2013; Duff, 2015), the roles of multilingualism (Hogan-Brun, 2017;

Mujtaba, Cavico, & Muffler, 2012; Stein-Smith, 2016), the effects of multilingualism (e.g., Alsheqeeti & Alsaedi, 2012; Kroll & Dussias, 2017; Paradowski, 2010; Spătaru-negură, 2016; Wong, 1969), multilingualism and the brain (Higby, Kim, & Obler, 2013), multilingualism and tourism (Heller, Jaworski, & Thurlow, 2014), multilingualism and consumer dispositions (Cleveland, Laroche, & Papadopoulos, 2014), and multilingualism in the workplace (e.g., Aichhorn & Puck, 2017; Gunnarsson, 2013).

Others have examined English as *lingua franca* (e.g., Boussebaa & Brown, 2017; Ehrenreich, 2010; House, 2003, 2014), corporate language (e.g., Fredriksson, Barner-Rasmussen, & Piekkari, 2006; Marschan-Piekkari, Welch, & Welch, 1999; Simonsen, 2009; Zaharia & Lolescu, 2009), corporate communications (e.g., Malmelin, 2007; Sanden, 2016), language barriers (e.g., Gardner-Chloros & Weston, 2015; Lohmann, 2010), language diversity (e.g., Aichhorn & Puck, 2017; Gaibrois & Steyaert, 2017; Mujtana, Cavico, & Muffler, 2012; Piekkari, Oxelheim, & RandØy, 2015; Yanaprasart, 2016), language management (e.g., Feely & Harzing, 2003; Tange & Lauring, 2009), language and bilateral trade (Melitz & Toubal, 2014), and language policies in multinational companies (e.g., Lønsmann, 2017). The aforementioned plethoric research has demonstrated the significance of multilingualism in varied nations all over the world.

Definitions

Experts in Linguistics have identified major key terms in the field. In *Language Files*, multilingual is defined as "the state of commanding three or more languages" or "having linguistic competence in three or more languages" (Bergmann, Hall, & Ross, 2007, p. 663). Bhatia (2017) stated that bilingualism and multilingualism contributed to the study or production, processing, and comprehension of two and more than two languages respectively; however, the term 'bilingualism' is used to cover both bilingualism and multilingualism in colloquial usage. "A situation in which communities of speakers share two or more languages and use them in everyday life" was called societal multilingualism (Bergmann, Hall, & Ross, 2007, p.463).

Englishization is defined as "making use of the English language as a *lingua franca* and converting material in the local language into English in an international corporation or other organization" (Definitions.net, 2018). Steyaert, Ostendorp, and Gaibrois (2011) coined the term "linguascape" (i.e., linguistic landscapes) "to conceptualize how the flow of language that cross a specific organizational space is discursively mediated" (p. 270).

Perspectives of Multilingualism

Most researchers viewed multilingualism from different perspectives. Alshenqeeti and Alsaedi (2012) stated that "multilingualism is not only a reflection of linguistic behavior of individuals, but also a linguistic behavior of many speech communities and societies around the world" (p. 66). Cenoz (2013) described that multilingualism is a complex phenomenon and can be studied from different perspectives in disciplines (e.g., education, linguistics, psycholinguistics, sociolinguistics). In general, several factors have contributed to the visibility of multilingualism, for example, globalization, transnational mobility of the population, and spread of new technologies (Cenoz, 2013).

There were six discursive practices to account for language use, including (1) adaptation to the viable language of a certain location, (2) adaptation to the language of the other (interlocutor), (3) collective negotiation of a common language, (4) languages can be used simultaneously, (5) finding a compromise through a third language, and (6) improvisation (improvise and actively mix several languages) (Steyaert, Ostendorp, & Gaibrois, 2011). It is a continuing process of negotiation where tensions among various discursive practices are reconfigured and specific languages are chosen (Steyaert, Ostendorp, & Gaibrois, 2011).

From the perspective of neurolinguistics, Higby, Kim, and Obler (2013) found that bilinguals or multilinguals demonstrated longer response time in verbal fluency tasks and semantic decision tasks; thus, cross-language interference is a possible disadvantage for multilingualism. Higby, Kim, and Obler (2013) further pointed out that multilinguals have a single linguistic system involving multiple linguistic repertoires which is supported by studies of cross-linguistic interference. In fact, "bilinguals tend to merge or resolve differences in their two languages by forming a set of intermediate representations that appear dissimilar from the representations of monolinguals of either language" (Higby, Kim, & Obler, 2013, p.88).

Do bilinguals outperform monolinguals? Higby, Kim, and Obler (2013, p.91) indicated that "cognitive control processes and the expected frontal-system regions that underlie them are implicated on a number of tasks that bilinguals quite consistently outperform monolinguals on." Additionally, "speakers of different languages display different mental models and semantic associations" and "multilingual individuals in a team promote cognitive diversity" (Hogan-Brun, 2017, para 1). Therefore, people's brains view problems and solutions in varied ways. Kroll and Dussias (2017) concluded that people benefit from exposure of multiple languages in early childhood, and the active use of more than two languages protect against cognitive decline.

Having two languages will "enhance opportunities for social interaction, for economic advancement, and for increasing intercultural understanding" (Kroll &

Dussias, 2017). Being bilingual is beneficial; however, it also "changes the mind and the brain in ways that create resilience under conditions of stress and that counter some of the deleterious effects of poverty and disease" (Kroll & Dussias, 2017, p.254).

"Multilingualism can be strong (all official language versions are equally authentic) or weak (one language version is authentic, while the others are official translations)" (Spătaru-negură, 2016, p. 28). Brannen, Piekkari, and Tietze (2014) viewed language as multifaceted and multilevel construct for international business research. They divided the development of the language stream in international business into three categories: "the decoupling of language from culture, the shift of level of analysis from that of the individual to the organization, and the joining together of dispersed studies about language(s) into a recognizable, legitimate field of study in the late 1990s and early years of the millennium" (Brannen, Piekkari, & Tietze, 2014, p. 499). These three categories constituted the foundation of language research in international business.

THE ROLE OF MULTILINGUALISM

Multilingualism has been perceived as an issue by unifiers and educators. Four decades ago, Wong (1969) claimed that multilingualism is a barrier to communication and national unity. Multilingualism may pose a possible threat to national identity, contribute to social discrimination on race, religion, and speech as well as represent disassociation and disorientation of groups with diverse values, beliefs, and objectives (Wong, 1969). In recent decade, multilingualism is playing a different role. Paradowski (2010) presented 25 benefits of multilingualism over monolingualism (e.g., children and seniors learning foreign languages demonstrated keener awareness, sharper perception of language, better language proficiency, more efficient communication, better listening, sharper memories, better verbal and spatial abilities, greater cognitive flexibility, better problem solving on issues, higher order thinking skills, extra skills in language use, better appreciate people from other countries, learn other languages more quickly, less racism, increasing job opportunities) (Paradowski, 2010).

What role do multilinguals play in international organizations and multinational corporations? On the one hand, many researchers have addressed the significant role that multilingualism plays in positive ways. "Bilingual employees can offer special and valuable skills and knowledge that can attract new customers and clients, develop new markets, improve communication between global departments and divisions, and materially enhance a business" (Mujtaba, Cavico, & Muffler, 2012, p. 44). Based on a survey by the *Economist*, two-thirds of 572 international company executives have identified their teams' multicultural nature increased their organizations' innovations (Hogan-Brun, 2017).

Multilingualism is an importance resource in tourism. Heller, Jaworski, and Thurlow (2014) stated that language in tourism is "an important window into contemporary forms of economic, political, and social change" (p.425). Multilingualism has become "a resource for stance-taking such as the appropriation of a local identity, the anticipation of a possible, casual sexual or fictive kin relationship, or the distancing of local people from visiting tourists" (Heller, Jaworski, & Thurlow, 2014, p. 449). "Multilingualism is essential for effective communication, understanding of other cultures, and the development of global citizenship values" (Stein-Smith, 2016, p. 2254). "The role of language in a multilingual world needs to be considered as both a means of communicating an idea or a goal and also as a tool to engage and build buy-in among stakeholder groups and to develop solutions that address the needs of all stakeholder groups" (Stein-Smith, 2016, p. 2255). Al-Fattah (2016) concluded from a survey of 159 graduate students that "the problem of clash of civilizations can be solved through multilingualism, which promotes inter-civilizational dialogue, and that proficiency in foreign languages is a tool for facing and averting global conflicts" (p. 53).

On the other hand, some researchers found the negative impact of multilingualism. Alshenqeeti and Alsaedi (2012) pinpointed the effects of multilingualism and linguistic diversity at the societal level (e.g., education, economy, employment, language policy, multiculturalism, and diglossia), and argued that the problems are created by government's language policies. In multilingual societies, the language used at schools are usually the language of the majority groups. The minority language people have to compete with the majority language group in the job market (Alshenqeeti & Alsaedi, 2012). Language and economy are relevant because the majority language will be learned by people who want to get the jobs (Alshenqeeti & Alsaedi, 2012). Although multilingualism plays an important role in the European Union (EU), the problem of unity in diversity involved (Spătaru-negură, 2016). The multilingualism in the European Union has led to misinterpretation, miscommunication, divergent texts, obstacle to legal EU law, and the impact of original language on the official language in translation (Spătaru-negură, 2016).

Corporate Communication and Corporate Languages

Communications in a company, domestically or internationally, rely on language. A multinational corporation (MNC) is comprised of a headquarters and subsidiary units in different language environments. Therefore, corporate communications have become an intangible asset for an organization. The "internal communication involves crossing language boundaries and operating at the interface between several languages including those of the home country and the host country, the corporate languages and company speak" (Fredriksson, Barner-Rasmussen, & Piekkari, 2006,

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p. 407). The "choice of language is a non-trivial decision in markets with bilingual or multilingual consumers" (Caminal, 2010, p. 774); the level of linguistic diversity in these markets will be inefficiently low under laissez-faire (Caminal, 2010). Caminal (2010, p. 786) suggested that, "the development of new technologies that reduce the costs of translations is likely to improve the efficiency of market outcomes, and, in the limit, it could even result in an overprovision of goods in minority languages"; therefore, "we only need to worry about excessive linguistic diversity if we ever observe that goods in minority languages are heavily over-represented with respect to the relative size of their community."

Luo and Shenkar (2006) regarded the multinational corporation (MNC) as a multilingual community; "parent functional language and subunit functional languages are concurrently used and recursively linked through an intra-corporate communication network" (p. 321). They developed a model of global language design for MNCs, and suggested that "headquarters functional language is determined by the MNC's international strategy, organizational structure, and transnationality, while subunit functional language is designed in accordance with organizational form, strategic role, and expatriate deployment" (Luo & Shenkar, 2006, p. 321). Luo and Shenkar (2006) illustrated with example;

To consolidate information from region-based language zones, MNC headquarters use either home language or a commonly shared language such as English, depending on the degree of transnationality. A French MNC may substitute English for French if the company is geographically diversified and internationalized. (p.329)

Therefore, the MNC structure may have multiple functional languages to reflect regional dispersed business needs. How many languages do they use? A French MNC may use "French as functional language in the West African region, English in North America, and Spanish in South America and the Caribbean region" (Luo & Shenkar, 2006, p. 329). In other words, each region has its independent language zone using a functional language, which is shared by local subunits. Thus, the employees in MNC need to be multilinguals to serve the company better. The problem is that after the company adopted a language as corporate language for both native and non-native speakers, resistance may occur. In other words, the employees do not participate in what is expected through refusal due to language diversity.

It is obvious that the success of international business tends to depend on the effectiveness of organizational communications. Malmelin (2007) developed a model of communication capital to address the challenges of corporate communications. The model for communication capital included juridical capital, organizational capital, human capital, and relational capital (Malmelin, 2007). Simonsen (2009) proposed a trinity theory in corporate communications. In the theory, the common

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starting points (CSPs) are used to integrate the three communication artefacts; namely, the communication policy (CP), the corporate language policy (CLP), and the corporate information portal (CIP) (Simonsen, 2009). They believed that an increased integration of the CP, CLP, and CIP is essential; "a company should integrate the strategic considerations expressed in the CP, the language political guidelines in the CLP, and the concrete and operational communication data in the CIP" in order to support the use of English as a *lingual franca* in the company (Simonsen, 2009, p. 211).

Language Policies and Leadership

Sanden (2016) pointed out that language skills are one of the most important assets in the international business, and most multinational operations require a diversified language strategy as a company-wide policy to satisfy all language needs. Therefore, the most powerful language management tool of all is awareness. Corporate language refers to language standardization in international business. Corporate language management is "an approach where a company plans, designs and implements a language regulation based on a strategic evaluation of the language needs of the organization" (Sanden, 2016, p. 274).

Wilmot (2017) examined the relationship between language policies and power through theoretical lens and found four types of power and resistance: coercion vs. refusal, domination vs. escape, manipulation vs. voice, and subjectification vs. creation (Wilmot, 2017). Manipulation is the power to limit issues for discussion and to control language within the company; however, manipulation can be resisted through voice where people seek to gain access to the decision-making processes from which they have been excluded so that they can be heard (Wilmot, 2017). Domination is another power, legitimate and inevitable. As English was adopted as corporate language in international business, employees may attempt to escape or disengage mentally from work (Wilmot, 2017). The final face of power is subjectification; policies regarding language use can lead to subjectification (Wilmot, 2017). The major point is that "employees can engage in translanguaging in which new language varieties are created and emerge as linguistic features from different languages to reflect the individual identities of the speakers" (Wilmot, 2017, p. 93).

After examining six leadership situations (i.e., rewarding, decision-making, goal-setting, face-saving, conflict-resolving, and empathizing) in 17 countries, Zander, Mockaitis, and Harzing (2011) concluded that the choice of language (e.g., native or English) does not matter, because "leadership decisions and reactions depend more on cultural and situational context" (p. 296). Additionally, Gunnarsson (2013) presented a model of workplace discourse with contextual frames, including a technical-economic framework, a legal-political framework, a socio-cultural

framework, and a linguistic framework. The global, national, and local language communities follow language policies and laws that directly or indirectly influence text and talk in the professions and local industries (Gunnarsson, 2013). In a word, corporate language is essential for corporate communications.

English as a Business *Lingua Franca*

Does the use of English as a common corporate language create difficulties or challenges in international business? Does English as a business *lingua franca* play a better role in international business? After examined the adoption of English as a common company language (i.e., language standardization) by Kone Elevators and the implications of language issues (e.g., staff selection, performance appraisal, training and development, knowledge transfer, expatriates and international assignments, and language policies), Marschan, Welch, and Welch (1999) believed that English as a common company language assists formal reporting between units in various foreign locations, enhances informal communication and information flow between subsidiaries, and foster a sense of belonging to a global 'family" as corporate culture.

Fredriksson, Barner-Rasmussen, and Piekkari (2006) indicated that several factors have promoted the prominent role of English as business *lingua franca* (i.e., the worldwide extension of the British Empire, the political and economic influence of the USA, the development of modern information and communication technologies, the growth of international mergers and acquisitions, the professional management education originated from the USA), which shape the language strategies and choices in the corporate world. Although top management may adopt a common corporate language, subsidiaries tend to local languages to deal with their employees, suppliers, and customers (Fredriksson, Barner-Rasmussen, & Piekkari, 2006).

Some researchers have found the significant role of English in international business. English was the most widely spoken foreign language in Europe because 38% of EU citizens acknowledged that they have sufficient skills in English conversation (Zaharia & Lolescu, 2009). In fact, "English either as a mother tongue or as a second/foreign language is spoken by 51% of EU citizens, followed by German with 32% and French with 28% of those asked" (Zaharia & Lolescu, 2009, p.330-331). Large corporations (e.g., HP, Xerox, Siemens, Genpact) publish their jobs advertisements only in English, and they prefer to use English as their official language of communication inside the organizations (Zaharia & Lolescu, 2009). In Ehrenreich's (2010) study of a Germany company, English is needed for managers and employees in all locations and at all levels, particularly from top management down to regular office workers and secretaries in top and middle management. English as business lingua franca was supported by both researchers and varied companies.

House (2003) made a distinction between language for communication and languages for identification; she argued that English as a *lingua franca* was not a threat to national languages and multilingualism, but a useful language for communication. She used language transfer and code-switching to illustrate recourse to interactants' L1; thus, the users of English as *lingua franca* users are multilingual speakers who do not lost their attachment to L1 (native language) (House, 2003). House (2014, p. 373) argued against psycholinguistic and neurolinguistics views that "massive importation of English lexis into another language influences thinking and concept formation in that language, and that the onslaught of English words and phrases damages a speaker's L1-mediated knowledge." Since many multilinguals and English as lingua franca speakers move between their languages smoothly and flexibly, House (2014) concluded that multilingualism including English as *lingua franca* speakers do not need to "inhibit concept formation in speakers' mother tongues" (House, 2014, p. 374). The increasing use of English as lingua franca is not a threat to translation because translation is not a by-product of globalization, but an integral part of it; without translation, "the global capitalist, consumer-oriented and growth-fixed economy would not be possible" (House, 2014, p. 375). Therefore, the dominant role of English as a *lingua franca* will not imperil other languages, endanger multilingual communication, or menace the profession of translation.

Another concern is that if English language is sufficient for communication. In their study of Austrian and Slovenian small and medium-sized enterprises (SMES) adopting language management strategies, Rižnar and Rybnicek (2017) found that English was not enough for satisfying every communication need; if people want to remain employable and companies open new markets and new business opportunities, they should embrace multilingualism. Rižnar and Rybnicek (2017) emphasized that,

The contribution of foreign languages to competitiveness is too obvious to be doubted. It may appear that English will keep its leading role as the world business language, but knowing other foreign languages may give individuals and enterprises a competitive edge. A lack of foreign language skills may not always lead to direct losses, but may dissuade enterprises from entering new markets. (p. 375)

Lønsmann (2017) found that the employees take three different types of stances: embracing English, resisting English, or a middle position (embrace it if it makes sense). "When informants focused on the immediate perspective, that is, their daily work, the upcoming deadlines and the current customers, they resisted the use of English" (Lønsmann, 2017, p. 119). However, Neeley (2012) believed that multilingualism is inefficient and hinders important interactions, and there were three reasons (i.e., competitive pressure, globalization of tasks and resources, and M&A integration across national boundaries) that drove English to be a corporate

standard. Neeley (2012) provided some examples to demonstrate that English is a common corporate language for many multinational companies (e.g., Airbus, Daimler-Chrysler, Fast Retailing, Nokia, Renault, Samsung, SAP, Technicolor, Microsoft in Beijing) as well as local company (e.g., Japan's Rakuten). "Adopting a corporate common language (CCL) provides MNCs benefits, such as efficiency and coherence, from standardizing employees' use of language.... multilingualism impacts both internal and external functions of organizations" (Woo & Giles, 2017, p.39). Woo and Giles (2017) summarized that "building and enhancing organizational cohesion in multilingual MNCs can be an intricate issue because of the tensions between in-/out-groups based on employees' ability to communicate in a CCL and related social identity issues" (p. 43).

The role of other languages in international business cannot be ignored from a corporate perspective. Ehrenreich (2010, p. 408) described,

What need to be learned, however, is not English as a native language but communicative effectiveness in English as a business lingua franca, which – as an international contact language – brings together nonnative as well as native Englishes from various linguacultural backgrounds spoken with varied degrees of proficiency.

Other languages play an important role as valuable strategic resources (Ehrenreich, 2010). "English may be the necessary tool facilitating international communication, but to accomplish a range of specific business tasks successfully, other languages are indispensable" in global organization with the concerns of establishing and maintaining relations with customers (Ehrenreich, 2010). In other words, even though English is the dominant language in international business, other languages do not disappear from the business scene. In order to communicate with business partners or foreign customers, additional foreign languages competence is a plus for business managers. Both multilingualism and English are important for international business.

ISSUES, CONTROVERSIES, PROBLEMS

Language Barriers

The first issue is about language barriers between international buyers and sellers. Language barriers would lead to misunderstanding and poor communication. Feely and Harzing (2003) raised three dimensions of the language barriers: language diversity (i.e., number of different languages the company has to manage), language penetration (i.e., number of functions and levels within those functions in cross-lingual communication), and language sophistication (i.e., the complexity, refinement, and

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types of the language skills required) for consideration. These language barriers could trigger negative consequences, such as uncertainty, mistrust, conflict, cognitive divides (Feely & Harzing, 2003). The consequences of language barriers would impact buyer/seller relationships, foreign market expansion, joint ventures due to language difference, the relationship between headquarter and subsidiaries, and staff policies (e.g., employing expatriates in important positions at subsidiaries) (Feely & Harzing, 2003).

Tange and Lauring (2009) also identified two barriers to employees' interaction within the multilingual workplace: language clustering and thin communication. Language clustering shows linguistic inadequacy and "takes the form of informal gatherings between the speakers of the same national language" (Tange & Lauring 2009, p. 224). Thus, when people encounter a problem at work, they prefer to consult someone who speak the same language rather than approach an expert who speak another language (Tange & Lauring 2009). Thin communication is a decrease in the amount of communication due to "non-native speakers withdraw from exchanges or routines perceived to be non-essential if these require the use of English" (Tange & Lauring 2009, p. 133).

Lohmann (2010, p. 160) pointed out that "language barriers are a significant deterrent to bilateral trade. A 10% increase in the Language Barrier Index can cause a 7% to 10% decrease in trade flows between two countries." Language barriers were caused by a lack of foreign language fluency, semantic differences between languages, cultural diversity, and limited rhetorical skills in English (Aichhorn & Puck, 2017). These language barriers made communication more complex, difficult, and time-consuming, which can lead to increased miscommunication, mistrust, negative stereotypes, communication withdrawal and avoidance (Aichhorn & Puck, 2017). What should they do if language barriers persist?

Language Diversity

Language diversity is one of the challenges to multilingual or multinational corporates. "Language differences and corporate language are equally problematic for the effectiveness of cross-cultural communication, inspiring in language users the communicative practices of language clustering and thin communication" (Tange & Lauring 2009, p. 228). Whether to adopt a common corporate language or use local languages is controversial. On the one hand, "sharing a language promotes cohesion, trust, and the emergence of shared visions"; on the other hand, "linguistic diversity within the boundaries of one and the same firm may have disintegrating effects" (Fredriksson, Barner-Rasmussen, & Piekkari, 2006). "Understanding the complexity of language diversity management in the workplace can help companies to manage languages in an innovative way, to monitor their diversity performance,

and to identify clues and indicators to measure the success (or failure) of their diversity initiatives" (Yanaprasart, 2016, p. 91). Aichhorn and Puck (2017) found the double-edged nature of language diversity: an asset and a liability for multinational organizations in their interviews of 22 respondents in two Austrian multinational companies. The positive aspect was that language diversity brought along some benefits for global organizations; however, there were also emotional and cognitive challenges. As they described, "although linguistic diversity is advantageous on the long run, linguistic differences initially bring considerable communication problems" (Aichhorn & Puck, 2017, p. 392). Is language diversity an advantage or disadvantage for MNC?

Problem of Englishization

The problem was that many international documents are prepared in two languages (e.g., English and common corporate language or local language), and it would incur cost and inconvenience. Constantly, translation between two languages might not be exactly what they mean. Additionally, staff's language competence, the cost of translation, misinterpretation, code-switching behavior, and information security become the issues (Fredriksson, Barner-Rasmussen, & Piekkari, 2006). In their study of a French university, Englishization is bound up with process of normalization, surveillance, conformist identity work (that serve to discipline local selves in line with the imperative of international competitiveness), and creative identity work (to resist, complain about and appropriate organizational Englishization and its associated disciplinary practices) (Boussebaa & Brown, 2017). In Piekkari, Oxelheim, and RandØy's (2015) multiple case studies of nine multinational corporations from four countries, they found that due to board members' lack of sufficient language proficiency, some board members had difficulty switching to English as the new working language and were silent in board meetings discussions. They noticed that Japanese employees were willing to use English in a range of situations for social inclusion and integration into the American corporation; however, "when Japanese employees with varying English skills were present at the same meeting with the foreigners, the Japanese employees most competent in English tended to dominate and the meeting was noticeably quieter than those attended only by Japanese" (Piekkari, Oxelheim, & RandØy, 2015, p. 27).

Another problem is that English competence might be the hindrance for communication. Often non-native speakers of English entered conversation in English with insecure and uncomfortable feelings about their ability to express themselves well in a foreign language. Further communicative challenges occurred for cognitive reasons stemming from a lack of general English competence, the limited semantic transferability for certain words into English, as well as lingua-cultural differences in

discourse practices (Aichhorn & Puck, 2017, p. 392). Neeley (2012) raised several obstacles to successful English language policies, including change always comes as a shock; compliance is spotty; self-confidence erodes; job security falters; employees resist; performance suffers; adoption framework is not a small task. The adoption of a common company language may "alleviate some of the internal communication and co-ordination problems caused by multiple languages within the multinational, but it can also create a range of different challenges that may emerge as critical HR issues" (Marschan, Welch, & Welch, 1999, p. 381). It is obvious that language diversity and language competence contributed to the difficulties in communication during the work process, even if they adopted English as a common corporate language. Once a company adopted a common language, certain procedures will be done and will affect employees' behaviors at varied levels.

Lack of Language Competence

Lack of language proficiency may lead to misunderstanding, misconceptions, and challenges while running an international business. Wright (2008) raised the issues of diglossia and code-switching in the analysis of multilingualism and bilingualism. Diglossia "seems to be more of a social phenomenon, rather than individual one" (Alshenqeeti & Alsaedi, 2012, p. 16). Traditionally, diglossia is "a situation in which one variety of a language is used for more prestigious functions, and another variety of the same language is used for less prestigious functions" and now it refers to "any situation in which two distinct languages or dialects are used for different functions within one society" (Bergmann, Hall, & Ross, 2007, p. 655). Code-switching refers to "the use of two languages or dialects within a single utterance or within a single conversation" (Bergmann, Hall, & Ross, 2007, p. 464). Wright (2008) also provided evidence of using so-called "Chinglish" by Cantonese speakers in Hong Kong.

In Tran and Burman's (2016) study, the English proficiency in global workforce is low, ranging from 73.83 in Netherlands to 33.64 in Iraq; none of the countries being surveyed were in advanced level. In general, women have better English language skills than men in most industries and countries, and the executives from non-English-speaking countries usually have lower English proficiency than mangers they oversee (Tran & Burman, 2016). In Vigier and Spencer-Oatey's (2017) study of three teams (33 members in total) in France, code-switching produced some challenges (e.g., frustration, distrust, and impoliteness) for one team, but effectiveness (e.g., humor, confidence, mutual respect, trust, and positive atmosphere) in a pleasant environment for the others. Cohen and Kassis-Henderson (2017) indicated that "the competences of the team members are not primarily due to their country-specific skills (knowledge of culture and language – as exhibited in cultural frame-switching behavior) but are to a large part due to their wider language-general and culture-

general skills or *multilingual franca* mind-set" (p. 19). In sum, multilingual people might have issues in language proficiency (i.e., usages, confusion, disorientation, code-switching, etc.) if those languages are not their native languages.

Demand of Multilinguals in the Market

Another issue is that if multilingualism is essential in international business, do we have sufficient multilingual people in the business world to perform the jobs? After surveying 2,100 U.S. employers on their requirements for multilingual employees, Damari et al. (2017) found that 93% of employers valued employees who work effectively with customers, clients, and businesses from foreign countries, and 41% employers gave advantage to multilingual applicants. Industries with great demands of multilinguals were administrative services, information services, government and public administration, educational services, and health care and social assistance (Damari et al., 2017). Foreign language skills were identified for linguists or translators/interpreters (84%), vendor management (82.8%), customer service (76.1%), sales (73.5%), project managers (69.4%), and marketing (67.1%) (Damari et al., 2017). Damari et al. (2017) emphasized that "there is an intense need for skilled professionals to meet this burgeoning demand for multilingual, multimodal, multidirectional communication" (p. 30).

Among the language professionals in demand are translators and interpreters, who must possess professional levels of skills in at least two languages and must also be adept at using the kinds of technology that these professions now require…. There is also demand for multilingual service professionals working in sales, marketing, customer service, project management, and vendor management. (Damari et al., 2017, p. 30)

In other words, more multilinguals are needed for international business and for the workforce; however, supply usually does not meet the demand. What should MNC managers do?

SOLUTIONS AND RECOMMENDATIONS

Establishing Language Management Policies

Effective communication contributes to successful leadership. Establishing language management policies is as important as communicating with staff in positive manners. Consulting employees' opinions and establishing language policies for

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the multinational companies are essential. What strategies are in need for corporate language management? There are four stages in strategic language management that companies need to do: (1) language needs analysis (to identify current and future language needs), (2) language policy strategy (to decide how to approach language and communication proactively), (3) language management tools implementation (to satisfy emergent language needs or overcome language related challenges), and (4) revision and adjustment (to improve performance and strategic learning) (Sanden, 2016).

Language diversity in multinational companies needs to be organized. If language diversity causes a problem, establishing language policies is needed. Employers and supervisors who are English monolingual might want to restrict the use of languages other than English in the workplace (Mujtaba, Cavico, & Muffler, 2012). Some employers concerned that "a variety of languages in the workplace will impede safety, efficiency, harmony, productivity, and possibly alienate the customer based" (Mujtaba, Cavico, & Muffler, 2012, p. 40). The Equal Employment Opportunity Commission (EEOC) established guidelines in 1980 to justify English-only rule; however, the EEOC also recognized "the employer has the prerogative to decide how it will conduct its business and manage its employees, including institute language policies" (Mujtaba, Cavico, & Muffler, 2012, p. 42). Since language plays a central role in international expansion for multinationals, adopt a functional language is a must. "The choice of the functional language can facilitate or hinder communication between headquarters and subsidiary locations. In order to communicate effectively with the parent organization, host country employees often have to adopt a language that is not native to the subsidiary region" (Bordia & Bordia, 2015, p. 415).

To manage language problems in a multinational company, Feely and Harzing (2003) provided the following options. (a) One language fits all. English as a lingua franca can be applied in emails, transactions, emails, websites, contacts, communications, etc. (b) Functional multilingualism. The parties rely on a mix of languages, pidgins, and gestures to communicate in international business transactions. (c) Employing external resources. For example, hire translators and interpreters to avoid language barriers. (d) Language training and personnel development. Learning how to manage language professionally in a company is important for company staff. (e) Adopting a single corporate language. The adoption of corporate language would have the following benefits: facilitation of formal reporting, ease of access to and maintenance, facilitation of informal communications, and fostering a sense of belonging. (f) Selective recruitment. Recruit people who have the target language skills to help. (g) Expatriate management. Assigning expatriates to work within each subsidiary to act as language nodes linking to corporate headquarters. (h) Inpatriates. A multinational company's employee from foreign country can be transferred from a foreign subsidiary to the corporation's headquarters. This way, they can provide

communication links to the operations and institutions of countries from where they came and offer cost-effective alternative to situations. (i) Machine translation. Machine translation and machine interpretation can be applied if human beings cannot be depended upon. (j) Controlled language. With limited vocabularies and syntax rules, it makes the text more easily comprehended by non-native speakers.

Adopting a Functional Language

Adopting a model might solve the problem of linguistic diversity or language barriers. Piekkari, Oxelheim, and RandØy (2015) suggested companies to make efforts in preparing for a language change before undertaking it, and the preparatory measures include the adoption of English in the executive management team, educating foreign and domestic board members on language issues, and replacing those members who are not able to handle the language switch. Bordia and Bordia (2015) provided an interdisciplinary theoretical model to illustrate employees' willingness to adopt a foreign functional language. This model included linguistic landscape (local to global), language exposure (between exclusively original to original and foreign), linguistic identity (strong original to multilingual linguistic identity), threat to linguistic identity (foreign functional language poses high threat to low threat to linguistic identity), willingness to adopt a foreign functional language (less willingness to more willingness to adopt), proficiency in a foreign language (high levels of skills and expertise in the language (positive impact on employees' willingness to adopt a language), and enhancement seeking (direct effect on willingness to adopt a foreign functional language).

Yanaprasart (2016) examined various models of language management and practices in Swiss multinational and national companies, and illustrated five models of language management philosophies: (1) monolingual language solution (i.e., global English policy), (2) monolingual institutional multilingualism strategy (i.e., one official language and four languages in use), (3) bilingual institutional language philosophy (i.e., two administrative languages), (4) institutional multilingualism model (i.e., English as corporate language plus three national languages), and (5) institutional trilingual choice (i.e., three official corporate languages plus English). Lønsmann (2017) explored when and why corporate language policies encounter resistance among employees in a Danish multinational company, and found that the contextual factors influencing employees' stances toward the introduction of English as a corporate language are English language competence, the local linguistic context and different temporal perspectives.

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Encouragement and Communication
From Corporate Managers

Mastering more languages might have positive impact on multinational company's development of international business. However, not all employees can learn the language quickly, especially if it is their second or third language. It is true that "globalization forces us to expand out foreign language ability, because cross-linguistic communication plays a pivotal role in global dialogue. Globally, multilingualism is considered to be the rule, not the exception" as Al-Fattah (2016, p. 31) noted. There were four types of employee responses to English as a corporate language: frustrated, oppressed, indifferent, and inspired (Neeley, 2012). How managers deal with language issue in the companies is critical. Neeley (2012) provided some strategies for managers to boost employees' beliefs in their abilities: offering opportunities to gain experience with language, fostering positive attitudes, using verbal persuasion, encouraging good study habits, and improving employee buy-in. Buy-in is the degree to which employees believe that a single language will produce benefits for them or the organization (Neeley, 2012).

Continual communication and encouragement from managers and executives are essential. Encouraging staff to self-identify as global rather than local employees is a must, because "using English as a business language can damage employee morale, create unhealthy divides between native and nonnative speakers, and decrease the overall productivity of team members" (Neeley, 2012). Woo and Giles (2017) suggested that "managers encourage and train employees to adopt accommodative speech-style strategies when interacting with other organizational members in a CCL" (p. 47). MNCs can "relieve the potential intergroup tensions…. by promoting a higher-order and shared organizational identity" (p. 47). "Managers can help employees focus on their collective identity as members of the same organization rather than on their social identity differences rooted in their L1 communities" (Woo & Giles, 2017, p. 47). Again, communication and encouragement from the top authority could help booster employees' confidence and language abilities.

Language Training

Employers and employees may need training in the foreign functional language for conducting international business if they decide to expand their business to local linguistic landscapes and they lack of multilingual experiences. Managing linguistic diversity is an important task for MNCs. There were three strategies to facilitate cross-lingual communication: (a) accommodation through language choices (e.g., use of English for business purposes and use interlocutor's language to improve

rapport-building); (b) accommodation through simplification of language (i.e., simplify English to ease comprehensibility including grammar, lexical register, syntax, pronunciation, and accents; simplification to reduce emotional and cognitive language barriers);, and (c) negotiation of meaning (i.e., negotiation of shared meaning by comprehension checks, confirmation checks, and clarification requests) (Aichhorn & Puck, 2017). Additionally, the formation of company-speak (e.g., incorporation of scientific terms borrowing from English and use them to facilitate communication) has its effects for communication due to its simplified and highly technical nature as well as culturally hybrid character. As Aichhorn and Puck (2017) emphasized, "Success in cross-lingual communication does not exclusively depend on an individual's general language competence, including knowledge of vocabulary, grammar, syntax and pronunciation. While a threshold level of language proficiency is certainly necessary, this article has shown that MNC employees with non-native fluency can engage in successful communication" (p.400). They believed that "language training should go beyond teaching pure linguistic competence such as lexis, grammar, syntax, and pronunciation. Furthermore, it should teach employees how to manage linguistic differences, and introduce them to successful language strategies which can help them cope with the language barrier" (Aichhorn & Puck, 2017, p. 400). Language training could proceed online or in company workshops.

FUTURE RESEARCH DIRECTIONS

Future researchers are encouraged to collect data from MNC all over the world and conduct the studies in both quantitative and qualitative methods, since this study tends to be on theoretical base. Plethora of literature should be reviewed to provide more solutions and recommendations. Issues on multilingualism and Englishization should be explored and language policies from companies all over the world can be examined to benefit corporate owners or CEOs in international business.

CONCLUSION

This chapter consists of a review of the critical roles that multilingualism and Englishization play, and an illustration of language policies for better international business. Corporate languages are decided by company executives, managers, and company owners. There is no definite answer on which method is the best; however, there is a better or more appropriate one. It all depends on the context and situation to decide when and how they use the language in the companies. "Language holds a

central role in sustainable international expansion for multinationals. The choice of the functional language can facilitate or hinder communication between headquarters and subsidiary locations" (Bordia & Bordia, 2015, p. 415).

International organizations should embrace diversity to meet clients' needs. If there are language barriers, the management has the responsibility to offer solutions to help the employees. Language should not be a challenge for multinational organizations, but an asset for international communication. Adopting the policy of linguistic assimilation in which minority language groups have to speak the majority group language due to national unity and the nation's identity protection might be a solution. It is rational if the minority language is reserved for informal conversation, and the majority language is used as a formal communication language. Multilingualism might provide a better way of promoting national cohesion if the language policy of linguistic assimilation creates problems. In examining the roles of multilingualism and Englishization, multilingualism should not be an issue to be solved, but a solution to the world of diversity. Englishization is a great approach for international business as well because English has been used as a global language for a long time.

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KEY TERMS AND DEFINITIONS

Code-Switching: A change of languages or dialects from one to another during the conversation.

Corporate Communication: The dissemination or exchange of information or news in a company by different departments such as finance, marketing, etc.

Corporate Language: Language used in a company or corporation for doing business.

Diglossia: Two languages or language varieties exist in a community or society and are used for different purposes or functions.

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Englishization: Making use of English language as *lingua franca* and converting materials in local language to English in an international corporation or organization.

Language Barrier: Communication obstacles between people due to language diversity or language proficiency.

Language Diversity: Language varieties including different language families, grammar, and vocabularies.

Language Policy: Through language planning, rules are made by a company or a government concerning official language choice, ways of use of a language, spelling reforms, the addition of new words, language issues, etc. in a company or a country.

***Lingua Franca*:** A language used for communication between different groups of people who speak different languages.

Multilingualism: The use of several languages (e.g., three or more) by an individual or a group of speakers.

Psycholinguistics: The study of language processing and mental representations in perception, production, comprehension, storage, and acquisition.

Chapter 9

Multilingual Education for International Business:
Insights on Undergraduate Program Design From Colombia

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ABSTRACT

Education for future international business (IB) practitioners must be linked to a clear multilingual and multicultural approach. In this chapter, the authors present a case of study of the setup, aspects, and implementations of an IB undergraduate program carried out mostly in a foreign language (English). The program here presented also requires students to acquire a third language, and thus has become the first IB program of its kind in Colombia. The consequences, challenges, and opportunities derived from this multilingual approach to business education are then discussed in this chapter. Through data collected from the study program, it is possible to draw attention to the link between linguistic skills and academic performance, which leads to a short overview of the cognitive correlates to multilingualism and the learning process aspects associated with the use of a foreign language in the classroom. Finally, the authors draft some recommendations for educators and professionals designing IB study programs with a multilingual approach.

INTRODUCTION

In this chapter, the authors address multilingualism in international business (IB) from the perspective of education for future international business professionals. Undertaking this enormous task requires a departure from understanding language simply as a tool for communication or a cultural outcome, and seeing it also, as stated by Claire Kramsch, as the creator of socially shared realities or cultures (Kramsch, 2009). The role of language in representing and organizing knowledge (Budin, 1996) is also a key concept that justifies the great importance of this issue for IB students. These perspectives will help to understand how language and diversity are core training elements for IB students in effectively reading and communicating in international business contexts. This chapter is of special relevance for educators and administrators in higher education in IB and other programs taught in a foreign language, as it discusses observed implications of and provides recommendations for these kind of programs, and it highlights the importance of language in IB, both for its training and its subsequent professional practice. Based on a case study of the first IB program in Colombia to be taught mostly in a foreign language, namely English, the ramifications of multilingual business education for the program, educators and students will be evinced. The chapter begins with a review of the importance of multilingualism in international business and continues with a short description of and background information about the program and the mechanisms the university has put in place to ensure multilingualism, including an overview of the linguistic profiles of students upon enrollment in the program. After a short summary of the cognitive correlates of multilingualism and the general effects of language in a classroom setting, the authors then discuss the observed effects, obstacles and advantages of a multilingual approach to education in international business.

The chapter concludes with several recommendations to further improve the status quo in the case study analyzed. This chapter aims to provide international business educators with information and insights to positively impact their design of IB learning programs.

MULTILINGUALISM IN IB

In approx. 440 BC, Herodotus wrote in his Histories, Book 4, often considered the founding work of History: "The Carthaginians also relate the following: - There is a country in Libya, and a nation, beyond the Pillars of Hercules, which they are wont to visit, where they no sooner arrive but forthwith they unlade their wares, and, having disposed them after an orderly fashion along the beach, leave them, and, returning aboard their ships, raise a great smoke. The natives, when they see

the smoke, come down to the shore, and, laying out to view so much gold as they think the worth of the wares, withdraw to a distance. The Carthaginians upon this come ashore and look. If they think the gold enough, they take it and go their way; but if it does not seem to them sufficient, they go aboard ship once more, and wait patiently. Then the others approach and add to their gold, till the Carthaginians are content." (Wikisource contributors, 2018)

Whether or not this description of what might be termed international trade in Classical Antiquity is in fact accurate or not, this depiction of silent trade captures the imagination in this day and age precisely because it is so far removed from modern practices. Verbal communication is a *sine qua non* in International Business today, and it is therefore mediated through language.

The role of languages in IB is a core issue along several dimensions for firms willing to hire employees that will support the planning and implementation of strategies to reach international markets. The activities of IB practitioners include interacting with transcontinental intermediaries, different government agencies and foreign institutions. The latter are just a few of the spheres wherein language comprises the very essence of global business expansion. Therefore, in light of the central role language plays in IB activities, it should be a milestone in any IB study program. Future IB professionals and practitioners must be aware of the influence languages have within internationalization processes.

As pointed out by Brannen et al. (2014) in a recent Journal of International Business Special Issue dedicated completely to the role of languages in IB, language is a key construct in this field together with its forms (national, corporate, technical, electronic) and features, such as the use of mixed syntax and gender-marking (Brannen et al., 2014, 495). Even when the use of the English language has become such a widespread tool of communication, not only in industry and business, but also in International Relations and more specifically in educational contexts "… *it has not rendered the world of international business monolingual*" (Piekkari et al., 2014,5). The implications of using other languages alongside English in International Business education can provide future professionals within this field with a multitude of benefits.

An illustration of this point is the number of professionals graduated from International Business programs that enter the workforce and the average income they perceive. The Colombian government holds a database of employability, rates and incomes for all alumni in the country. These numbers help schools keep track of their professionals and measure the impact of their programs. Employability rates are calculated based on the people registered in the social security system, and their incomes are reported to and taken from this same system (Observatorio Laboral para la Educación, 2018).

Employability rates are lower: 73% compared to the national mean (74.1%) and compared to the average of all programs in Universidad EAFIT (77.4%). This is due to the fact that many professionals in IB leave the country after graduating to pursue further studies or to settle somewhere else, which leaves them outside the social security system and with no possibilities to track them using formal methods. This has been identified through personal surveys and follow ups from academic coordination and the alumni center.

Nevertheless, for international business program alumni from 2016, which is the most recent year for which there is information available, the average income is higher than both the income reported for the rest of study programs in Universidad EAFIT and the national mean. From this it can be inferred that the program, whose main distinction from other programs of its kind is its multilingual policy, improves their salaries and professional profiles.

Consistent with the importance of language, the European Union has set language diversity as a milestone for its foundations, by recognizing and implementing a set of efforts to ensure the use of the mother tongue as a primary citizen right (European Parliament, 2015). Moreover, the consolidation of a Digital Single Market (DSM) for the European Union is a project that is only feasible with the mediation of this economic block's multilingual character. A recent report on e-commerce published by the United Nations Conference for Trade and Development (UNCTAD, revealed an interesting perspective of European consumers' e-commerce behavior, showing, for instance, specific data regarding the distribution of consumers buying from domestic web pages versus consumers buying from foreign web pages. The report showed how, even within the European Union, most companies sell their products and services domestically (16%) compared to the percentage of companies selling to another EU country (7%) (UNCTAD, 2015). Even though this consumer behavior can be attributed to a cultural tendency to buy national products, it also reveals opportunities for multilingual approaches when going international. Most importantly, this data exposes the multilingual IB environment and also implies the need to integrate more languages into IB education for training future professionals in key communicative skills within multilingual contexts.

The aforementioned aspects pave the road to consider language in IB a multifaceted and multilevel issue (Brannen et al., 2014). Within a myriad of approaches, the issue of language can be found from anthropology to organizational studies, through communication and information sciences, to knowledge creation and representation. Even though these different approaches highlight different aspects within the concept of language, the idea of language as a shaper of thoughts and mirror of social realities lingers in the literature since the beginning of the 20th century with the Sapir-Whorf hypothesis. Applied to an international context, these aspects of language must be given special attention because they reflect how central and

vital the use of language is. All these approaches point toward an understanding of language as the main tool for firms and means of knowledge creation, sharing and representation within the context of a global business (Cater, 2004). In this regard, communication plays an important role in making language a real constitutive force for organizing knowledge by making sense of a given discourse within firms (Cooren et al., 2011). For IB researchers, natural languages such as English, as it is commonly used within firms internationally, can also serve as a common platform in complex international operations like mergers (Louhiala-Salminen et al., 2005). It is especially evident when communication occurs between individuals that do not speak English as their mother tongue. Cases like communications between a Swedish and a Finnish company both using English as a second language are common in international operations and since neither firm has English as their mother tongue, there is a considerable level of complexity involved.

Communication and knowledge sharing cause a number of difficulties especially for multicultural organizations. Studies carried out to identify key aspects in these activities report the great complexity of knowledge sharing across different levels within organizations and between them. In South Africa, Dube and Ngulube (2012) have found communicative barriers even when using English as a common language. They noted that linguistic competencies are crucial to performing knowledge sharing activities, and that a lack of them can negatively affect the outcomes of these activates. There are plenty of examples showing how complex and delicate the use of knowledge is, particularly when it comes to multilingual communication for knowledge-related purposes (Gorga and Halberstam, 2007; Lee and Cole, 2003; Moreno, 2003; Peltokorpi and Vaara, 2014). One of the most well-known cases in international management is Rakuten, the giant Japanese e-commerce company whose CEO, Hiroshi Mikitani decided to undertake a "Englishnization" policy seeking to improve company communications and, therefore, its insertion into global markets. Despite the extensive efforts and warranties to employees for improving their English skills, this policy had important consequences especially for senior employees who found that the transfer of their experience and knowledge was affected due to the imposition of communicating in a foreign language. This shows that even when using the same language, a series of complex issues and communicative challenges still arise.

The importance of different cultures in IB has been well recognized and extensively researched at least since the work of Hofstede (1980) and shall not be elaborated further here. However, for the purposes of this chapter it is important keep in mind that, in the tradition of cultural psychology, language is often thought of as embodying communication styles, employing pragmatics, grammar and words in ways that reflect meaning and value systems within a particular culture, as well as the worldview and self-construction of individuals in that culture (Imai, Kanero,

& Masuda, 2016). In this sense, language provides a mirror or window that enables cultural understanding and competence.

Nevertheless, as pointed out previously in this chapter, the specific aspects of communication in the IB domain leads to a move from a monolingual approach to communication in IB to a multilingual approach for transferring meaning, permitting the inclusion of other languages besides English in the education and training of IB professionals. Moreover, having multiple languages in the early stages of IB education provides students with better skills to face an ever-changing and multifaceted IB context.

History of the Program

The undergraduate program in International Business at Universidad EAFIT was created in 1993 as an institutional response to the open globalization process defined as a public policy in Colombia during the early 1990s. With the goal of facing these new and complex challenges, the University gathered a group of scholars to imagine a program that would eventually produce up-to-date professionals with the competencies required for internationalizing Colombia's organizations. Its curriculum is recognized for its multidisciplinary and flexible design that focuses on contextual environmental analysis, negotiation for problem solving, and acquiring knowledge and competencies for the formulation of all kinds of internationalization processes.

It is a pioneering study program in Colombia and today, with 1,030 students, the second largest program within the institution and one of the largest in the country. Students, faculty and alumni are all multilingual, as a consequence of the program's language requirements applied at three very important moments: enrollment, progress control and graduation.

Language Policy Within the Program

Since the creation of the International Business program at Universidad EAFIT, English proficiency is required for enrollment, as more than half of the program's syllabus is taught in English (55 to 66%). This policy was modified 10 years later, in 2003, when third language proficiency was included as a requirement for the mandatory full-time corporate internship period and for graduation.

Based on the Common European Framework of Reference (CEFR) for Languages, the two language requirements students need to advance in the program are:

1. **Enrollment:** English proficiency at B1 level, certified by international standardized exams like TOEFL, IELTS, FCE, CAE, among others; and
2. **Before Internship:** English proficiency at B2 level, and third language proficiency at B1 level.

Students can choose one third language to study out of six options that have international standardized exams, namely French, German, Portuguese, Italian, Japanese, and Mandarin Chinese. Foreign language studies, exam preparation, exam, and report to the Admissions Office are all at the students' expense. It is important to add that language studies are not included in the curriculum, meaning there are no subjects dedicated to the teaching of a specific language, but only to the teaching of International Business in English.

The reasons why proficiency in English as a second language is required to enroll in and study International Business are linked to the nature of the program itself, as set out in previous lines on the importance of multilingualism in IB. First, as English is commonly used, to the point it is considered a lingua franca in Business, it has become necessary for practitioners in this area to be able to communicate with others in this language. Second, most of the courses are taught in English, in order to familiarize the students with both the language and with the proper vocabulary in the different spheres covered by international business activities.

Third, the program's international approach has defined a requirement for an academic community that thinks, talks, reads and carries out research in English, since most of the available literature, case studies and teaching materials are published in this language. Fourth, English-proficient professionals are in high demand in the country, because of the intense internationalization process it is going through. Finally, Universidad EAFIT has defined internationalization as a primary goal within its vision. This requires having faculty educated abroad, carrying out research with an international scope, promoting mobility among students and faculty, adopting international practices in education, and using international teaching and research materials in the classrooms.

Third Language Policy

As previously stated, the undergraduate program in International Business at Universidad EAFIT responds to a policy related to the internationalization of the domestic market undertaken by the Colombian government. Moreover, the program's interdisciplinary nature is one of the reasons behind the adoption of the third language policy.

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International Business, as an interdisciplinary field of knowledge and research, takes elements from a wide variety of other disciplines and sciences such as: economics, finance, accounting, logistics, social sciences, psychology, organizational behavior, international relations, negotiation, among others. Parallel to these diverse fields, International Business reacts to the concrete forces of international market integration, information and communication technologies and globalization.

In this context, the undergraduate program in International Business at Universidad EAFIT has strived for a multidisciplinary approach in its academic areas since its inception. The program included areas typically associated with IB, including Corporate Internationalization, Transport and Logistics, International Trade, among others; but also covered further areas such as Conflict Negotiation and Settlement, International Relations and Intercultural Management. The inclusion of other languages besides English as a requirement for students to receive their undergraduate degree also reflects this multidisciplinary spirit.

Beyond these basic considerations, the addition of a third language as part of the requirements for students has provided the undergraduate program in International Business at Universidad EAFIT with a collective identity. Amongst the University's academic community at a regional and national level, this program has gained strong recognition. Moreover, the effects of the third language policy on students are visible in a number of spheres, including the following:

First, this policy encourages IB students at EAFIT to direct their attention to a distinct language community other than the Spanish one, to which the country belongs, and the English one, whose language is used in the classroom. This is done with the understanding that intercultural competence includes, among other aspects, a linguistic factor (Deardorff, 2006; Byram 1997; Lambert 1994)

This policy also helps students develop greater intercultural sensitivity. According to Janet and Milton Bennett and their Developmental Model of Intercultural Sensitivity (DMIS), students engaged in intercultural workshops, classes and exchanges are more likely to become competent intercultural communicators (Bennett, Bennet, 2004). Language acquisition classes are also intercultural encounters where students can establish differences and similarities between the cultures involved.

Second, the third language policy opens up opportunities for academic and internship experiences abroad. Many students choose their third language according to their future career development aspirations. In other cases, having a third language make them more eligible for academic exchanges, scholarships and internship periods.

As can be seen in the following section, data collected from the undergraduate program in International Business at Universidad EAFIT related to the language requirements suggests similar effects.

Quantitative Information on the Program

To gain a quantitative overview of the student's language profile, the program coordinator met with IT to extract data for the following admissions and language certification statistics.

Table categories correspond to student status at the time the data was retrieved from the institution's databases. Active students are those that are currently enrolled in the program. Graduated students are those that completed the curricula and received their degree. The remaining categories list all students not currently active. The third encompasses students that did not meet minimum academic performance requirements; the fourth, students that voluntarily withdrew from the program temporarily. Students in the fifth category cancelled their studies, while the sixth corresponds to students who have completed their studies but have not received their degree. The seventh category lists students currently undergoing enrollment procedures, and the final one, students that passed away.

According to data retrieved from the institution's statistics and presented in Figure 1 (third language choice), the third languages preferred by students as of November 2017 are, in decreasing order of popularity: French (44.3%), Portuguese (37.5%), Italian (9.7%), German (6.9%), Chinese (1.4%) and Japanese (0.1%). This

Table 1. Student status according to English language skills at enrollment

Status	Enrollment with B1	in % of category	Enrollment with B2	in % of category	Sum Total
Active	469	46.76%	534	53.24%	1003
Graduated	893	58.48%	634	41.52%	1527
Withdrawn because of poor academic achievement	155	58.71%	109	41.29%	264
Withdrawn voluntarily	213	57.41%	158	42.59%	371
Statutory cancellation	30	58.82%	21	41.18%	51
Non-graduated Alumnus	2	33.33%	4	66.67%	6
In process of enrollment	2	66.67%	1	33.33%	3
Deceased		0.00%	3	100.00%	3
Sum Total	1764	54.65%	1464	45.35%	3228

Figure 1. Choice of a third language
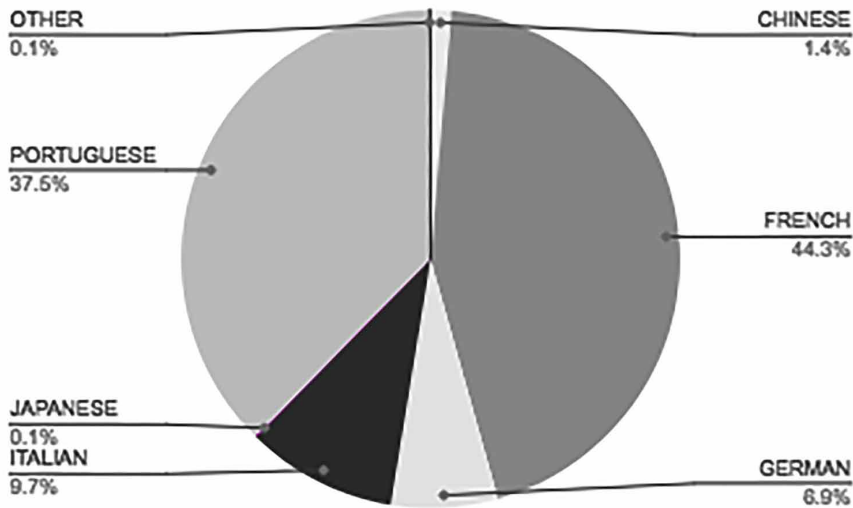
distribution of the third language seems to follow a student rationale that prefers evolved Romance languages that are most similar to Spanish and therefore, are perceived as easier and faster to learn, so they can rapidly certify their proficiency.

Due to database limitations, the authors do not have the same precise information mentioned in Table 1 for students regarding their third language choice. Over the last decade, the percentage of students meeting the third language requirement at enrollment has varied between two and nine percent. Many of these students have either a family background that allowed them to acquire a third language early in life, have gone to schools affiliated with a particular European country and which include a third language in their curriculum, or have gone on a student exchange before enrollment.

When comparing active to graduated students, an increasing of the number of students with a B2 certification at the time of enrollment is evident, which could be associated with the importance English has gained in primary and secondary education in the country, the access to better English proficiency training, more possibilities to travel to practice the language, enrollment in schools categorized as bilingual or with higher language teaching intensity, and easier and better access to resources for language training such as music, series, books, movies, tv series, among others.

It can also be inferred from the data retrieved and analyzed that there is a lower desertion and withdrawal rate, both voluntary and caused by poor academic performance, of students with a B2 certification, compared to the desertion rate for students that only meet minimum enrollment requirements (B1). Based on primary

information provided by the academic program coordinator, the desertion rate for International Business at EAFIT is also lower compared to the other programs within the institution and throughout the country.

This reduction can be attributed to different factors. One possible explanation is that B2 students feel more comfortable with class assignments, making their studies more accessible or even easier and raising their performance. This could be compounded by the fact that students with only a B1 upon enrollment need to certify both a B2 in English and a B1 in a third language by the time of their internship, which represents a significant commitment in terms of study time for the first 7 semesters. For students with a B2 certificate at enrollment, the need to acquire a higher proficiency is no longer an obstacle to continuing with their studies, and they can fully focus on their third language and other curricular activities, reducing their workload and, presumably, their stress levels.

Of course, an alternative explanation for this is that the higher the English certification of a student, the less he or she is willing to drop out, as result of their increasing motivation for the program. This is the explanation favored by the academic coordinator: Since the additional language requirements are much higher than other programs' requirements, they cause students that wish to enroll in the program to make additional efforts, both academic and financial, to acquire language skills in order to meet them. These efforts reduce the probability that students will drop out of the program because of their sunk costs in terms of time, dedication and money, and because the decision made to study international business is often much more deliberate and informed.

A third explanation is that a common factor or factors cause better academic performance, lower desertion rates and improved English skills. These could be higher overall learning abilities, for example better schooling, intelligence, metacognitive abilities, or executive control. This explanation is especially interesting, because these are precisely the cognitive correlates that research has consistently found to be associated with bilingualism, and will be discussed in the following paragraphs.

Cognitive Correlates of Multilingualism

So as to be sufficiently open-minded in the interpretation of both the lower desertion rate in students with better English skills at enrollment, as well as the effects and influences of using a foreign language in the classroom, it must be kept in mind that multilingualism is correlated with several changes in cognitive performance. These mostly positive impacts are also relevant when assessing the costs and benefits of a study program taught mostly in English and requiring proficiency in an additional foreign language.

In their systematic review and meta-analysis, Asope et al. (2010), relying heavily on several studies by Bialystok and colleagues, found significant evidence of the following correlates of Bilingualism: Improvements in attentional control, working memory, metalinguistic awareness, metacognitive awareness and abstract and symbolic representation skills. These will be described in more detail below.

Attentional control in this context refers to a person's ability to "to control their attention while engaged in linguistic and nonverbal tasks" (Adesope et al., 2010). The evidence for improved working memory seems to be mostly conclusive in tasks that require greater attentional control. Attentional control is obviously indirectly beneficial to performance in both academic and professional settings.

Most of the studies surveyed have also found that bilinguals have an improved awareness of language. Having different words for concepts or being proficient in different syntaxes and grammatical rules seems to foster a better understanding of how these produce meaning.

Metacognitive awareness is of special interest in higher education contexts, as it refers to *"an awareness of one's own learning strategies and the mental activities required to self-regulate the learning process"* (Adesope et al., 2010). The evidence seems to support improved metacognitive awareness in bilinguals, which should, ceteris paribus, imply both better learning strategies and learning outcomes, and is one of the most convincing arguments for the inclusion of different languages in education.

Especially relevant to student success in future working environments are abstract or symbolic reasoning, creative and divergent thinking, and problem-solving skills. Bilingualism appears to foster cognitive flexibility, as demonstrated in tasks requiring executive control and, for example, Simon tasks.

Furthermore, language and linguistic code switching have been shown to prime (Chen and Bond, 2007) and activate different ethnolinguistic identities and therefore impact cultural code switching (Molinsky, 2007), a highly important skill in International Business. Since one of the program's major objectives is to foster global thinking and interculturally competent professionals, it seems necessary to include multiple languages and language use in the program as early as possible.

Although Adesope et al. (2010) specifically noted that the effects of bilingualism are stronger if the second language is acquired earlier, most of the effects are still statistically significant if learned later in life, which is supported by other findings, e.g. Kroll and Bialystok (2013).

The aforementioned authors did not review the literature on multilingualism, and the study of the cognitive correlates of trilingualism or other forms of multilingualism is still scarce. Cenoz and Jessner (2009) noted that there are "non-predictable and dynamic effects" depending on the mode of third language acquisition. For bilinguals, the options of language acquisition are either simultaneous (in childhood) or

consecutive, with a shorter or longer interval between L1 and L2 acquisition. In tri- or multilinguals however, the possible permutations in language acquisition, depending on the simultaneous or consecutive acquisition of one, two or three languages, as well as the differing time spans for each permutation add a higher level of complexity. Although the precise nature of this cross-linguistic influence or interaction has yet to be defined, it seems that the effects of learning and speaking more than one foreign language are presumably at least as strong as the effects of bilingualism, since most hypotheses suggest that the transformative cognitive experience of language learning itself functions as an activator of cognitive plasticity and leads to the improved cognitive correlates. It would therefore seem counterintuitive that further language learning would reduce the improvements already achieved.

For all these reasons, it seems highly worthwhile to foster second and third language proficiency and use, as catalysts for the students' holistic and cognitive development, besides the obvious social and communicative benefits. However, the IB program at Universidad EAFIT has not only implemented language requirements, but also decided to teach many of its subjects in a foreign language. Teaching in a foreign language influences students, educators and classes in different ways, which will be illustrated in the following subchapter.

Effects of Language in the Classroom

The following paragraphs will briefly mention the general function of language in an educational context and the different dimensions of learning affected by and mediated through language, which will serve as inputs for the following discussion.

As mentioned above, the importance of multilingualism and respect for linguistic diversity has been especially recognized within the European Union (Commission of the European Communities, 2003), which has also emphasized studies on the use of multilingualism in an educational context, although often with a focus on schools.

Of interest in the case of Universidad EAFIT is the concept of immersion teaching, or, as it has been known since the 1990s, "Language and Content Integrated Learning" or "LCIL" (Eurydice, 2005), defined by both by both Marsh (2008) and Eurydice (2005) as a "generic term that refers to the teaching of subjects in a different language from the mainstream language of instruction".

By teaching most subjects in English, EAFIT pursues dual objectives and motivations: Teaching the disciplinary knowledge of the different subjects and teaching competency and fluency in the general and specialized languages used in international business. Research on language teaching has already established the "need for learners to be exposed to a situation calling for genuine communication" (Eurydice, 2005). As such the approach aims to overcome an important obstacle

to language learning in the Colombian context, namely the lack of a genuine communication need in the subject fields of students' future work.

According to Meyer and Prediger (2012) any language used in the classroom serves a triple function, as it is at the same time:

- An object of learning, and as such must be acquired. It is in this context that definitions are usually used to introduce specialized language and new concepts to be learned by students.
- A medium for learning, since the student's disciplinary or subject learning, whether from books or the teacher, is transmitted and mediated through language.
- A prerequisite for learning, since without the necessary linguistic competencies, students could not follow classroom activities. As such, it is important to understand that a lack of language skills can become a potential obstacle to learning.

In the EAFIT context and to assess the impact of learning and acquiring linguistic and professional competencies, it is therefore important to understand that classes are taught not only *in* a foreign language, but *with* and *through* a foreign language (Eurydice, 2005).

These three perspectives shed a very broad light on the use of a foreign language in the classroom, mostly as a warning to be aware of the importance of language proficiency and the necessity to consciously promote its acquisition in class. A more detailed framework is necessary to help detect particular areas impacted by the decision to change the language used in the classroom to a foreign language, and to compare the advantages and disadvantages of doing so.

According to Vollmer and Thürmann (2010), there are different dimensions to the use of language, or "*areas of linguistic action*", in learning situations. The first and most obvious function of language is communicative. In the classroom, this function impacts the following dimensions:

- Class participation,
- Understanding of both texts and the lecturer,
- Production of texts or presentations, and
- Access to further material.

Although all these dimensions are important, the last dimension, access to further material, critically determines curriculum design in higher education, as it is concerned with learning resources, autonomous learning, research activities and the ability to understand required reading for class.

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The second function of language is cognitive and has been alluded to in the previous subchapter. In the classroom, this cognitive function impacts the following dimensions:

- Critical reflection on learning results and processes, and
- Structuring, adapting and expanding knowledge.

In the discussion below, the authors will relate informal observations by the programs teaching staff to the above dimensions, to provide as complete a picture as possible of the effects that result from a higher education program taught in a foreign language.

Discussion

In the IB program, the abovementioned functions and dimensions led the authors to hypothesize about the advantages and disadvantages of teaching most of the program in English and to highlight several salient questions.

The first and most evident aspect is that class participation is simplified when students have been certified has having a high level of proficiency, which, similarly to the dynamics in discussions between native and non-native speakers, often leads to dominance in class discussions, and frequently to better academic performance. In this sense, English proficiency leads to feelings of self-assurance, motivation and natural performance. On the other hand, the use of English in the classroom can have a silencing effect, causing the withdrawal of students whose real or perceived English sufficiency does not allow them to fully participate in class. This may be why students with a lower level of English proficiency have a higher probability of dropping out voluntarily or due to low academic performance. So far, the authors have no information on the impact of proficiency on motivation or program satisfaction. Along these same lines, good English skills are a definitive advantage for the production of written reference texts.

The second aspect is that English proficiency leads to better comprehension and communication, both with professors and among students, as the language is used in the classroom and for every academic activity within the program. When students have all their reading assigned in English and all research has to be done in this language, it fosters understanding within the classroom when they have to share ideas with their classmates and the lecturer. This also allows their written production to be richer as they use appropriate terms and grammar rules.

Third, English proficiency aids with the use of more academic and rigorous sources, due to the fact that most prestigious databases and publications are written in English and available in this language for common consultation. The coherent use

of English as the language of instruction and evaluation helps students significantly expand their access with regard to complementary materials and international sources, consult English language publications and textbooks, and frame issues included in the different subject fields in an international context, comprehension issues notwithstanding. Also, translation is no longer required for students to understand the contents of academic literature. It is in this area and in later semesters that the third language also begins to gain relevance. Students with different third languages start to refer to additional material from local sources in their third languages, which enriches classroom discussions and presentations through highly current local knowledge.

Fourth, lecturers have a much wider choice of instructional materials for the same reason, including cases studies from Harvard Business School Publishing, scientific databases and papers that are closer to the state of the art. The use of international examples and topics leads to more globalized thought processes amongst students and familiarizes them with companies and contexts in different countries, as opposed to the Latin-American context alone. As stated before, English is a Lingua Franca, and the most widespread and commonly used language by multinational and international organizations, which are, in turn, important sources of teaching information and materials.

Fifth, lecturers have found that the structuring and expansion of knowledge mentioned in the cognitive dimension above is mostly consistent throughout the majority of English language use. There are, however, some comprehension problems by students in the case of specialized terminology in certain subject fields. Students tend towards a "1 to 1" translation of terms into Spanish, and the mistaken belief that the same word, such as "universalism", equals the same concept in different subject fields such as ethics and international management.

Sixth, student proficiency in second and third languages contributes to a reduction in the perceived difficulty of cultural distance for international mobility programs and has a motivational effect upon these programs, causing a larger number of foreign students to seek exchange semesters within the IB program, and a much higher number of students going abroad. Since many classes are taught in English, incoming students from many different countries undergo exchange periods in the program, providing local students with international exposure through other people whose mother tongue is different from Spanish. Because of the challenge of the requirement, institutional policies and support have been adapted to make it easier for students to access different means of language acquisition and plan their international experiences. It has also been identified that knowledge of a language opens doors to certain cultural conducts and facilitates interactions with foreign students and behavior in foreign cultural contexts.

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And finally, language skills are a plus on student profiles when pursuing internships at many multinationals or international organizations that require personnel that can speak specific languages, due to their specific activities in certain markets and regions that demand capabilities for communicating with locals and extracting information from local sources.

Despite the many advantages of having this language policy within the program, there are still several aspects to be improved. First, the language used by the lecturer in the classroom is not everyday language but rather a more sophisticated *"Bildungssprache"* or cultured language. Although everyday English is taught at school and acquired through courses, it can be argued that a B1 level of English is probably insufficient for comprehending the sophisticated language used in the classroom.

Although specialized language in the subject fields is often specifically introduced and taught through classroom definitions, sophisticated language is not taught, but rather assumed implicitly as a prerequisite, and is not taught in a differentiated manner throughout the program. It must be a specific concern that a B1 level is probably insufficient for reading academic articles and producing coherent texts to a standard of academic writing. Special attention must also be paid to processes of critical reflection, where students require understanding both the lecturer and written texts in a contextualized, differentiated and multifaceted fashion.

Second, if language production and reception requirements are only partially fulfilled, this could easily lead to limited access to disciplinary knowledge. Usually, this leads the teachers in the school to react by adopting compensatory strategies, according to Prediger (2013): Either defensive strategies of simplification of the language and linguistic requirements in class, or offensive strategies of conscious support, scaffolding with incremental difficulty, as well as language learning as a cross-class task. Often however, the lack of language awareness in higher education, especially the lack of sensibility for the mediating process of language involved in acquiring disciplinary knowledge, leads lecturers to neglect linguistic strategies. Further complicating this is that many of the lecturers at EAFIT are also non-native English speakers.

Third, certification in a third language is a mandatory requirement for progressing with the academic plan, but there is no inclusion of a third language in regular curricular activities. This means students are not provided with an environment where they can practice the language with a genuine need for communication and use within an IB context. The option of classes taught in a third language is being considered by creating complementing or elective subjects for students who wish to practice and increase proficiency in their language of choice. This requires having lecturers that are fluent in specific languages like Portuguese, French, German or Italian, besides compliance with academic degrees required for hiring. For instance,

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this is an aspect that needs to be thought about in more detail, considering the financial and administrative issues needed to make it feasible.

On balance, the authors find that the positive impact of the language policy far outweighs its difficulties and negative effects. Improved learning outcomes, employability and stronger internationalization for students reflect well upon the program as a whole, and the above discussion clearly illustrates several ways the language policy impacts these. In light of this, the difficulties and significant room for improvement mentioned above do not constitute an overall negative perception, but rather serve to highlight the complexities that exist alongside the immense potential of the language policy for students.

Data Gaps and Limitations

There are several data gaps and limitations the authors wish to point out in the interest of transparency and to indicate future fields of research. According to the program's academic coordinator, English proficiency and the pursuit of acquiring a third language promote higher mobility rates amongst students seeking to practice or perfect their languages and become immersed in cultures of interest. This international exposure is indeed the best and most effective way to obtain a desired level of proficiency in a language, while allowing students to experience life in an autochthonous context. Sadly, the authors do not have information on the motives for choosing the third language, the influence of the third language on student mobility or the mode of third language acquisition. An observation by the coordinator was that only a small proportion of international mobility is actually to or from English speaking countries. One possible explanation of many is that the students' preferred mode of third language acquisition is an exchange program, allowing them to live in countries where that language is spoken.

Information regarding the motivation behind and the acquisition of third languages can be gathered through a survey to be filled out by students at certain stages of their study plan. First to identify what leads them to choose a specific language over others, and what attracts them about that language. And second, to characterize the different means of acquiring a third language, as students are free to choose their preferred method, so long as they certify it with the institution. With this information, further comprehensive analyses can be performed to come up with suggestions and measures for improving the program.

A further gap in the data is that there is insufficient information to reliably assess the impact of language proficiency on motivation. Neither the additional workload imposed on the students, nor the extent of the positive and negative effects observed and noted above are quantifiable so far. Thus, no hypothesis about the cause for the reduced desertion rates can be confirmed until better, individualized data is acquired.

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RECOMMENDATIONS

Throughout this chapter arguments and data have been presented to evince the effects of the language policy implemented by this study program. Despite the positive results that can be attributed to the multilingual policy undertaken by the undergraduate program in International Business at Universidad EAFIT, there are several actions for improvement to make this policy an even more significant part of the education of future IB professionals. The integration of the third language into this study program in the form of curricular, co-curricular or extra-curricular activities is an urgent need. To truly improve communicative and subject field-related English skills in the classroom and to integrate the third language policy into the learning experience in IB it is necessary to promote activities that will articulate the different languages with the contents and research carried out in the program.

The experience obtained over the years of teaching, guiding and following up the learning process of students in the undergraduate program in International Business at Universidad EAFIT provide solid grounds to suggest a series of actions for improving English proficiency and integrating the third language into the student's learning experience both within and outside the classroom:

As was explained in the introduction to the study program at EAFIT, an English requirement for enrolling and continuing within the program is a must. Nevertheless, the effects of language and content-integrated teaching of English in the classroom can be enhanced by implementing actions such as:

- Raising awareness among the different participants within the academic community (students, professors, researchers, study program coordinators) regarding the importance of encouraging a steady and active improvement of English communication skills, and of the obstacles faced by students with limited English proficiency.
- Integrating the issue of specialized communication in English with the International Business context. This can be achieved by inviting experts in the field to share their views and activities seeking to turn the mere requirement of English into a process of continuous improvement for increased professional performance.
- An increasing number of foreign students in the undergraduate and graduate programs of the Department of International Business provides an excellent opportunity for implementing extracurricular activities, such as cultural meetings, music and arts conversations, to foster integration and cultural exchanges with Colombian students. These activities can be carried out in English or a third language, creating an atmosphere of integration and

fostering an acquaintance with the different accents and vocabulary used by the participants.

- Identifying students that share same third language option. With this information, professors and administrative staff can suggest activities that use these languages, including conferences in non-English foreign languages and other experiences that connect these languages with IB topics.

For educators responsible for designing programs with a multilingual component in International Business, it would be advisable to include activities related to advanced topics and involving these languages in the syllabi. Moreover, integration of curricular activities in the third language within the curriculum will serve several purposes:

- First, it would encourage students to cultivate a third language to share experiences, progress and difficulties with other students in the classroom.
- Second, it would integrate the acquisition of the third language with subject field-related terminology, essential for generating unambiguous texts in multilingual communication.
- Third, the requirement would attract new faculty members capable of expressing and understanding issues related to IB in their particular language, fostering a more global profile for the program.

As has been emphasized above, a general recommendation based on the case study presented in this chapter is that a discussion about English-centered education in business schools is extremely necessary. For a study program in International Business to become truly global, it is important that it be open to embracing a multilingual scope and not impose artificial limits upon the clear benefits of using other languages in the classroom. The extensive influence of the English language in education, research and praxis within the areas covered by International Business nowadays is self-evident. Simultaneously, it is important to send a message of inclusion and acceptance of other voices and languages representing different cultural identities in the education of future IB professionals. This is a central aspect when thinking about the great responsibility IB education has for fostering critical thinking and dealing with ethical concerns in an understanding of business as providing opportunities for people around the world to improve their economic standards while acknowledging their linguistic and cultural heritage. Including at least one third language per student fosters academic mobility and brings truly global diversity into the program.

FUTURE DIRECTIONS

To better understand the impact of the language policy on IB education, the link between linguistic proficiency, motivation and performance needs to be studied further, to be able to accurately assess the impact on desertion rates, workload and the acquisition of specific disciplinary knowledge and competence.

The reasons for choosing a third language, as well as the impact of a third language on mobility and future work, especially in the Colombian context, is understudied and not sufficiently understood. The suspected link between a third language requirement and outgoing student mobility for acquiring that language skill in other countries is of great importance when considering the program's internationalization and global reach. Therefore, the means of third language acquisition should be studied further.

To address both of these issues, the link between linguistic competence and perceived performance by students, alumni and future employers needs to be investigated, to obtain detailed information on the long-term impact of the third language choice as well as on the proficiency and competence obtained through the content and language integrated learning approach.

Finally, to accurately assess the impact of learning in a foreign language, the perspective of faculty and teaching staff and their classroom teaching and coping strategies need to be analyzed. There appears to be much room for improvement in the practice of content and language integrated teaching, especially in higher education, if the current lack of awareness and training programs in this area serves as an indication.

CONCLUSION

On balance, the cognitive correlates of multilingualism, fostered through language and content integrated teaching, as well as the observed effects in the classroom and the program, highly recommend both language requirements for enrollment and continuation of studies and the use of foreign languages in the classroom.

Students and staff need to be aware of the complexities, silencing effects and increased workload arising from teaching in a foreign language. The cognitive correlates of bi- and multilingualism suggest comprehensive benefits for students, while their linguistic skills are developed through the use of English in situations that truly require communication.

The most salient and relevant impact of multilingual IB education is the genuine internationalization of faculty, students, student mobility, classes and materials. The amplified reach and access achieved through the use of English as classroom language can hardly be overestimated. Precisely because of this positive observed balance, IB educators should not limit or be content with English as the only foreign language used in the program but should fully integrate third languages that bring the rest of the world into the classroom.

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