Multilingualism
Interdisciplinary Topics

Edited by Xiaoming Jiang

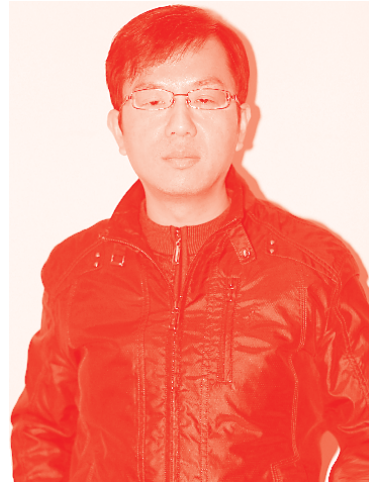# Multilingualism - Interdisciplinary Topics

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Meet the editor

Dr. Xiaoming Jiang is a professor at the Institute of Linguistics, Shanghai International Studies University, China. He obtained a BS in Psychology from East China Normal University and a Ph.D. in Cognitive Neuroscience from Peking University. He served as a research fellow at the School of Communication Sciences and Disorders, McGill University, Montreal, Quebec, Canada, and as a senior speech scientist in nuance communication. His research utilizes experimental methodologies to uncover social and interpersonal aspects of human communicative processes in both monolingual and multilingual contexts. While serving as guest editor for *Frontiers in Psychology* and *Frontiers in Communication*, he published nearly forty peer-reviewed articles as lead author in high-impact journals such as *NeuroImage*, *Journal of Experimental Psychology: Human Perception and Performance*, and *Speech Communication*.

Contents

Preface

Multilingualism has exerted a huge impact on people's well-being and quality of life all over the world. Despite that many countries have developed language policies regarding multilingualism, we are largely unaware of what it is to be a multilingual speaker in a multilingual society dealing with a multilingual communicative setting. This book presents state-of-the-art developments in science and technology regarding what we have known and what we have yet to know about the nature, factors, and consequences of living a multilingual life.

Firstly, how do multilingual speakers differ from monolingual ones in general cognitive capacities (e.g., cognitive control, social intelligence, etc.) and in the ability to produce, comprehend, acquire, and use different language forms (e.g., spoken, sign, audio-visual, etc.) across contexts? Secondly, how do multilinguals communicate attitudes and emotions as well as perceive and connect with others of different cultural/social backgrounds? Thirdly, what are the processes, benefits, and costs of learning multiple languages, especially for people who speak underrepresented and marginalized languages and those who live in areas where English is not the dominant language? Fourthly, how does being a multilingual speaker benefit or alter the speaker's health, for example, in the elderly and in those who suffer from language and speech impairment? Fifthly, how have artificial intelligence (AI) techniques been deployed in intelligent systems to benefit multilinguals in social media connection, translation, speech recognition, and multimodal sensory integration across communicative contexts?

This volume is divided into three sections, each of which tap one fundamental issue tightly linked to the topic of multilingualism: Multilingualism: Culture and Identity (Section 1), Multilingualism: Learning and Communicative Competence (Section 2), and Multilingualism: Media, Health and Society (Section 3).

The first three chapters contribute to the association of culture and identity with multilingualism. Chapter 1 demonstrates that the instruction and learning of a new language enhance one's awareness and empathy of the cultural value and the mindset of that language speaker. Chapter 2 introduces multilingualism in Cameroon and shows how speakers from different linguistic groups construct and deconstruct the concept of a country given the feeling of belonging to one country. Chapter 3 analyzes decision-making in the choice of language in multilingual contexts, as well as the underlying factors and sociolinguistic implications of this choice.

The following three chapters showcase the impact of multilingualism on learning and communicative competences. Chapter 4 focuses on the anxiety in bilingual students when speaking English for academic purposes and associates academic oral communication anxiety with student motivation in language learning. Chapter 5 claims monolinguals are more capable of understanding and creating a positive effective relationships with others when they evaluate their success in both business and academic places. Chapter 6 reviews empirical studies and proposes the role of the acquisition of distinct script systems on face processing and highlights that becoming multilingual has fundamental impacts on human cognitive abilities beyond language.

The final two chapters demonstrate the mutual benefit of multilingualism and media, health, and society. Chapter 7 provides a case report on the multilingual broadcasting practice by rural radios. Chapter 8 gives examines how multilingual speakers benefit doctor-patient communication and their social and psychological well-being.

The book highlights the interdisciplinary endeavor across linguistics, psychology, cognitive neuroscience, communication sciences, sociology, education, AI, and health sciences, among others. It draws upon areas of expertise from a team of multilingual and multidisciplinary experts, including scientists, policymakers, educators, AI engineers, and others.

We believe this book is a novel and timely contribution to the broad field of multilingualism. We hope it will reach a large audience for a variety of purposes, including students and professors in academic institutions for teaching and research activities as well as educators, doctors, and practitioners for applying relevant knowledge to the development of educational tutorials, efficient communicative strategies, and policies in multilingual contexts.

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Section 1

Multilingualism: Culture and Identity

Chapter 1

Multilingualism and Awareness of Cultural Differences in Communication

Irina-Ana Drobot

Abstract

The purpose of this chapter is to look at ways in which teaching and learning a foreign language can benefit from previous knowledge of other languages, when it comes to the awareness of linguistics, pragmatics, as well as of cultural differences. The assumption is that having knowledge of other languages and, implicitly, of cultures, can help increase awareness and empathy with other cultural values and mindsets. As a result, adaptation to the ways and values of other cultures can be easier and faster for multilinguals. Studying a foreign language should always be strongly connected to studying the respective culture, since it can increase awareness of the context of communication and help in the study of pragmatics. The chapter will analyze examples of multilinguals with these abilities and awareness and draw conclusions.

Keywords: pragmatics, linguistics, foreign language teaching, culture, civilization

1. Introduction

In today's world, contacts with different cultures are very frequent, as a consequence of globalization. As a result, we need cultural awareness and cultural competence in order to relate with empathy to different cultures, with different values and mindsets, rituals and traditions, as well as with different ways of communication. Topics of interest in the foreign language classroom include, aside from linguistics and conversational aspects, aspects related to contemporary culture and civilization, not just culture and civilization from some time ago in history. All traditions and events from history should be presented in relation to what is still relevant at present time. Students may find that old textbooks about the cultures related to the languages they are studying present a world they will no longer find in reality, during a trip. This is because we now live in a multicultural world. Different cultures can be found in the same country. We can come into contact with other cultures at various times in our lives, such as in the classroom, as both teachers and students, as well as at work, during international collaborations, and as tourists. Situations where we need to take care in order to minimize or even avoid culture shock are represented by moving to live in a different culture, going for work, or as students. Having accurate information about the different culture, as well as understanding the differences can help with adaptation, either on long or short term, depending on our stay. Language is an important part of any culture, and, what is more, it "does not exist apart from culture, that is, from the socially inherited

assemblage of practices and beliefs that determines the texture of our lives" [1]. The relationship between language and culture also consists of the fact that language is "a key to the cultural past of a society" [2], as well as a key to understanding "social reality" [3]. Thus, language is a means of reflecting a culture and its mindset, but also of influencing it and creating it: "The structure of a language determines the way in which speakers of that language view the world or, as a weaker view, the structure does not determine the world-view but is still extremely influential in predisposing speakers of a language toward adopting their world-view" [4].

In time, cultures change, since "they are dynamic, they interact and compete with one another" [5]. Culture is always changing with respect to its traditions, values and mindsets in order to answer to the needs of its members. One change when it comes to cultures can be visible in the phenomenon of multiculturalism, which is currently valued at the time. It refers to "a system of beliefs and behaviours that recognizes and respects the presence of all diverse groups in an organization or society, acknowledges and values their socio-cultural differences, and encourages and enables their continued contribution within an inclusive cultural context which empowers all within the organization or society" [6]. Multilingualism can be regarded as a part of multiculturalism, just as language is part of any culture. According to Cutler [7], multiculturalism means ways of behaving and thinking, as well as learning styles, but also communication styles. Multilingualism can be understood as a communication style, but also as an influence on mindsets and values.

Through multilingualism, we can increase the awareness of cultural differences and feel empathy for these differences at the level of linguistics (especially pragmatics) as well as at the level of values and mindsets. Anyone that is multilingual is aware of different ways of communication and of relying on context of various cultures, not just his/her own. The ability of cultural awareness could be increased through multilingualism, which may, in its turn, help students learn easier another foreign language, since they already have knowledge of possible differences. In the foreign language classroom, the teacher could also make reference to other commonly known language(s) to help the students make connections and learn faster.

The main question this chapter deals with is whether multilingualism helps gain an increased awareness of the cultural differences in communication.

2. Impact of multilingualism on foreign language learning

By looking at various definitions of multilingualism, the aspect of being able to use certain languages for communication and to understand what is communicated in these languages stands out. We also notice that multilingualism can be regarded like a trend that is set at a political level, by the Council of Europe, by placing emphasis on diversity and understanding across languages and cultures, but also like a result of the situation in certain countries, where there are several official languages, not just one.

Multilingualism could be defined as "any degree of linguistic ability from an equally good command of two or more languages [...] to lesser abilities, active or passive, in one of the languages" [8]. It is believed that a multilingual person is "anyone who can communicate in more than one language, be it active (through speaking and writing) or passive (through listening and reading)" [9]. The European Commission [10] defines multilingualism as "the ability of societies, institutions, groups and individuals to engage, on a regular basis, with more than on language in their day-to-day lives". Attention has been drawn to the individual multilingualism and the societal multilingualism distinction [11]. Plurilingualism, according to the Council of Europe, is the "repertoire of varieties of language which

many individuals use", while multilingualism is "the presence in a geographical area, large or small, of more than one 'variety of language'". In the foreign languages classroom, some students may be multilingual due to their individual preferences or contacts with other cultures, while some others can be multilingual due to the area where they live, if more languages are spoken. For instance, in Russia, twenty-four official languages are spoken, in India twenty-three, while in Switzerland there are four national languages.

Multilingualism can influence the way foreign language learning is going on in several aspects. First of all, if communicative language learning is practiced, the focus will be on the way conversations are understood, and notions of pragmatics will be given, sometimes theoretically, sometimes practically, sometimes by including both. Second, multilingualism is regarded as a means of helping students to adapt to the realities of the everyday world, a world which encourages both multiculturalism and multilingualism. What is more, learning a foreign language is always connected to beginning to understand the respective cultures, with its mindsets, values, as well as rituals and traditions. In this way, by knowing several languages, students can gain insight in the cultural differences and they can sympathize with other cultures. Third, if the class is made up of students belonging to other cultures and thus, having other native languages, or knowing other languages, then the teacher should take these students' background into account when planning the lessons and devising the activities. Fourth, if students and teachers know several languages, then they can use this background knowledge in order to make teaching and learning easier, and help students draw comparisons among the already known languages and the foreign language they are currently studying. Fifth, there could also be drawbacks in learning several languages, as previous knowledge could at times interfere with the currently studies language, which could lead to students producing incorrect answers.

2.1 Communicative approaches to foreign language learning and pragmatics

2.1.1 How being a multilingual speaker affects foreign language teaching

Foreign language teaching can take into consideration areas such as everyday life culture and dialogs, as well as grammar and vocabulary. A communicative approach is mostly preferred in foreign language teaching nowadays, especially since teaching is supposed to be student-centered, and students should participate actively in class. The communicative competence in foreign language teaching has been around since the 1970s, when the audio-lingual method was believed to help learners [12]. Active participation in class can be guided towards eagerness of students to participate in dialogs with their classmates. In this way, they can be made aware in their building of dialogs of frequently used phrases to address someone or to make polite requests, as well as of using specific formulas in specific contexts. Context awareness in communication is one of the teachings of pragmatics, together with the intended meaning suggested by the speaker. The following definitions could be applied to pragmatics: "Pragmatics is the study of speaker meaning", "Pragmatics is the study of contextual meaning", and "Pragmatics is the study of how more gets communicated than is said" [13].

One example regarding the domain of pragmatics could be given to native Romanian students that can compare direct and indirect politeness. While in English and French polite requests are formulated in an indirect way, the Romanian language uses a more direct formulation. For instance, while in English the polite request is formulated as: "Can I have your Syntax lecture notes please?", the Romanian equivalent is: "Dă-mi şi mie cursul de Sintaxă. *(Give me the Syntax lecture notes.)*" [14].

Polite requests differ in directeness and indirectness function of culture. As a result, indirect polite requests are also found in Hebrew and Spanish [15]. Those belonging to Uruguay culture prefer directness in polite requests [16]. Greeks prefer to offer reasons for the polite requests [17]. Some languages use more hints in requests, such as Japanese and English, which use them in a 40% proportion [18]. The hints in the Japanese language are, however, more opaque. According to research, there were less than 10% hints in the requests in English, French and Hebrew [19]. According to research [20–22], the Chinese polite requests can be more direct when social distance is small. These are all examples that can raise awareness of the cultural differences reflected in language as far as polite requests are concerned.

Increased pragmatic skills can be noticed in multilinguals. We can take the example of Grice's conversational implicatures, which are a type of inferences about the speaker's intended meaning [23]. For instance, in the dialog "John: Did all of the students pass the exam? Mary: Some of the students passed the exam." the following inferences can be drawn: "Some and possibly all of the students passed the exams" and "Not all of the students passed the exams.", the latter being a scalar implicature. Research results [24] "showed that bilingual children were more advanced than their monolingual peers in computing scalar implicatures." Studies [24] have been using conversational violations tests, according to which "bilingual children performed significantly better than their monolingual counterparts". Knowing two languages offers the possibility of gaining more background knowledge regarding conversations. Other researches mentioned in [23] include those listed under [25, 26], which conclude that "bilingualism boosts children's Theory of Mind-the ability to understand other people's mental states and intentions." Researchers [23] have started from this evidence supporting advantages in pragmatic abilities of children in order to extend their findings to multilinguals. However, their experiment's results [23] "provide only limited support for the position that multilingualism fosters children's pragmatic abilities. Overall, multilingual children were numerically better than bilectals in most implicature sub-tests including metaphor, irony, scalars 1 and scalars 2." What is more, they mention the following: [...] While the overall pattern of our results points towards a multilingual advantage, especially for the more demanding types of implicatures (i.e. irony), it does not provide robust evidence in favor of the hypothesis that exposure to more than one languages confers an advantage in children's conversational understanding." At the same time, their results show that multilinguals seem to benefit more from having wider background knowledge regarding conversation interpretation, as in the example of understanding irony. These findings could be used for practical aspects in foreign language teaching: the students could be given examples from several languages they know regarding conversational skills, so that they can draw their own comparisons and conclusions with respect to differences and similarities among languages. These comparisons could help them become aware of various ways in which communication works, through direct expression or through suggestions, implications and allusions. The favorable results from the experiments mentions with bilinguals, as well as multilinguals, may have to do with the fact that learning a foreign language "enhances children's understanding of how language itself works and their ability to manipulate language in the service of thinking and problem solving" [27]. By learning a foreign language, students have at times compared it with their own, and have gained insight into the way languages work regarding communication, as well as grammar and vocabulary. If students know Germanic and Romance languages, for example, they may draw further comparisons with new foreign languages they are attempting to learn. With their intuitive comparisons among languages, they can later have a basic background from where they can start their study of linguistics, of domains such as grammar and etymology.

The inclusion of exercises and notions based on pragmatics is necessary in the foreign language classroom, since studying grammar means only studying "how the formal knowledge of the language develops", while ignoring "the question of how the knowledge is transformed into actual usages, that is, into a productive use of language in its spoken and written forms, or, into socially and culturally appropriate usages" [28].

Besides skills in understanding conversations better, there is another skill that multilinguals can benefit from, namely "Multilinguals are more capable of separating meaning from form" [29]. Research has focused on the cognitive consequences of multilingualism: "multilinguals of different ages develop resources that allow them to perform better on some metalinguistic tasks and can even slow down some aspects of the cognitive decline associated with aging" [11]. These skills can make it easier for multilinguals to learn another foreign language, since it is suggested that they can become more sensitive intuitively to various aspects of the linguistic and communicational level.

There are studies which support the "relationship between multilingualism and conceptualization" [11]. Thus, "Some scholars consider that multilinguals and monolinguals have a conceptual base that is identical, while others think that the differences are not only quantitative but also qualitative." Other research mentioned is the "volume edited by Pavlenko (2011)", which "explores the way the acquisition of additional languages is related to conceptual development and restructuring and reports interesting findings on areas such as visual perception, inner speech, and gesturing" [11].

Foreign language teachers should take into consideration the above findings, and develop their activities in such a way as to take into account that students with a multilingual background can be more skillful in some areas of language learning, such as metalinguistic tasks, separation of meaning and form, a better conceptual base, and better conceptual development. At the same time, the foreign language teacher should also have in view to use the more perceptive skills the multilingual students have acquired in order to make differences between communication styles at the level of different cultures and languages more clear. For instance, the teacher could explain to these students, even if they feel them intuitively, the differences between direct and indirect communication cultures (or low context and high context communication cultures). Direct communication cultures focus on "getting or giving information" [30], and are, generally, Western cultures. Indirect communication cultures do not rely on saying the meaning directly, but instead on "pauses, silence, tone of voice" [31], and are, generally, Asian cultures. For indirect communication cultures, "The overriding goal of the communication exchange is maintaining harmony and saving face" [30]. Especially in indirect communication cultures, knowledge of pragmatics can be applied, since there are lots of instances when there are suggested meanings and allusions, both verbal, as well as non-verbal. For instance, in Japanese culture, hesitations and silence can show that someone does not agree with the interlocutor. While an interlocutor from the Western world would directly "yes" or "no", an interlocutor from the Asian cultures would even say "yes" when meaning "no" in order not to offend the interlocutor, but would provide instead hints and clues to what he/she means by silence, hesitation, and non-verbal communication.

2.1.2 How a speaker's native language and culture can impact the pragmatic language use in a foreign language

However, the native language and culture can influence the way that the speech acts are used in a foreign language. As an example, the researchers presented in [32] have done studies with respect to pragmatic skills in multilinguals and the way they

use the most frequently encountered speech acts of requests and refusals. For their study, they have been preoccupied by the degree of directness of requests and refusals that were formulated by "trilinguals for whom English is L2 (Hebrew speakers) and those for whom it is L3 (Arabic speakers), and the background variables that might explain this production". The Hebrew group of speakers showed a tendency for using direct requests, especially when using English at work. However, this tendency could be related to the way that requests are used directly when having informal relationships with work colleagues. The Arab group of speakers used less frequently direct requests when they were speaking with close persons, such as family. Arabic culture has the tendency to use direct requests with family [32]. The Arab group tended to use indirect refusals, "as the number of years of exposure to English increased" [32]. While Israeli Arabic is "more direct than English and even Hebrew (Katriel, 1986, 2004)", it was noticed that "increasing exposure to English may increase the level of indirectness employed by the Arabic (L1) speakers in their production of English refusals" [32]. This study showed that for these groups of users of English as a foreign language, English was used at work, and that language proficiency could "contribute to a more appropriate level of directness in a non-native language" [32]. As a result, the groups' previous experiences have an impact regarding how they handle requests and refusals in English as a foreign language. English uses both direct and indirect requests, and choosing the appropriate type of request has to do with the relationship between the speakers. Thus, the Hebrew group use more direct requests when having informal relationships with work colleagues, and the Arab group used more indirect refusals if they had studied English for more years. The presentation of this case study shows that previous experience is used when speaking a foreign language.

2.2 Multilingualism and multiculturalism as features of contemporary, everyday culture

When teaching and learning foreign languages, we need to take into account the social and cultural realities. In our case, we need to take into consideration the contemporary context, where, according to source [33] one of the "striking" features "of globalisation is the impact of multilingualism, and the related phenomenon of multiculturalism." What is more, contemporary societies are diverse, as far as both languages and cultures are concerned: "Very few contemporary societies can be considered homogenous; they are increasingly diverse, whether in the languages spoken or in the ways that people live and express themselves (their cultures)." The foreign language lessons need, thus, to help students prepare for the reality of a world where multilingualism is a necessary skill and a necessary tool for adapting to the everyday life. As a result, it is considered normal in today's world to know at least two or even more languages: "Speaking two or more languages is the natural way of life for three-quarters of the human race. [This] principle … has been obscured in parts of Europe as a consequence of colonial history" [34]. The current world asks for intercultural communication skills, where knowledge of other cultures cannot be completely separated from knowledge of other languages. Research [29] mentions the need to help students "come into contact with a number of different languages and cultures as early on as possible", since the students should adapt to a multicultural and multilinguistic world, where they will cooperate with other cultures when at work. Source [33] draws attention to the issue that certain languages are disappearing, that some are spoken by a very small number of persons, while English has known a rise as a globally spoken language. However, across the world "there are still over 7,000 distinct languages spoken", and in some countries multiple languages are spoken.

In today's world, both knowing other languages, most often English, the global language, as well as others is necessary. However, it is still necessary to maintain a connection with our native language and culture. As an example given by source [33], we can see Welsh identity as being connected to both culture, values, mindset, traditions, as well as to language: "To be Welsh is an experience. To both be and speak Welsh is a related, more robust experience. Each time we erase one of those options from the world of human experience, we lose an incomprehensibly complex realm of knowledge" [35]. The same experience could be applied to any other native language and culture.

Multilingualism and multiculturalism refer to both respecting one's native language and culture, as well as to showing respect and understanding towards other languages and cultures.

The European Commission views the multicultural language classroom as a means for the teacher to help students "value diversity" and to incorporate "cultural diversity in their teachings" [36]. Their document focuses on issues regarding the inclusion of migrant children in the process of foreign language teaching. The European Commission believes that migrant children should maintain their mother language, together with its culture, while learning another language. This is why, according to [37], they will need to interact with their family and community.

The European Union also "encourages multilingualism by espousing a policy which requires citizens to learn at least three languages, i.e. two languages in addition to their respective mother tongue" [38]. As a result, foreign language teaching should take this rule into account, by having schools and universities develop curricula that help students achieve this goal. The researcher mentioned in [39] draw attention to the reality that students of a foreign language already know at least one more language, other than their mother language. This means that "they already have an array of linguistic and cognitive skills that may prove very useful if they are adequately exploited during the language learning process". Yet, the issue is that "the particular characteristics of multilingual learners often go unnoticed by foreign language teachers". The researcher mentioned in [39] believe that teacher should be aware, and make use in the foreign language classroom, of the "multilingual learners' metalinguistic awareness, for example by adopting strategies such as reactivating prior linguistic knowledge and exploring the formal differences and similarities between the languages present in the classroom". Most of the times, it is useful for learners to start from what they already know, and then build further knowledge of the foreign language they are currently learning in class. What is more, the human mind tends to work by categorizing knowledge and experience, meaning by ordering knowledge and experience in various groups and based on various features. The language learners' mind works in the same way, as their previous knowledge of other languages can be considered part of their experience in the domain. They may order language features by types of family the language belongs to, for example to the Romance or to the Germanic family. Due to this, they can establish similarities and differences regarding vocabulary and grammatical structures, or these can be pointed out to the by the teacher during class. The teacher can also draw on his own background with previously known languages to give examples of how he/she uses previous knowledge to help him/her in learning a new language.

2.3 Disadvantages of multilingualism: language transfer (language interference)

As we have seen from the research presented in this chapter, in spite of all the previously presented benefits, there are also disadvantages to using multilingualism during classes. One of these disadvantages can be found under the form of language transfer (also known as language interference), which is explained by

source [40] as follows: "when attempting to communicate in a second language, learners often 'transfer' elements of their native language onto the speech patterns of the target language". Language transfer is an issue that is also raised in [41], which can be negative when it is "the sign of the lack of some kind of linguistic and/or pragmatic knowledge and that takes the form of grammatical and/or lexical mistakes and errors." In some cases, language interference can lead to incorrect use of a foreign language. This could be the reason why certain teachers avoid using the students' previous knowledge of other foreign languages in their classroom activities. However, language transfer, or language interference, can happen in the case of any foreign language learners, even if they are multilingual or not. This has been identified as one of the common problems of learning a foreign language. In the case of multilinguals, we can speak of second language transfer while learning a third language [42]. While learning a second language, the leaner will go back to the knowledge of the first language, and try to fit in the new language according to the patterns of the first, already known, one. While learning a third language, the learner will go back to the most recently learned foreign language and try to use the same, already known, pattern. This type of mechanism that is visible in the learning of other languages can show that language learners set previous knowledge and experience with languages as a basis for acquiring their new knowledge. At some points relying on what they already know can hinder the process. This could be regarded as a difficulty to adapt to the new reality. An example of transference from a learner's second language to his/her currently learned third language is given in [43]: "a native speaker of English with French L2 and German L3 says: *Tu as mein Fax bekommen*, maintaining correct German syntax but unintentionally producing the French personal pronoun and auxiliary [43]."

Source [43] enumerates some factors that cause multilingual speakers to mix the currently known language with previously learned ones, namely the language learned right before the one they are currently learning. Among these factors, the following could be found: "typological similarity between languages and the speaker's level of proficiency", "the degree of markedness and the degree of morpheme boundedness of individual lexical items". Other factors include the "foreign language effect" [43] and the "last language effect" [44]. Those factors that are specific to using second language knowledge to third language use are, according to [43], the following: "cognitive mode, language typology, proficiency, and frequency of use."

However, even transfer from previously known languages is not accepted by all researchers. Source [45], for instance, believe that there is a full transfer among languages, meaning that "all syntactic properties of the L1 initially constitute a base for the newly developing grammar, which is constructed with the involvement of Universal Grammar (UG)" [46]. Other researchers believe that there is not a complete transfer, for example they [47, 48] claim that only transfer of lexical categories can occur, while Eubank [49, 50] claims that lexical and functional categories can both be transferred. The researchers mentioned in [46] claim that the learners can build "an interlanguage grammar (ILG) on the basis of L2 input and of UG" following "this initial transfer phase". Other researchers [51, 52] believe that there is no transfer occurring from previously known languages. According to these researchers, "neither the L1, nor UG are involved; there are only general (cognitive) learning strategies that guide the learner in the development of a new grammar" [46]. Source [53] claims that "UG alone is involved, and thus the learner will initially create an ILG drawing on UG options" [46].

There are, thus, competitive views regarding whether language transfer occurs or not, among researchers. Foreign language teachers will rely on their personal

observations of and experience with a certain group of learners, and try to make them learn a foreign language efficiently.

In the case of using the first language in the foreign language classroom, according to [54], some researchers believe that it is beneficial for the teacher to make references to it, as "learners acquire a second language by using the knowledge they already have of their native language". Learners "use structures from their first language that are comparable to the second language transfer forms and meanings while attempting to read, speak or write the second language." From this viewpoint, another previously known language does not hinder the learning process of a new language, but on the contrary, it helps learners.

The research observations presented in this section regarding language transfer refer to the linguistic level, to issues of grammar and vocabulary. Other aspects of multilingualism should also be taken into consideration, especially the cultural and political aspects. The current cultural context depends on the values of diversity put forth at a political level by the European Comission. While the students may not find that knowing other languages can help them with learning a new one in class, they may be taught to take into consideration their previous experience to better understand the way that different cultures communicate differently, by using different phrases, and also non-verbal hints, because they belong to a certain category of cultures. As a result, they may communicate more or less directly or indirectly. Students may also be encouraged to learn more languages since it is believed that they will be helped to better understand the frames of minds of other cultures, due to language and culture being interrelated. Some languages can show specific aspects of certain cultures, such as the way that their members perceive colors. For example, Greeks have, in their language, two terms for blue, light and dark blue ("ghalazio" and "ble"). After staying for a long time in the United Kingdom, for instance, where there is only one term for the two colors, namely "blue", the Greeks will perceive light and dark blue as more similar.

As a result, depending on their background, whether they are studying humanities or engineering, students can be made aware of the relationships between different cultures and languages. Humanities students can be interested in the theoretical linguistics aspects, as well as in the culture and civilization aspects that have led to the cultural differences, while engineering students may be more interested in the consequences regarding the practical, conversational part and in culture and civilization aspects. The author of the chapter teaches English seminars and a course in Culture and Civilization to engineering students, at the Technical University of Civil Engineering Bucharest. The focus when teaching these students foreign languages and culture is on examples regarding communication and the relationships between the interlocutors, whether they are more or less familiar, or whether the conversation takes place in a business context or in a family or friends circle. At the Faculty of Engineering in Foreign Languages there are many foreign students, from all over the world; however, since the author of this chapter does not know all their native languages, and since not all the students have the same background regarding other known languages, teaching takes place only in English. However, during classes, cultural aspects of communication can be presented, for instance regarding direct and indirect communication cultures, together with references regarding various structures of different languages, as well as formulas of addressing someone. For instance, in Japanese, there are honorifics, used for addressing someone function of rank and relationship, as a sign of respect. In English, we can address anyone with "you", as the culture is more egalitarian. Japan is, traditionally, a high-power distance culture, according to Hofstede's theory of cultural dimensions [55]. This means that they will show respect for anyone in a position of authority, in the family, at school, and at work. In French and Romanian, we also have the

pronouns *tu* vs. *vous*, *tu* vs. *dvs*., to be used function of whom we are addressing. For the English language, we may add respectful words such as "Sir", "Madam", and "Professor", instead of having a specific set of pronouns like in Japanese, French and Romanian. However, with Romanian students studying engineering at other specialties, such as Hydrotechnics, knowledge of several languages can be used when students are given glossaries for technical terms, for instance in English, Romanian, French, and German. They may find it useful to know the same term in several languages, if they wish to search for scientific articles on the topic, in other languages they know. This can be useful for projects at university, but also for projects when they have a job.

2.4 How native language affects language transfer in a multilingual setting

While knowing several languages can help students learn a new language together with other foreign students, since this means that they are already familiar with various grammatical notions they should pay attention to, there will always be the interference, at some points, of the native language over the newly acquired language. Knowledge of several languages works in the following way on learners: "The most central difference between transfer in SLA and transfer in TLA is the fact that the learner can draw on multiple background languages when encountering a gap in the target language (TL)" [56]. The area that is mainly affected by language transfer is vocabulary: "While transfer can occur at different linguistic levels (e.g. syntax and phonology), it is especially interesting in the case of lexis. Vocabulary is the main carrier of meaning and central to language learning" [56]. Among the factors that can influence the extent of the transfer are the learners' high proficiency in the background language, how recently they have used a certain language, how close the learners believe a certain language they already know is to the language they are currently learning (based on experience with the new language or based on expectations), as well as item-specific transferability, meaning that learners may believe that a certain item could be found in a close form in a certain language they already [56]. Thus, language transfer may not be related only to transfer from the native language, especially in the case of multilinguals [57]. What is more, the process of language transfer can be both spontaneous and strategic [56].

Source [56] presents the study done on a group of learners that share, as much as possible, the same background and previously known languages, and which were from Luxemburg. The country has three official languages: Luxemburgish, German and French. These learners were 79 high-school students in their second year of learning English. Of course, they also knew other languages in various proportions. The author of the study noticed form-based transfer in the form of borrowing, foreignising, spelling, but also meaning-based transfer, in the form of lexeme matching, but also semantic extensions, combined transfer of compounds, and others. These students were using their main known languages as background knowledge from where to get help in situations they did not know how to deal with in English.

For the Asian learners of English, English is a language that is used in Asia more often with other speakers of Asian languages than with speakers from English-speaking countries such as the US or the UK [58]. The existence of Asian varieties of English may also influence the perception of English by Asian learners, and also their language transfer. For instance, "Very often, Asian speakers of English deviate from American or British norms of communication and thereby understand each other and establish rapport" [58]. The main issue with Asian varieties of English is that native language transfer is considered normal, and that it forms the specific of Asian varieties of English. No improvement is asked from the Asian speakers as far as Asian English varieties are concerned. The same holds true for African varieties of English.

Thus, to some extent, when it comes to English, every speaker in the world has come into contact with it under one form or another. In some cases, native language transfer issues are accepted. With respect to learning other languages, by Westerners or Easterners, most issues related to transfer from first language are related to the subjectivity of the learner, to how he/she perceives other languages or to what he/she expects from them, based on his/her background of previously known languages.

3. Multilingualism as fact or multilingualism as political construct?

The question is which studies regarding multilingualism should be trusted: those regarding the benefits of multilingualism, or those claiming that monolinguals and multilinguals, or bilinguals and multilinguals can have the same skills? Is multilingualism just a trend supported by the European Commission, and part of the current values regarding diversity and multiculturalism, and respect for these, or is it more?

The answers could be given on the basis of personal experience of both students and teachers. The answers could also be given due to individual skills, since certain persons seem to be more gifted than others at learning foreign languages. One should consider the factors that can influence the results of all the experiments presented in the research papers, and also the limitations pointed out by the authors of the studies. At this point, studies with various groups of learners that are multilingual may seem dependent on other variables, while evidence coming from studying the brain of multilinguals can seem more convincing, as physical evidence can be given. For instance, according to [59], native languages and languages learned later activate the same areas of the brain and use the same neural resources. However, it is not known "whether the brain processes these languages in the same way or not." Such findings could help support the arguments that knowledge of previously known languages could help learners in their study of a new language. Yet, researchers have not agreed whether all languages can be processed by the brain in a similar way. This could suggest that a multilingual may not learn any other language with more ease.

After all, what is convincing evidence depends on the perception of the person looking for evidence, whether the respective person is more inclined to believe in studying the behavior and skills of a group of persons or is more inclined to look for physical, scientific proof that can be explained by looking at the human physical brain. Most likely, most foreign language teachers will judge these matters based on their own experience with teaching groups of multilingual, bilingual, or monolingual students. They will take action regarding the way they can teach their students efficiently considering the situation at the very moment.

In some cases, multilingualism depends on an individual's language learning skills, more than on anything else. What is more, some teaching methods can prove to be more efficient than others, and more suitable for learners to better understand the respective language. In other cases, knowing more languages can be an imposition regarding the place where someone lives, if there are several official languages.

Schools and universities are reflections of the rules of the culture and society students and teachers live, and so certain languages can be studied.

Therefore, multilingualism can be the result of various circumstances: values imposed by the European Comission, by the culture someone lives in, as well as of personal preferences.

4. Conclusions

The chapter has taken into consideration aspects of multilingualism in relation to teaching foreign languages especially, while also taking into account aspects related to contemporary cultural values and communication styles that are culturally related. It has also presented examples of research and group experiments regarding the extent to which multilinguals use previous knowledge of foreign languages, and the extent to which it may or may not help them in acquiring a new language.

The techniques used by the teacher with students having a multilingual background should be adapted to the students' age. While intuitive comparisons with other languages with concrete examples of conversations can work for any age, explanations that are more theoretical, and dealing with notions of culture and civilizations, as well as pragmatics, are more suitable for university-level students. At the same time, the teacher should also take into consideration the background of the students, even at university level, and needs. Some university students may have a technical background, if they are studying Engineering, and only having English language seminars once a week, like students at the Technical University of Civil Engineering where the author of this chapter teaches. These students may not be interested in the theoretical aspects related to linguistics, and may instead look for a more practical teaching approach. They may be given conversational examples, with explanations related to the notions they study related to Culture and Civilization during the English seminar. The focus is especially on contemporary and everyday culture and civilization, since they should know about today's contemporary world. Aspects regarding cultural differences are most important, since they will come into contact with other cultures during university years, as well as at work.

While according to various research papers, students may or may not benefit from previous knowledge of other languages, at the level of grammar, vocabulary, and language structure, they can benefit from practical examples given as comparisons of previous known languages with the language they are currently studying. The students can use previous knowledge of other languages and cultures in such a way so as to become aware of cultural differences and to adapt to a world that values multiculturalism.

Multilingualism and multiculturalism are related, and through multilingualism students can be drawn into the topic of multiculturalism, starting from what they already know, with their experiences as language learners. Multiculturalism and multilingualism are both key aspects of the world they live in and they should know about. They also need to understand this world, and one step is to sympathize with different cultures, first of all through communication. Communication itself is dependent on cultural differences, as it can be more direct or more indirect. After all, communication remains the main purpose of learning any foreign language for any foreign language learners. Moreover, communication is regarded as one of the key aspects in today's world, under all its forms, personal, public, spoken, written, printed books or social media. It is believed that our contemporary age is the age of communication, especially due to all the possibilities of technology, that bring us all together. Multilingualism and multiculturalism invite us to cooperate, especially through efficient communication, cultural awareness and cultural empathy.

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Multilingualism in Cameroon: An Expression of Many Countries in One Country

Paschal Kum Awah

Abstract

Cameroon is a country with many languages interacting together. The languages have a complex history reflecting its complex culture. This paper focuses on some of these complexities and demonstrate how people belonging to different linguistic groups construct and deconstruct the concept of country using local languages. I will expand on the feeling of belonging to the country when a local language is used. The paper will set the context, provide a historical background of Cameroon, explain the language situation and settle on how the multiple languages spoken in Cameroon make village and ethnic entities countries within a country. It may not be possible to discuss the possible interactions between the multiple languages but levels of interaction of these languages will be established. The notion of country will be explained through the use of the languages and linked to the complexity in the governance process undermining the unity of the people of Cameroon.

Keywords: Cameroon, multiculturalism, languages, complex, country

1. Introduction

African countries are largely made up of autonomous ethnic entities within the nation-state structure. These are territorial entities carved out when Africa was partitioned by European countries in 1884. The partitioning equally split linguistic entities but did not detach them from their linguistic entities. Cameroon has evolved in the same way. The contemporary period has become a central feature of the problematic of nation-building process in Africa. Cameroon has a complex linguistic context. More than approximately 280 languages are spoken in Cameroon. The way these languages are used to discuss the concept of "Country" makes it difficult to state with certainty whether Cameroon is a multiethnic nation, a multinational state or a territory with many nations or a confederation of countries. The analyses of the naming of groups of people, villages and cultural areas will shade light on the concept of the notion of country in Cameroon. Mercado [1] had claimed that Cameroon shows many signs of being a multinational state on multiple levels but did not move further to elucidate her claims. Her arguments presented Cameroon as being a multinational state. This paper sets out to demonstrate the claims that the territory Cameroon is made up of many national territories on linguistic background and expressions.

2. Background of Cameroon

Cameroon is a low-income country. It has a population of over 25 million inhabitants, growing at an average annual rate of 2.6 percent. Cameroon is ranked 144th out of 177 countries in the 2020 United Nations Development Programme (UNDP) Human Development Report [2]. More than 40% percent of its about 25 million people live below the poverty line. That is, on less than 1 $US per day). Over 48 percent of this population resides in rural areas. From the map of Africa, Cameroon is located on the border between the western characterized by an English speaking zone of influence (Nigeria) and the Eastern and Southern French speaking zone (Chad, the Central African Republic, Gabon, Congo). The only exception is Equatorial Guinea, which has Spanish as its official language although since 1998 French has become the "second official language" (see **Figures 1** and **2**).

Cameroon has two official languages, English and French. There are eight "French speaking" regions and two "English speaking" regions. The two English regions are the Northwest and Southwest. All ten "regions" were called "provinces" before Decree No. 2008/376 of 12 November 2008. Cameroon is divided into four sociocultural ecological zones which I call linguistic ecologies. The languages all vary and interact with these zones.

The coastal sociocultural ecological zone of Cameroon corresponds largely to the Littoral and south west regions. This region has been the destination for a large number of migrants from different parts of the country. Its attractiveness is the result of its early exposure to European traders and missionaries, the existence of more relatively developed transport and communication infrastructure, numerous opportunities in international trade and in industry. The main towns here are Douala, Nkongsamba, Kumba, Edea, Limbe and Buea. Most of the inhabitants in this zone identify themselves with what is popularly called the Sawa. Sawa was initially created by the Dualas in 1996 to lay claims on some political and social
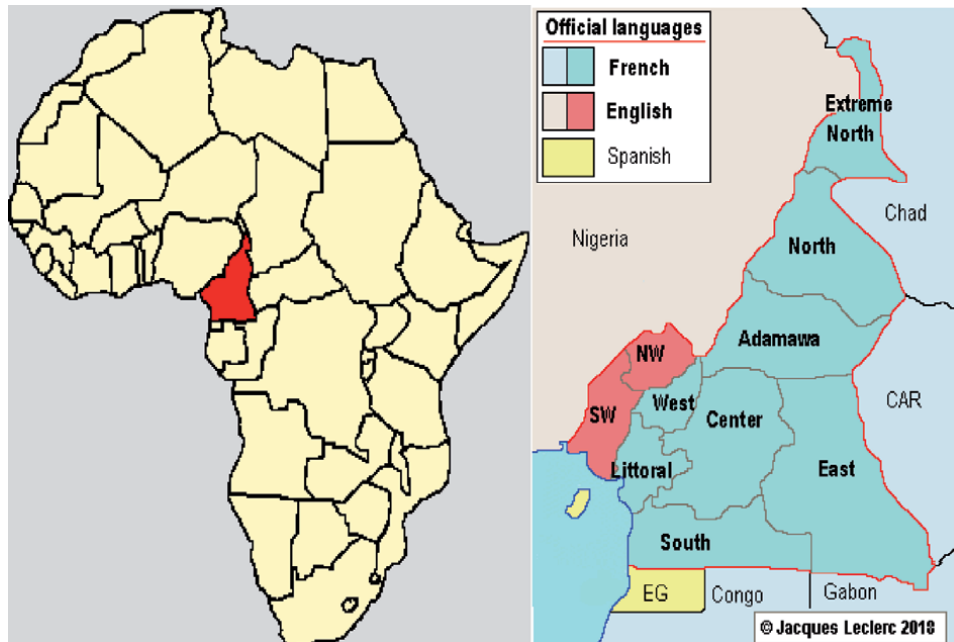
Figure 1.
Map of Africa showing the location of Cameroon. Source: https://www.uottawa.ca/clmc/internationalperspective/cameroon.
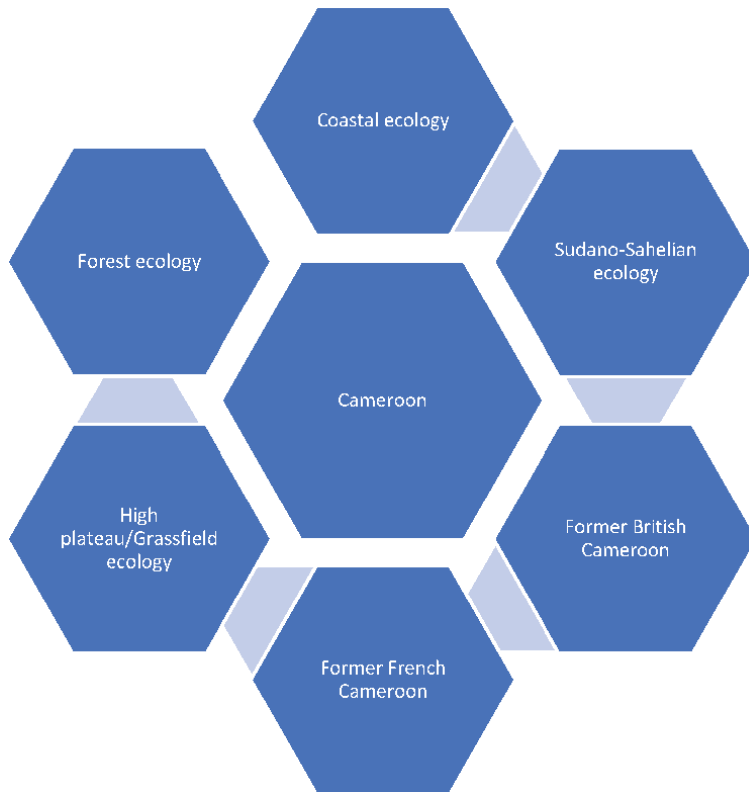
Figure 2.
Linguistic ecologies of Cameroon.

benefits that they thought they could not obtain. This concept of Sawa was later extended to other neighboring groups of people having similitude with them but not being Duala. Their invitation was extended to ethnic groups that were even unrelated to Dualas but share the Littoral and South-West physical ecology. The linguistic influence spill over westwards to coastal Nigeria, Benin, Togo, Ghana, and southwards to the Democratic Republic of Congo. However, the people of this socio-cultural ecology speak the Bantu languages and share cultural traits similar to those of the other Bantus living in the Gulf of Guinea. The influx of populations into this zone has largely offset the traditional social and cultural structure of the native people. The contact of these people with migrant population has also established evolving new forms of social organizations and tremendous changes in lifestyles and languages spoken. The underlying rituals peculiar to people of the zone are still performed. The population of this zone makes up 21.9% of Cameroon's population.

The Sudano-Sahelian sociocultural ecological zone is located in the three northern regions of Cameroon (Adamawa, North and Far North Regions). The Far North on its own is the most populous region in the country with a population of over 3.4 million inhabitants. The region is suitable for livestock farming and the cultivation of cotton, onion, millet, Irish potatoes, groundnuts and white yam. The rivers and lakes are rich in fish stocks and fishing represents a very lucrative activity in the Logone and Chari localities of the region. The North with a population of 2.0 million is the second most thickly populated region in the Sudano-Sahelian zones. Sedentary live is not a recent phenomenon in the Sudano-Sahelian zone of Cameroon. The zone has come under the influence of the Arabic and Nok culture

and the civilisation of the Arabic and Kanem-Bornu empires urshering in Arabic and Haussa Languages. Even before Europeans carved out the territory known today as Cameroon, that marked the beginning of the growth of towns, such settlements already existed in Sudano-Sahelian Cameroon. Examples include Mora, Mokolo, Ngaoundere and Maroua amongst others. That may explain the dense population it harbors compared with other regions in the country. It is equally a melting pot of migrants who over the centuries have moved across the area to and from what are today referred to as Chad, Niger, Nigeria, and the Central African Republic. This has led to the presence of a multiplicity of ethnic groups amongst which are the Fulani, Hausa, Mousgoum, Massa, Gisey and Musey, Toupuri, Mundang, Giziga, Mafa and the Matakam. Though the people here have respective languages, Haussa, Arabic and Fulani are dominantly used as lingua franca.

The next overarching ethnic category of Cameroon are the various people living in the southern part of Cameroon, in the tropical forests. The densely forested sociocultural-ecological zone covers the South, Centre and East Regions. Most of the population in the South Region are mainly the Ekang said to be of the Beti-Fang-Bulu origins. They depend on farming for subsistence. The capital city of Cameroon is located in the Centre Region. The population of the zone represents 25.8% of the population of the country. The people of this zone include the Ewondo, Eton, Fang, Bulu, Bafia, Massa and Bassa. Their languages come from the Bantu language family, and for most of their history they lived in hunter-gatherer societies that moved about the jungles. Some of these ethnic groups still maintain these traditions to this day. About 40% of people in Cameroon identify religiously as Christian, and they make up the majority of the people in the south. Some of the larger Bantu-speaking ethnic groups in the southern jungles include the Bassa, Beti, and the Baka, called Pygmies by European explorers due to a relatively small stature developed from generations living in the jungle. All in all, about 30% of people in Cameroon identify with one of these ethnic groups.

The fourth sociocultural-ecological zone is the Western High Plateau otherwise called Grassfields. It is made up of the Bamenda and Bamileke Grassfield and physically located in the Savana though overlapping into the Forest, Coastal and Sahel ecologies. Farming is the main occupation of these people. They live in mountainous areas and are commonly classified as the Semi-Bantus of Cameroon. The people of this socio-cultural ecological zone are very migratory in pursuit of better economic opportunities. The main ethnic groups here are the Bamileke, Bamoum, Ngemba, Bali, Kom, Moghamo, Ngemba, Nso, Mbum, Widikum and Yamba. Their cultures belong to the Semi-Bantu language family, a unique language group borrowing from many central African language families, and generally practice traditional religions that worship nature and ancestor spirits. About 38% of Cameroonians fall into this broad ethnic category, with the largest specific ethnic groups being the Bamileke and Bamoun.

3. The linguistic history of Cameroon

Before the balkanization of African which led to the annexation of territories including Cameroon by European nations in 1884, the people of Africa were grouped differently. Africa was made up of empires with boundaries. The nation states stretched over large expanse of territory. There were fewer states and empires whose boundaries and names shifted with the ability to conquer. However, when people were conquered the entire territory including its people were converted into the new empires or states. When the territories were annexed by European countries, the annexation did not consider ethnic and linguistic boundaries. Languages

have emerged and mixed with others. Some of these languages were acquired through colonization, trade and missionary activities.

3.1 Emerging languages from African-Arabic Trade

The Trans-Saharan Trade started long Before Christ. The trade links ushered in the use of Arabic. Arabic led to the extinction of some languages. However, it became a more widely used language with the spread of Islam in Northern Africa toward the Sahelien and coastal areas of Sub-Sahara Africa including Cameroon. Arabic is the dominant language used amongst Islamic believers and converts. The Hausa and Fulbe languages were spread during the Islamic raids orchestrated on the people of Northern Cameroon during the Kanem Borno Empire. It also led to the influx of people from North Western Africa mainly the Hausa and Fulani from Northern Nigeria and Fouta regions of Guinea and Senegal.

3.2 Trans-Atlantic Slave Trade, Missionary and Trade links

The Trans-Atlantic Slave Trade came across with the use of Pidgin English. Several authors have established that Pidgin English was introduced in Cameroon about 500 years ago, when the Portuguese traders made contact with Cameroon's coast [3–5]. According to Kouega [4] the period 1400–1800 was when this contact was established. This was the period of slave trade during which the Portuguese employed British privateers [4] to do the trade links. This explains why early samples of Pidgin had lexical items borrowed from both English and Portuguese. The Pidgin English language continued to be used by British missionaries and traders from 1800 to 1884. During this period, Baptist missionaries came to Cameroon and adopted Pidgin for their work. The Missionaries set up churches in which they used Pidgin for evangelization. Mission schools were established and the English Language was used as the language of instruction. Between 1845 and 1887, there were 75 Protestant missionaries in Cameroon. Some of these missionaries came from Jamaica, rather than the U.S. or Britain. During this time an English-based Pidgin grew in the areas where the English influence was felt through missionaries and traders. Pidgin English mixed with local languages and Pidgin English dialects developed. The arrival of the Germans in 1884, as a result of colonization, did not change the dynamics but German was used for administrative purposes. In 1890, the American Presbyterian Missionaries arrived through the South of Cameroon and established missionary activities using Pidgin English. The English-speaking missionaries posted to Cameroon learned Pidgin English to enable them integrate the Cameroon Society to evangelize.

4. Managing languages during the colonial and post-colonial periods

When the Germans annexed Cameroon as a colony in 1884, Pidgin was a fully developed language [4] but they declared the language illegal. Soon the Germans found it difficult to communicate without it. They realized that it would take long to teach a generation of Cameroonians German and be able to work with in the territory. Pidgin English was then used in oral transactions. The German rule was short-lived. At the end of World War I in Cameroon in 1916, Cameroon was divided between the British and the French, with the majority (80%) of Cameroon ceded to French control [6] and 20% to British as a mandatory territory. French Cameroon gained its independence in 1960, and the union of French Cameroon and English Cameroon took place in 1961 [6] after British Cameroon gained its

own independence deciding to join French Cameroon. Bilingualism in English and French was chosen to resolve the problem of multilingualism in the new country and to preserve national unity in a fragile federation [7]. Although it was not accorded official status, Pidgin English remained in and is used [6] for daily business, being the oldest foreign language used across different parts of Cameroon.

Today, Pidgin is mainly spoken in the Northwest, Southwest and Littoral Regions of Cameroon. Its spread is more in the two official Anglophone areas, plus the two adjacent Francophone regions: the Littoral and the West Region and recently the Central Region's main cities [4]. It is also a main Lingua Franca of other main cities of Cameroon, especially in the Northern Regions by virtue of its proximity with Nigeria. Pidgin is spoken even in the predominantly French-speaking capital. Ethnic neighborhoods developed there after reunification in 1961, when Anglophone appointees to federal positions began to move there [8]. After the movement of important public services to Yaounde in 1972, immigration from the Anglophone region turned into a flood and has remained intensive with the War of the Restoration of the State of Southern Cameroon. Anglophone neighborhoods have emerged in main cities and Pidgin English and the English Languages have made major in routes as a result of the settling internally displaced persons in the Majority French speaking territory.

5. Evolving interactions of European and local languages in Cameroon

The history of European Languages in Cameroon dates as far back as the period of Portuguese explorations when they traded in the Gulf of Guinea, starting with the trading in goods then in humans (Slave Trade). They named the territory along the Wouri River as Cameroes, meaning shrimps culled from the Wouri River that they had named Rio dos Cameroes (River of Shrimps). The Spanish Language followed, then the English Language. By the beginning of the 19th Century Slave Trade had ended. American and English Missionaries came across with Christianity to Africa and the English Language was introduced in Cameroon in 1841 [7] through the first missionaries. When Cameroon became a German territory through annexation the German Language was introduced for German colonial administration. The English Language continued to be used as the language of instruction in schools and for missionary work. When Britain and France defeated Germany in 1916, Kamerun was divided into two. Britain took the Western Territory bordering Eastern Nigeria and named it British Cameroons and France took the Eastern Territory and named it French Camerouns. While the English Language continued being used in the Western Territory, The French Language was introduced in the Eastern Territory. The French Language was introduced in 1916 when French influence started after the World War I [6].

In the British Cameroons Territory the British reserved a place for three local languages in schools: Duala, Bali (Mungaka), and Fulani, based on the policy of "Indirect Rule" and in an attempt to avoid uprooting Cameroonians from their culture [6]. Alongside these languages and the English Languages, the Pidgin English prevailed as the lingua franca and the most widely spoken across the board in administration, trade and missionary work. British missions were the first to put Cameroonian vernaculars into writing [6]. The Bible was translated into the three local languages and these languages were used for instruction in schools at initial levels and for missionary work in communities. Although originally more localized, the British policy gradually became less friendly to other Cameroonian vernaculars after four decades [7]. Peoples who spoke languages other than the three resisted and wanted their own languages to be included in the policy. In 1956,

local languages were only used if more than 75% of students spoke the language. Gradually, English replaced the native languages, and English was declared an official language in 1961 at Independence [9]. The British policy was to encourage anyone that could attend school to do so but Chiefs and notables in the British Territory preferred sending the children of commoners to be beaten as used to obtain with slaves.

The French policy on the other hand was to completely convert the people of her territory to French speakers and to replace languages with the French Language and the local cultures with French culture. During the period between the World Wars, although French was used in schools, schools were not intended for all children [10]. They were often established for the sons of chiefs, members of the traditional elite class who would presumably inherit political leadership [10]. Although the schools varied, they always taught French language, French administrative procedures, and traditional laws. Their mission was political aimed at legitimatizing French rule and diffusing spoken French so that colonial administrators would not need interpreters [10] in discharging their duties. From 1920, the French required the use of their language in all schools, and local languages were forbidden [9]. By independence, French was present in school, administration, and other domains [11]. Education was valued for the way it provided access to the social and economic realm of colonial power [12]. French educated children usually found work with Europeans, rather than returning to villages to work in farms [12]. Education, the French language, and power were all closely linked.

French Cameroon gained its independence in 1960, and British Cameroon obtained its independence on February 11, 1961 and joined French Cameroon to form the union of French (East) Cameroons and English (West) Cameroons that took place in on October 1, 1961 [6]. To efficiently manage the territories where the English Language and the French Languages were spoken, "Bilingualism" was chosen to resolve the problem of multilingualism in Cameroon and to preserve national unity in a federation thought to be fragile [7]. It would not have been possible to privilege one of the languages to the detriment of the other. The English and French Languages were enshrined in the Federal Constitution of 1961 as languages with equal status. With the Constitutional amendment of 1996, these provisions were reaffirmed in unequivocal terms. Article 1, paragraph 3, thereof provides that: "The official languages of the Republic of Cameroon shall be English and French, both languages having the same status. The State shall guarantee the promotion of bilingualism throughout the country". This was not just policy as from 1961 (see **Figure** 3).

Actions to support teaching and translation followed. In 1962 a bilingual university was created in the new country's capital, Yaounde. Cameroonian English pidgin remained in use [6] across the territory as a lingua franca, especially for business, evangelism and socializing. To encourage individuals to speak both English and French, the Ministry of National Education instructed that French be taught in all institutions above the primary level in the Anglophone regions, and that English be taught at all institutions above the primary level in the Francophone regions. This led to the widespread of both languages across the country. Though later highly contested because of the management of the bilingualism policy which led to dissension against the central government by people inhabiting the dominantly English Speaking territory in 2016 leading to a problem, crises and a war from November 2017. The response from government was the creation of a National Commission for the Promotion of Bilingualism and Multiculturalism in 2017. The issue of languages was going to be handled within the aspect of multiculturalism, language being one of the main aspects of culture. It means managing more than 280 languages spoken in Cameroon.
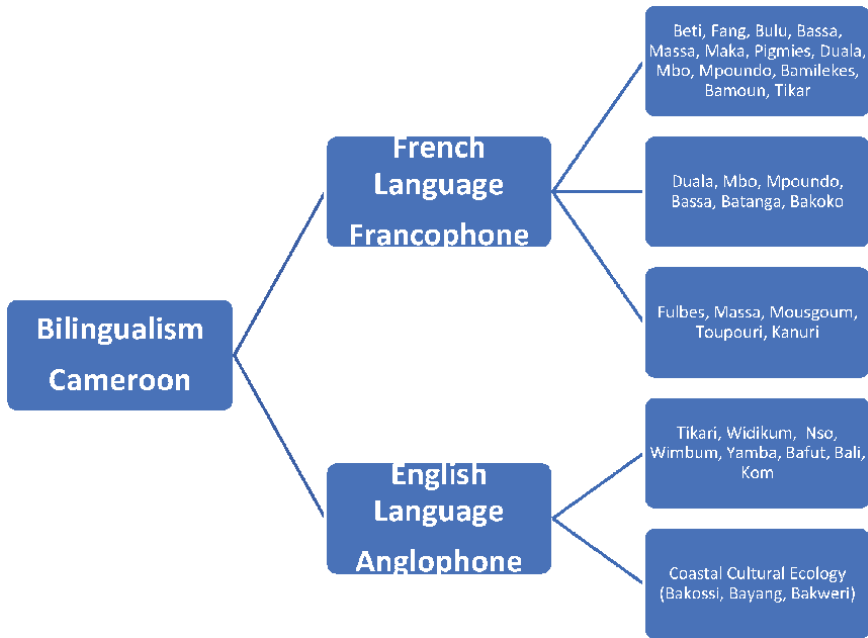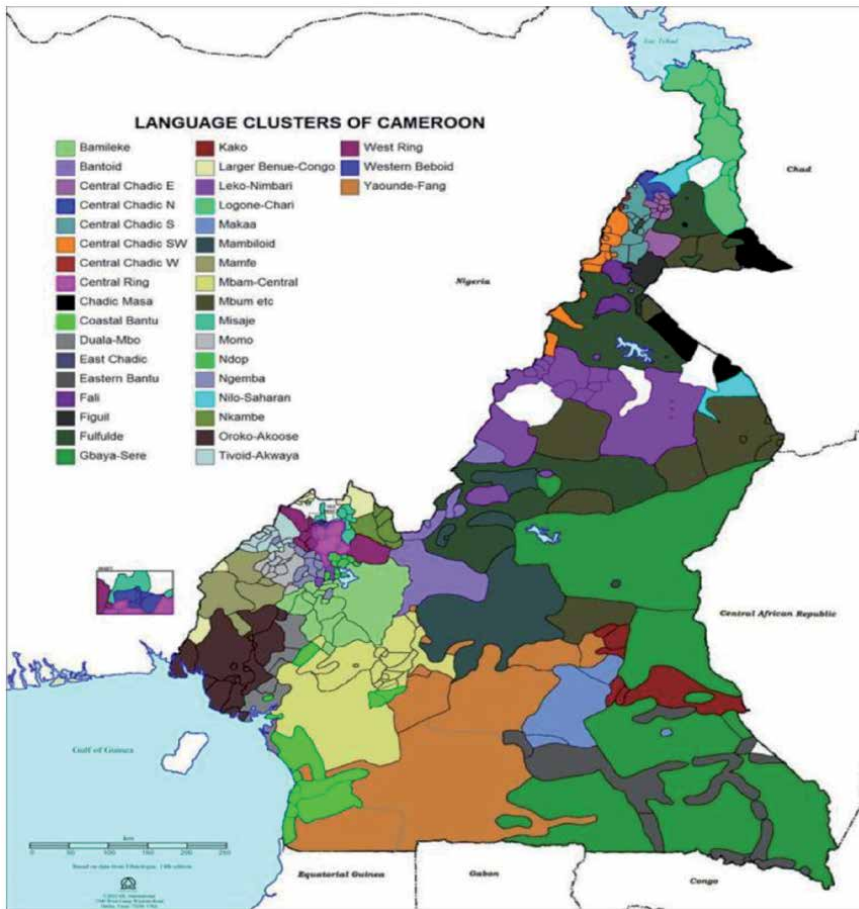
Figure 3.
Stepwise definition of country according to linguistic groupings.

6. Multilingual Cameroon

Following from **Figure 3**, there has been a debate on the number of local languages spoken in Cameroon. However an estimated 280 languages are spoken in Cameroon. Cameroon is one of the sub-Sahara African countries that has hundreds of local African languages. Some of these languages are fragmented and overlap into languages spoken in other African countries, given that the partition of Africa did not respect any cultural or linguistic affiliations, cultural or physical boundaries. Following the debates on the number of languages spoken in Cameroon, it is difficult to state the exact number of local languages existing in Cameroon. A Summer Institute of Linguistics (SIL) publication in *Ethnologue* list 279 local languages [13]. Echu [14] on his part states that there are 247 languages. To him, some of the languages are varieties that emerged from other languages. Onguene Essono [15] furthers that Cameroon is likely to have 250 languages not the claims about nearly 300. See the map of Linguistic Clusters of Cameroon (**Figure 4**).

The *Atlas linguistique du Cameroun* (*ALCAM*) project did a descriptive and geographic overview of the language groups in Cameroon in 1983 providing that Cameroon has 248 languages [16, 17]. Bitjaa Kody [18] holds that there are 282 national languages in Cameroon. These numbers, in their hundreds are strongly contested and claims are made that Cameroon rather has 20 languages and the rest being variants of these twenty different African languages [19]. For that reason the glossonyms may be linguistically reduced. It means that these languages are dialects emerging from very few languages. There is a debate about what a language is and what a dialect is. However, the most commonly used criterion to distinguish a dialect from a language is mutual intelligibility [20]. A language that has several varieties in which the speakers of these varieties can understand each other is a language for those dialects. The varieties are dialects. These varieties may be called dialects which belong to a dialect cluster that frequently is identified with a particular glossonym.

Figure 4.
Linguistic clusters of Cameroon.

The intelligibility as a parameter requires the establishment of some sort of intel-ligibility threshold. SIL uses lexico-statistical calculations, questionnaires and intel-ligibility tests. Seventy percent intelligibility distinguishes dialects from languages. As a comparison, the intelligibility between French and Italian is 89 percent and 75 percent between French and Spanish [13]. The Scandinavian languages would be considered dialects of the same language according to this definition. A social and political feature is frequently added to intelligibility to distinguish a language from a dialect. Cultural, social, political and historical factors may be very heavily involved when a variety of a language has to be considered a language or a dialect. Social and cultural aspects play a prominent role when it comes to language status issues as considered by the speech community, and whether or not a language has and own glossonym. Generally, languages are dialects that have succeeded to politically, economically and militarily impose themselves on a people. The language becomes an abstraction which groups find them as inter-comprehensible dialects. For this reason, there is need for a reclassification of the Cameroonian local languages to fit within Guthrie's classification of languages. This will scale down on the number of languages in Cameroon because many of these are varieties of a language. From a linguistic point of view, the distinction between language and dialect is arbitrary so need another round of classification. The number of national languages in Cameroon will reduce to twenty and even 10. But this hypotheses need verification.

7. Concept of country in languages spoken in Cameroon

However, whether these are languages or varieties, their reference to and expression of belonging to a country point to the meaning of a country in the respective languages. Mercado [1] concludes that at every level of groups of people, Cameroon tends toward being a multinational state, rather than a multiethnic nation. She dismisses the idea of Cameroon being made up of multiethnic groups. She thinks that Cameroon is made up of multinations as illustrated by some selected languages.

7.1 Some examples of village/country naming

Below are some selected languages to illustrate the concept of naming village the same as the people will name a country.

According to **Table 1** above, people refer to their villages as countries. For many, a village is a country when referring to it in mother tongue. The table reveals that people assign the same name to their villages by calling it "country" in their local languages and assign the same or similar name to their "country". The word village in a given language means the same as country. **Table 2** provides details on how people say in their local languages that they are going to the village while referring to going to a country.

7.2 Qualifying a village, country in sentence construction

People have a way of saying in their local languages that they are going to their villages. When people say they are going to their villages or tribal or ethnic territories they say that they are going to their countries. For example the Dualas will say *Mboua*. Yet, when they say they are going to their country, Cameroon, they still say that they are going to *Mboua*. Meaning that *Mboua* stands for village and for country. For speakers of each language this distinction between village, tribal or ethnic territory or territorial entity called country is seemingly not drawn as you will have in the English and other western languages. **Table 2** below is illustrative of this and other examples.

The people speaking these languages call their rulers, Kings.

7.3 Gender and linguistic expression of village and country

One of the key concept that emerged from **Table 2** was related to gender. Villages are referred to as homeland and/or motherland. The Moto of Cameroon is Peace-Work-Fatherland. In French it is *Paix-Travail-Patrie*. The notion of fatherland is also inscribed on the national anthem of Cameroon and other national symbols. The French and English cultures from which modern Cameroon was crafted lay emphasis on fatherland being paternalistic. Through local languages spoken in Cameroon it is the notion of motherland that dominates local dialogs though many of the people claim belonging to paternal than maternal societies. The Cameroon administration refers to its territory as fatherland but local linguistic lexicons lay emphasis on motherland. The multitude of languages in Cameroon create linguistic ecologies and also country ecologies shaped by these languages. Language ecology [21] perspective is created such that it results in shaping a people's thought around their villages and ethnic groups making these to be countries. They naturally stress diverging points of belonging to many countries as the rather than seek common ground'.

Language	Speakers	Linguistic ecology	Naming of village	Naming of country
Itanghi-Kom	Kom	Grassfield	Ilah	Ilah
Laimbue	Laimbue	Grassfield	Inah	Inah
Aghem	Enah	Grassfield	Enah	Enah
Bufu	Bafut	Grassfield	Alla'a	Alla'a
Funghom	Funghom	Grassfield	Enah	Enah
Fe'fe'e	Bafang	Grassfield	Mbeh	Ngwe
Medumba	Bangante	Grassfield	La	Nge
Ossananga	Sanaga	Forest	Edongo	Edongo
Oku	Oku	Grassfield	Eblam	Kitum
Beti-Akonolinga	Yebekolo	Forest	Dja'a	Nnam
Beti-Akonolinga	Mvog Nyengue	Forest	Djal	Nnam
Bulu	Bulu	Forest	Djal	Nlame
Ewondo	Ewondo	Forest	Ndjal	Nnam
Beti	Ewondo	Forest	Adzeu	Nsi
Kapsiki	Kapsiki	Sudano-Sahelian	Melme	Hedi
Laka	Laka	Forest	Bbee	Bbee
Lamso	Nso	Grassfield	Lam	Kitum
Bamileke	Yemba	Grassfield	La'ah	La'ah
Bamoun	Bamoun	Grassfield	Nju	Ngou
Maka	Maka	Forest	Ndeun	Name
Ngemba	Ngemba	Grassfield	Nkpwav	Bongne Lah
Ngoumba (Pygmies)	Ngoumba	Forest	Gware	Nlamboh
Toupouri	Toupouri	Sudano-Sahelian	Touloum	Touloum
Bamileke	Baham	Grassfield	Lack	Ngoun
Beti	Ntoumou	Forest	Nnam	Efoussi
Fang	Fang	Forest	Nnam or Djal	Si
Banen	Tunen	Forest	Pounong	Hitik
Grassfield	Nabelema	Grassfield	Lah Grafit	Ngo lah
Bana	Bana	Grassfield	Ngul meh	Hidi
Eton	Eton	Forest	Atann	Nnam
Fali	Kangou	Sudano-Sahelian	Rii	Deesii
Bassa	Bassa	Coastal	Mambine	Log Yem
Duala	Duala	Coastal	Mboua	Mboua

Table 1.
The naming of villages and countries and villages in some local languages of Cameroon.

7.4 An example of negotiated ethnic identities and renegotiated new countries

The socio-cultural or identity dimensions of people shape the negotiation of ethnic identities. There are a few glaring examples in Cameroon. This situation has created what has come to be known as Sawa, Laakam, Bamenda, Nordist and Essingan

Language	People	I am going to my village	I am going to my country
Itanghi-Kom	Kom	Min du ilah or Min du a mi ilah I am going to my village	Min du ilah or Min du a ghes ilah I am going to my village or I am going to my country
Laimbue	Laimbue	Ma ndu inah	Ma ndu inah
Aghem	Enah	Mo ndu enah	Mo ndu enah
Bufu	Bafut	Mo gwi alla'a	Mo gwi alla'a
Funghom	Funghom	Mo ndu enah	Mo ndu enah
Fe'fe'e	Bafang	E dzeubu mgul mbeh	E dzeubu mgul mbeh Ngwe
Medumba	Bangante	La	Nge
Ossananga	Sanaga	Nguendam na edongo ya me Je vais dans mon village	Nguendam na edongo ya me Je vais dans mon village
Oku	Oku	Min ndu eblam	Min ndu ikitum
Beti-Akonolinga	Yebekolo	Ma ke a dja'a	Ma'a dou gane a dja'a dame
Beti-Akonolinga	Mvog Nyengue	Ma ke a dja'a	Ma ke nnam wom
Bulu	Bulu	Ma ke a dzal dam I am going to my country	Ma ke nlame wom I am going to my village/country
Ewondo	Ewondo	Ma ke ndjal wam I am going to my mother's village	Ma ke a nnam wam I am going to my village/country
Beti	Ewondo	Ma ke adzeu dam I am going to my mother's village	Ma ke a nnam wam I am going to my country
Kapsiki	Kapsiki	Melme	Hedi
Laka	Laka	Bbee	Bbee
Lamso	Nso	Lam	Kitum
Bamileke	Yemba	Mem si noh a la'ah nsah	Mem si noh a teuh la'ah mem
Bamoun	Bamoun	Me nan gono nkon nju	Me nan gono si nkon ngou
Maka	Maka	Me keu ndeun me nyion wam	Me keu name wam
Ngemba	Ngemba	Me reh lah	Me reh lah
Ngoumba (Pygmies)	Ngoumba	Meh quee gware	Meh suuh quee gware mah yah I am going to the village of my mother
Toupouri	Toupouri	Ndi raw biilegee mani manbi no	Ndi raw biilegee mani manbi no
Bamileke	Baham	Ga bou go'o lack gafie mama I am going to my mother's village	Ga bou go'o bink ngoun lack mama I am going to my mother's land/village
Beti	Ntoumou	Ma ke nnam nya wom I am going to my village	Ma ke nnam wom I am going to my maternal or mother's village
Fang	Fang	Ma ke nlam wom or Ma ke djal dam	Ma ke si jam
Banen	Tunen	Mi nou hakana ou Poame pounong I am going to my village	Mi nou hakana a hiame hitik I am going to my village/country
Grassfield	Nabelema	Me eula lah grafit	Me Ngo lah
Bana	Bana	E dzeubeu ngul meh	E dzeti hide leu mgurngeu I am going to my mother land

Language	People	I am going to my village	I am going to my country
Eton	Eton	Me te ke atann wommo I am going to my village	Me te ke a nnam wommo I am going to my village
Fali	Kangou	Mi tayke mba Rii I am going to my village	Mi tayke Mba deesii I am going to my village/country
Bassa	Bassa	Min Que. mambine I am going to my village	Min que I log yem I am going to my village/country
Duala	Duala	Nde au Mboua I am going to the village/country	Nde au Mboua I am going to the village/country

Table 2.
How people say in their local languages that they are going to their villages as opposed to I am going to my country.

awareness where they respectively represent people belonging to languages groups of the Coastal, Bamileke Grassfields, Bamenda Grassfields, Sudano-Sahel and Forest cultural ecologies. Let us take the case of the Sawa. Sawa was originally used by the Duala to refer to themselves as seashore dwellers but in the context of the 1996 post council electoral crisis it was extended to related peoples such as the Bakweri, Mongo, Pongo, Malimba, the Bakoko and Bassa of Douala city, Bodiman and Ewudi. Sawa became a political and social movement and eventually carved out and denoted a territory. This territory eventually included other peoples in the Littoral and South West Provinces[1] not necessarily located along or near the coast were also integrated in the movement. These included the Mbo, Bakossi, Yabassi, Balong, Oroko and Bafaw and far off Bayang in Manyu Division. Prior to 1996 therefore the term Sawa was almost inexistent as a term to describe a local regional and cross regional awareness. The French colonial administration had prohibited any such initiatives and favored fragmented identities. Before this, in 1992, after the parliamentary elections when a representative from the southwest was a migrant from Bassaland but representing the people of Tiko, he led a movement to unite the Bassa ethnic groups into creating a Bassa country called *Pays Bassa*. The Sawa and Bassa initiatives are identity awareness motivated crisis expressed through protests. At this stage none of these groups of ethnic entities thought of Cameroon but as being countries that needed to expand their territories using political and social protest against other ethnic entities which they thought were dominating and making gains out of the minorities. Yenshu-Vubo [22] thinks that an awareness of political marginalization is definitely at the basis of the protests but in its original form, it does not exist as an ethnic movement. Before colonization territorial expansion of countries was negotiated through war. But the Duala, Bassa, Beti, Bamileke, Nordists expansion was negotiated via political and social protest using the weaknesses in state legislations to gain territory and expand their respective countries within a larger concept of a country, Cameroon. To legitimize this and satisfy these movements of ethnic renegotiation and territorial expansion, the revised Cameroon constitution of 1996 enshrined the natives and settlers concepts. This gave the idea to the natives that they were minority and could only gain protection if they supported the governing party and were loyal to state institutions and the settlers to be considered by natives as majority and usurpers of their political power and opportunities.

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[1] What is now called Regions were called Provinces at the time of the 1996 post-electoral council election crises.

Language sets a platform of unity [23] and translates into regional movements by elites who stress a convergence of interests through language and equate similarity of predicament with similarity of identity [24]. One cannot doubt that there is a degree of similarity in culture and language within the region but that does not translate automatically into a collective awareness but is constructed to trace new political boundaries and interest. For the Sawa, it is the convergence of the crisis of modernization that forged the new ethnic identity by building it into a common cultural heritage symbolized by the *ngondo* festival. But this has hatched other parallel festivals with new country boundaries drawn within the Sawa country. The *Ngondo* was initially a Duala festival but the aftermath of the 1996 protests translated it into an assembly uniting such peoples as were perceived as related to the former.

It is this invented Sawa identity that transforms a political movement into a cultural one and uses the cultural to consolidate the basis for political claims. The Duala elite, who invented this term, as the leading faction of the coastal peoples, thus attempted to carve an ethnic political base for themselves which their members could not guarantee in the geopolitics of Cameroon. It is in this sense that Yenshu Vubu's [22] assertion that dominant classes are the agents of cultural models gains all its meaning. Varieties of a language serve as the base of the construction.

7.5 Village, country and motherland: Implications for national unity

Cameroon exist in a context of fragmented ethnic entities. These are expressed in the disconnection between the Moto of the country and the linguistic expressions of naming villages and a country as being the same. Firstly, when the Moto of Cameroon is written, it refers to Cameroon as fatherland but when people talk about the village and country they mean motherland as opposed to fatherland. Secondly, people call their villages, countries, paradoxically, not drawing a distinction. When people from respective villages say they are going to their village, they mean that they are going to their land of birth.

8. Conclusion

None of the official languages in Cameroon serve as a unifying language. Rather, each of the official languages unify people across the former colonial boundaries and colonial languages of French and English. The lingua franca, Pidgin English leading and some local languages like Fulani, Duala, Ewondo, Haussa and Fulani and Bassa serve the purpose of unifying people around the physical and virtual territories bordering the main people who speak these languages. This motivates people speaking these languages to have a sense of belonging to some country beyond, with no properly defined country because of the linguistic affiliation. The Duala speakers claim belonging to a Sawa country (*Pays Sawa*), the Ewondo speakers claim belonging to the Beti country (*Pays Beti*). The Bassa speakers claim their belonging to the Bassa country (*Pays Bassa*). The Haussa and Fulani speakers claim their belonging to the Northerners (*Nordists*). Pidgin English is the local language that is widely spoken across all regions. The varieties of dialects in languages make a case for people to consider their villages and ethnic groups as countries. Though bilingualism is what the Cameroon administration created to unify the two former colonial territories, it does not replace the language divide and it is not a language but a policy difficult to apply. The trend of divisions and regroupings into different territories called countries within the country, Cameroon, is prominent amongst the former French Territory or East Cameroon. French and English are linked to a two territories, which were previously two different countries from 1916 to 1961.

People still live in this colonial divide determined by these two languages though the names assigned to the two territories have evolved for over 105 years. Ethnic languages denote other countries within Cameroon putting into question its unified identity in a linguistic diversity that submerge the good intentions of bilingualism.

Acknowledgements

Conflict of interest

The authors declare no conflict of interest.

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Chapter 3

Multilingualism and Language Choice in Domains

Tesso Berisso Genemo

Abstract

Experts know that multilingualism is not the so-called minority phenomenon as many people think it to be. Although it is difficult to provide the exact statistical data on the multilingual speakers and distribution of multilingualism in the world, sociolinguists and linguists estimate that there are roughly around 6000 languages in the world. The focus of this book chapter is to succinctly present the sociolinguistic aspects of language choice and use of multilingual speakers in various domains. Besides, concepts such as bilingualism and multilingualism and their dynamics in the field of sociolinguistics have been critically been reviewed and presented from the theoretical and empirical perspectives. Further, some of the relevant issues related to language choice and use in multilingual speech communities in different parts of the globe are reviewed and included. Furthermore, factors inducing multilingualism among different speech communities and individuals have been reviewed and finally, recent developments and dynamics toward the spread of multilingualism in various parts of the world are also presented in the chapter.

Keywords: sociolinguistics, bilingualism, monolingualism, multilingualism, language choice, domain of language use, domain analysis

1. Introduction

Multilingualism alludes to both a person's capacity to utilize a few dialects and the coexistence of distinctive language communities in one geological area [1]. Besides, Edwards and Aronin [2, 3] contend that multilingualism is the phenomena of the present age; however, it has existed throughout the whole of human history. As society moves ahead, the expansion of multilingualism is attributed to the social, linguistic, and cultural changes derived from globalization, geographical, and social mobility, economic and political transformations, and the development of technology [2, 3]. Hammarberg [4] states that multilingualism is the normal condition of language ability and that humans are multilingual by nature [4].

In the book *Introducing Multilingualism*, Weber and Horner [5] refer to Blommaert's [6] definition of "multilingualism" and they state that we all have a variety of linguistic resources at our disposal and it can refer not just to one or two languages one may possess. Thus, Weber and Horner [5] do not distinguish between such terms as bilingualism and trilingual, but subsume them under one concept of "multilingualism." Multilingualism, thus, ought not to be seen as a collection of languages that a speaker control, but it may be seen as a complex semiotic asset, of which a traditional defined "language" has a place in a few, while a distinct "language" has a place in others. Among the resources are concrete accents, language

varieties, registers, styles, modalities such as writing ways of using language in certain communicative situations and spheres of life, and people's ideas about such methods of utilizing their linguistic ideologies [5, 6].

According to Blommaert [6], we are all multilingual to a certain degree since we use different "linguistic varieties, genres, registers, accents," and it does not matter if our linguistic recourses belong only to one "conventionally defined language" or several of them. He further points out language ideologies in his conception about multilingualism. He connects these ideologies with the ideas people have about the way of using languages they possess, the way they define a language and multilingualism, their beliefs about how language is used and how it works. Aronin and Singleton [7] share with Blommaert's [6] similar ideas about multilingualism. They describe it as a new social phenomenon in itself, not just adding numbers of languages to individuals and societies. They view multilingualism as a "new linguistic dispensation," which means "language ideologies and policies, language education in all its dimensions, and the patterns of language use of communities and individuals. It also encompasses the systemic development and evolving status of the full spectrum of extant and emergent language varieties" [7].

According Franceschini [8], today the term multilingualism "denotes various forms of social, institutional and individual usage as well as individual and group competence, plus various contexts of contact and involvement with more than one language." Franceschini states that the study of multilingual phenomena takes into account the practice of using more than one language, including regional languages, minority languages, migration languages, and language varieties such as dialects, to varying degrees of proficiency among individuals and societies [8]. Thus, the term "multilingualism" is being used increasingly and it refers to societies, nations, individuals, who use more than one language in everyday life, in variety of situations to varying degrees. Multilinguals then are the one who have two or three languages in their repertoire.

"Bilingualism and multilingualism are normal, unremarkable necessities of everyday life for the majority of the world's population" [9]. However, different sociolinguists use the terms "bilingualism" and "multilingualism" in different ways. For example, Romaine [10] uses these terms interchangeably to refer to the routine use of two or more languages in multilingual speech communities. In this chapter, I use the term "multilingualism" to refer to the routine use of two or more languages in a community. Sociolinguists know that multilingualism is not the aberration or minority phenomenon many speakers suppose it to be. It is, rather, a normal and unremarkable necessity for the majority of the world's population. Although it is so difficult to provide the exact statistical data on the multilingual speakers and distribution of multilingualism in the world, the focus of this chapter is to succinctly describe the sociolinguistic aspects of language choice and use of multilingual speakers in various domains. Besides, some of the relevant issues are related to language choice and use in multilingual speech communities, in different parts of the world. Furthermore, factors and recent developments for the spread of multilingualism in various parts of the world are also reviewed and included in this chapter.

2. Language and sociolinguistics

Spolsky [11] affirms that, during the last 40 years or so, sociolinguistics has been acknowledged as an independent scientific study that accounts for the relationship between language and society. The field of sociolinguistics, Llamas [12] maintain, in the early twenty-first century has become a mature, definitive, and

vigorous discipline. Hudson [13] on his part propounds sociolinguistics as the study of language in relation to society. Yet again, according to Coupland and Jaworski [14], sociolinguistics is defined as "the study of language in its social contexts and the study of social life through linguistics." Further, Fishman [15] uses the term sociolinguistics to embrace both the sociology of language and sociolinguistic. Multilingualism is one of the basic concepts dealt in sociolinguistics.

In sociolinguistics, no matter how it is defined, as partially already mentioned, "Language is not simply a means of communicating information. It is also a very important means of establishing and maintain relationships with other people" [16, 17]. In other words, "the fundamental sociolinguistic question is posed by the need to understand why anyone says anything" [18]. Clearly, in the field of sociolinguistics, language is the key point that links speakers to other people and to society in general. As a matter of fact, the use of language is probably what separates humans from other species and what explains the peculiar ways of living together we can call society or community [19]. That is to say, whether it is used as a basis or as the main topic, language is the essential and central instrument that brings human beings together by creating societies and communities. In [20] terms, "language is the principal means whereby we conduct our social lives. It expresses cultural reality through all its verbal and non-verbal aspects, language embodies cultural reality." In other words, language might be consider the fundamental instrument within the society in terms of communication, but also one of the main tools that convey and constitute elements of culture and values. This point, on which there seems to be no conflicting opinions, allows all sociolinguistic research to be carried out.

3. Multilingualism

How many languages are there in the world? Questions such as these are central to the study of multilingualism, which can be defined as the use of more than two languages by individuals, and/or within societies and countries. This definition of multilingualism subsumes the definition of bilingualism, which can be defined as the use of two languages by individuals [21]. The term can be applied to people who have competences in a number of languages or to places where many languages are used. The ability to use more than one language) as the attribute of an individual who has a "plurilingual repertoire" of language competences [1]. Plurilingualism is the opposite of monolingualism because it refers to the variety of languages that many people use; it includes the linguistic diversity referred to as "mother tongue" or "first language," as well as a variety of additional languages or varieties.

Multilingualism can be defined as follows:

- The act of using or promoting the use of many languages by an individual speaker or a group of speakers in general. In the world's population, multilingual speakers predominate monolingual speakers.

- Polyglottism is yet another term for it. Polyglots are people who are multilingual. This has evolved into a societal phenomenon governed by globalization and cultural openness requirements.

- In a general way, a multilingual person is someone who can communicate in more than one language, whether actively through speaking, writing or signing, or passively through listening, reading or perceiving.

- Multilingual speakers have acquired and maintained at least one language during childhood, that is, first language (L1) or mother tongue. This is something that can be acquired without a formal education. Even if a person is proficient in two or more languages, his or her "communicative competence" or "ability" may be unequal.

3.1 Viewpoints on multilingualism

In society, linguistic diversity has been viewed in three ways: as a problem, a right, and a resource [22]. Ethnic linguistic minority is considered as a problem that must be solved by assimilation into the majority language from the first perspective. Supporters of this viewpoint believe that minorities should fully embrace the behavior and language of the majority group. The second viewpoint views minority language maintenance as a right, while the third viewpoint argues that a minority language is a resource that can enrich the experiences and perceptions of all community members, regardless of their first language, [23]. This third view of multilingualism and linguistic diversity has been advocated in a number of studies [24, 25], where three main benefits of multilingualism have been identified: improved international relations and trade; cultural enrichment; and social inclusion [25]. Multilingualism is also seen as a key factor through which different ethnolinguistic groups in society can successfully coexist. Auer and Wei [24] commented as: "Far from being a problem, multilingualism is part of the solution for our future. Social stability, economic development, tolerance and cooperation between groups are possible only when multilingualism is respected" [24]. Thus, this shows that multilingualism is a necessary part of the solution to problems surrounding language and inequality in a given polity.

3.2 What is multilingualism?

In this section, I examine at some of the different meanings of multilingualism offered by the different authors. I also go through the definitions of the some of the concepts that have been related to multilingualism, albeit with some preconceptions.

3.3 Delineating multilingualism

3.3.1 Dissociating multilingualism from monolingualism

Multilingualism is a fundamental phenomenon that involves language competences and communicative practices in most communities around the globe, according to Heller and Edwards [2, 26]. Multilingualism is an important linguistic dispensation in respect of people's communication patterns, according to Aronin and Singleton [27, 28]. They claim that multilingualism is the worldwide norm, notably in Africa and Asia, and that it manifests itself at the individual and societal levels. Although language uniformity has long been valued in Europe, there is a growing tendency toward embracing linguistic diversity [8].

The term multilingualism refers to the knowledge and use of a wide range of languages and language varieties with various statuses on the one hand, such as official, national, majority, minority, non-standard varieties, mixed languages, and domains of use on the other, such as home, school, and work places [8, 29]. It also entails all levels of language knowledge and skills. Research on multilingualism has greatly influenced studies in the fields of Linguistics, Applied

Linguistics, Psycholinguistics and Sociolinguistics. Jessner [29] states that one of the reasons for the challenge in creating widely recognized definitions of multilingualism is that monolingualism's principles do not match the unique arrangements that occur when individuals or groups know and use many languages. This is also evident of different conceptions for different terms and concepts crucial to multilingual studies, such as the meaning of "language," which is the primary object of study in various domains.

Since "multilingualism" emerged as a theme in linguistic research, different attempts have been made toward defining it. According to Kemp [30], the different definitions stem from the complexity of language practices in different communities on the one hand, and differing ideologies and goals of researchers in studying multilingualism and multilingual societies on the other hand. The understanding of multilingualism starts from the understanding of its basic ingredient, "language," which in the classical sense is defined as an abstract tool of communication with territorial and cultural boundaries [5, 31, 32]. Its bounded nature inspired the creation of language names like English attached to specific geographical territories [6]. In this sense, language is a quantifiable entity. The fact that the people or communities could have many such institutions inspired the counting convention. The practice of counting languages led to the coining of terminology such as "bilingualism," "trilingualism," "plurilingualism," and, of course, "multilingualism" [4, 5, 30]. In light of the aforesaid, Edwards [2] defines "multilingualism" in terms of individual knowledge and use of language (individual multilingualism). He recognizes that the ability of an individual to speak different languages is varied does not exist at the same level for all languages. This discussion forms the base for a binary approach in research, which distinguishes the complexity of multilingualism as opposed to monolingualism, and which subsumes "multilingualism" under "bilingualism" by authors of [33–35].

3.3.2 Social mobility and multilingualism

At earlier, descriptions of multilingualism emphasized on languages as abstract objects, with multilingualism being associated with having a number of independent monolingual systems. Before the industrial revolution, it was uncommon to find people who spoke more than two languages in Europe. As a result, the term multilingualism was first applied to civilizations where multiple languages coexisted, rather than to individuals. Canagarajah [36] for example refers to "national multilingualism" which he defined it as the use of many languages in a country. This concept illustrates how the presence of multiple languages can be a barrier to easy communication because people are not thought to have the ability to quickly learn new languages for trans-local contact. For many years, this perception of multilingualism resulted in its denunciation in communities and among people [37]. On the similar vein, Blommaert [6], mentions that it has since been revisited in light of the ongoing and increasing migration and globalization, which promotes the constant transfer of languages and cultures from one place to another, needing individuals to construct communicative practices that are compliant with the diversity in order to either provide or access services. The peculiar trends of communication observed in certain parts of the world such as South Asia, particularly India [2] and Africa [37] have presented linguists with a complex scenario that prompts more critical attention than just numerical consideration of languages [38]. This, as Blommaert and Heller [6, 39] mention, highlights the situated nature of language practices that makes people acquire and use bits of language that suit particular contexts.

3.3.3 Multilingualism and language practices

Franceschini [8] elaborates that the concept of multilingualism is to be caught on as the capacity of social orders, teach, bunches, and people to lock in on a customary premise in space and time with more than one dialect in regular life. This means that multilingualism is a product of the fundamental human ability to communicate in a number of languages. Operational distinctions may then be drawn between social, institutional, discursive, and individual multilingualism. This is in line with Groasjean's [33] assessment that "bilingualism" involves open interaction and contact especially involving different cultures. Franceschini [8] further addresses the unfixed nature of communities and practices by acknowledging language use in space and time, and the aspect of contact. She emphasizes the value of communities of practice (institutions and groups) which breed the environment for societal and individual practices that utilize and produce language for different purposes. Groasjean [33] on the other hand asserts that "bilingualism is not a phenomenon of language; it is a characteristic of its use." In an attempt to give a profound description of multilingualism, Cruz-Ferreira [34] emphasizes [32, 33] assertion by viewing "multilingualism" as an aspect of individuals and not of languages. Makoni and Pennycook [32] contend that multilingualism has nothing to do with languages, because languages are not multilingual, rather people are capable. This is not to say that there is not a language element to the concept of multilingualism. It all more strongly mirrors Stewart's [31] argument that language is a local practice formed by individuals' repeated activities in their many communicative interactions in various social contexts. In other words, individuals' social practices (what people do) with languages cause multilingualism [34, 40]. Thus, Makoni and Pennycook [32] suggest that in order to understand and ably describe "multilingualism," there is a need to study speakers' language practices.

3.4 Types of multilingual competence

Sociolinguists list down different competencies of multilingual speakers. In multilingual societies, not all speakers need to be multilingual. Some states have multilingual policies and recognize several official languages, such as Canada (English and French). In some other states, particular languages may be associated with particular regions in the states, when all speakers are multilingual linguists classify the community according to the functional distribution of the languages involved.

4. Language choice and use in multilingual settings

Resources in a multilingual repertoire are obtained with a variation of competences for use in specific contexts [41] and for specific purposes. Henceforth, language choice is an important aspect to discuss in a study of multilingualism [42, 43]. Gumperz and Duranti [42, 44] moreover keep up that multilingual speakers in multilingual settings continually make choices as to which etymological asset to convey in a given setting and with a given group of bystanders. Gumperz [42] accepts that dialect choice depends on the realization of the communicative capacities of the questioners such that comprehensible is of center intrigued. Myers-Scotton [45] on the other hand asserts that language choice is motivated by performance of identity and negotiation of agency especially during social interactions. With this view, Myers-Scotton [45] is inclined to language choice as a function of identity negotiation whereby every time the communication situation changes and people

assume different subject positions, Kramsch [46] chooses a code that reflects their personae. Meyer and Apfelbaum [47] argue that "cognitive, social and historical aspects may play an important role in multilingual communication such as level of linguistic competence of participants and the degree of linguistic regulation of interaction spaces."

Scholars have identified a number of factors which they believe influence language choice and language use in ethnic minority settings. These are as follows: domain, interlocutors, and topic. These factors are discussed in the following sections:

i. **Domain**—Domain refers to the idea that each language or variety of language is assigned to a specific purpose, space, or group of people in society, such as the work domain, family domain, or religious domain, for example. Spolsky and Fishman [48, 49] argue that domain is a useful idea in investigating individual and community language use. Likewise, language speakers in ethnic minority communities tend to link certain languages with specific domains, according to the language domain idea of [50]. For example, the language spoken at home or in one's neighborhood may differ from the language spoken at school or at work [51]. Eastern European migrants in East Anglia have "a slight preference for the use of English outside the home/family domain, while the L1 is used predominantly in the home/family domain, as would be expected" [51].

ii. Interlocutors—Interlocutors have a significant impact on language choice. While researching the linguistic behavior of ethnic minority communities in the London suburbs, Harris [52] identified three patterns: one with parents, which usually involved a mixed language of mainstream and minority languages; one with siblings, which mainly involved using the mainstream language; and one with grandparents, which mainly involved using the minority language. Other researchers Lawson and Yagmur [53, 54] reported similar results, suggesting that language use may be connected to the speakers' age. Gender differences are thought to influence language usage patterns [52, 55].

iii. **Topic**—Language choice may also be influenced by the topic under discussion. Fishman [50] suggests that certain subjects are some way or another dealt with way better in one dialect than in another, in specific multilingual contexts. Lawson and Sachdev [53] point out that Bengali was used with topics related to family issues, while English was mostly used while discussing school matters. Wei [55] presents two primary techniques within the macro-societal perspective model: the complementary distribution approach (following researchers like [56]), and the conflict model. According to the first method, all of the languages or language variants in the linguistic community are used to fulfill a certain role. As a result, languages (or their variations) are attributed to a set of functions that work together to create a consistent multilingual system. Code switching is also one manifestation of the way in which bilingual individuals negotiate and practice language choice [57, 58]. For example, Ethiopia is a multilingual and multicultural country where more than one or two languages are used in various settings and as a result, bilingualism, multilingual repertoires, code switching, language choice for specific domain, codemixing, and borrowing are instances of multilingual language preferences and use in diverse Ethiopian communities [59].

5. Domain analysis as a theoretical framework of language use

The concept of domain analysis developed by Fishman remains useful for both description and explanation of the distribution and use of language in domains and is based on [49] famous question of "Who speaks what language to whom, and when." There is a correlation between language choice and a wide range of social factors, such as the number and geographical distribution of the language's speakers. Domain analysis, therefore, is the framework on which the survey questionnaires for this study are based. Domain analysis approached the study of language use by relating self-reported language behaviors and attitudes of the respondents to sociological indices in the groups under study. The language domain should be considered an abstraction of an interactional situation in which a cluster of sociocultural, sociolinguistic, and linguistic factors is at work.

The family, the playground, and the street, the school, the church, work, literature, the mass media, the courts, and other administrative agencies are examples of domains described in the literature. The precise description and classification of domains necessitates a thorough understanding of a society's sociocultural dynamics, norms, and values at a specific point in time. This is because the quantity and intensity of language behavior domains can vary from context to context [49].

5.1 Defining domain analysis

Domain, an important determinant of language choice, refers to the context of language use, for instance, that of family, friendship, neighborhood, education, and transaction. With reference to domain distribution of language use, Wallwork [60] says that in some domains there may be contact with other people with whom there is a potential choice of two or even three languages. The decision may be focused on the function of the two speakers in relation to each other, or the topic of the conversation who both view domain in the same ways [61].

5.2 Domain effects on language choice

The impacts of domain on language choice have been investigated in a number of research. Greenfield [62] states that in the multilingual Puerto Rican population of New York, the low language, Spanish, is preferred in intimate domains such as family and friendship, while the high language, English, is preferred for job and education. Parasher [63] demonstrates that in India, people use their mother tongue and another language in the family domain, although English dominates high domains like education, government, and employment, as well as some low domains like friendship and neighborhood. Similar findings were reported by Hohenthal [64], who found that languages are employed differently depending on the domain. The concept of domain and domain analysis, however, has been criticized. Some of the studies reported partial effect of domain on language choice whereas others reported even no effect at all. Pascasio and Hidalgo [65] examined how role-relationships, domains, and speech situations affect language use among bilinguals in Philippines. The speech situations, however, do not seem to have much effect on language used. Gal [66] however, strongly disagreed with the influence of domain on language choice. The other situational factors such as audience, setting, occasion, and purpose have been found to influence the choice of language in other communities but these factors were found irrelevant to the Oberwart case in Austria.

5.3 Factors determining language choice/use in multilingual situations

Topic, role relation, and geography, according to Fishman [49], are elements that influence the concept of domain. In multilingual situations, he claims that topic can be a language regulator. When discussing specific topics, someone might, for example, adjust their language to that of the interlocutor. Role relation, according to Marjohan [67], is that the languages you use are decided by the interlocutors with whom you communicate. For instance, a father may converse with his mother, a child may converse with his mother, and a mother may converse with her child. He also says that locality influences the languages you use because of where the discussions take place. According to Marjohan and Tanner [67, 68], there are factors of choice to be setting in locale. The factors are content or topic, social distance and motivational factors. In social distance, there are two dimensions: vertical and horizontal dimensions. The vertical dimensions mean that the languages use are determined by the relative position of someone that is compared with others. Marjohan [67] States that you have to respect someone who is above you in terms of status, age or marital status. The horizontal dimensions refer to the relative closeness of someone with others. You tend to use a low code if you speak to someone who is close to you in terms of degree of friendship, sex, ethnic background, religious background or educational background. Someone has motivational factors when he or she is interested to speak with the interlocutors or interested about the topics even manipulative.

5.3.1 The part of language proficiency/knowledge

A number of studies have identified proficiency as a limiting factor in language choice. David [69] There have been reports that a shift can be attributed to a lack of proficiency in the ethnic language (language shift, switch, mix and maintenance are the ways through which language choice manifests). David also understands that code switching reflects a speaker's level of expertise and comfort with a certain language. She also acknowledges that whether English or Malay is utilized as the lingua franca is determined by whether the speakers are fluent in both languages. Wallwork [60] has a similar view when he states that it is vital to consider an individual's language skill in connection to the settings in which language is used. In a Puerto Rican bilingual education program in New Haven, Connecticut, Hakuta [70] looked into the links between language choice, proficiency, and attitude. She claimed that language transition in American Hispanic communities is frequently characterized by a combination of processes involving proficiency, choice, and attitude.

5.3.2 Ethnicity as a factor

Ethnicity is widely acknowledged as a major limitation that determines people's linguistic choices. The impact of ethnicity on language choice has been documented in several research. Gal's [66] is one of the research that firmly suggests that language choice is determined by identity. In the Oberwart instance in Austria, Gal discovered that only the participants' identities can account for their language choice and use. In their study in Valencia, Spain, Sankoff [71] discovered a similarly high link between ethnicity and language choice. According to the findings, ethnic identity is the most closely linked to language choice motivation. Another study Burhanudeen [72], conducted in Malaysia, where the current study is being conducted, finds that the ethnicity of the participants influences the Malays' language choice.

5.3.3 The gender factor

Gender is also found to influence language choice. According to Lu [73], disparities in age, education, gender, and residency area result in various attitudes toward native language maintenance and legitimacy, and these attitudes encourage people to choose alternative languages. Chan [74], on the other hand, finds no gender differences in Minnanren's language use (quoted in [75]). Domain, proficiency, ethnicity, and gender are all factors that influence language choice among Malaysian friends and neighbors, according to this study.

5.3.4 Attitudes toward language

Given the scope of the term and the relevance of the various characteristics of attitudes, Garrett [76] contends that defining the idea of attitude is difficult. Attitudes, on the other hand, are divided into three categories: cognitive, affective, and behavioral [76]. The first is concerned with the impact of attitudes on an individual's perceptions of the world and specific situations; the second is concerned with emotions in response to the attitude item, and the third is concerned with attitudes interfering with conduct [76]. There is a general consensus in the literature that learning and using a language are easier for people who have a positive attitude toward the language and its speakers [76, 77], because language attitudes can better determine others' reactions to the language choice and thus influence this choice [76].

6. Frameworks for promoting multilingualism

Scholars have argued pedagogical, theoretical, and empirical foundations for such multilingual language use policies in multiethnic countries. Increasing citizens' language skills will be equally important in achieving European policy goals, particularly against a background of increasing global competition and the challenge of better exploiting Europe's potential for sustainable growth and more and better jobs. For example, The European Union Commission's long-term objective is to increase individual multilingualism until every citizen has practical skills in at least two languages in addition to his or her mother tongue. This framework should establish clear objectives for language choice and use of multilingual speakers at the various domains and be accompanied by a sustained effort to raise awareness of the importance of linguistic diversity and multilingualism.

7. Recent dynamics of multilingualism

Two patterns deserve comment in relation to the changing character of multilingualism in the world today. This is true for the spread of the major world languages such as English, Spanish, French, and Chinese especially in the major cities and urban centers in the world. This is because as those major languages spread in urban centers as well as other localities, people tend to prefer and use them (languages) in various domains instead of the other minority or less populous languages. The second condition in the new development of multilingualism in the world is the increasing linguistic and cultural diversity, and mobility in different parts of the world particularly in Europe and America where linguistic homogeneity was the major characters of these parts of the globe [6]. Of course, in these parts of the world (Europe, USA), mobility and waves of immigration are the main leading factors for the spread of multilingualism and multiculturalism across the world.

8. Sociolinguistic implications of multilingualism

Sociolinguistics is the descriptive study of the effect of any and all aspects of society, including cultural norms, expectations, and context, on the way language is used, and the effects of language use on society. Multilingualism is the act of using polyglottism, or using multiple languages, either by an individual speaker or by a community of speakers. The simultaneous coexistence of a large number of languages in a country has also important cultural, economical, sanitary, and political effects on the life of its inhabitants, who will be crucially affected by the decisions taken by the government on language policy.

9. Implications of multilingualism and linguistic diversity

i. **Problems of nationalism**—Difficulties within a country can act as an impediment to commerce and industry and be socially disruptive. This is remedied by adoption and development of a national language. For the case of Kenya, Kiswahili has been propagated. The national language is promoted by ensuring its acceptance by those who are not its native speakers and ensuring that the language serves the needs of a modern state,

ii. **The choice between a local language and the colonial language**—If a country settles on the old colonial language as the national language, then the chance for a local language serving as the national language is severely threatened.

iii. **Multiplicity of local and ethnic languages**—The three east African nations have multiple languages to choose from in the choice of a national and official language. In addition to the challenge posed by the dominance of the colonial language, promoting one local or ethnic language over the other may bring forth a conflict in the sense that the community owning that language is also elevated politically which can bring strife in the country concerned.

iv. **Implications within the educational system**—i) A country may decide to use various ethnic group languages. These are already known by children; hence, the subject matter can be introduced immediately without waiting until children learn the national language; **ii)** it gives birth to dominance of some languages over others; the result is that the majority of writers and readers operate within the framework of one language; **iii**) there are serious implications relating to the issue of translation of literature from one language to another with particular reference to the whole field of oral literature; **iv)** there is also language interference that occurs when one language imposes itself on another language especially during the process of language learning and usage. The language an individual learns first as mother tongue or as a first language (L1) will always affect the learning and usage of any other language subsequently learnt.

v. **Maintenance of diversity**–using ethnic languages for initial language learning and switching to a national language for more advanced education. This ensures the maintenance of the ethnic group language.

vi. **Mixing of the linguistic codes of different languages**—Multilingual situations may also have important linguistic effects on the languages in contact.

They may cause the mixing of the linguistic codes of different languages, resulting in lexical borrowing and the spreading of some grammatical features among those languages.

vii. **Code switching—**This is a dominant effect of multilingualism. Code switching is the use of two or more codes in the same talk exchange [77]. The speaker uses a switch in code as a tool to negotiate the rights and obligations set which she/he wishes to be in effect for the exchange. The addressee uses the switch as an index of the negotiation in which the speaker is engaged. For instance, in the Kenyan situation [58], speakers change between codes to imply formality, informality, closeness, distance, kinship and also to define human relationships.

10. Conclusion

As already explained or stated in the introduction of the chapter, multilingualism is the common norm and way of life in many parts of the world. Nevertheless, for so long time, the concept of monolingualism has been also a dominant norm and way of life in various parts of world particularly in the Western countries. As has been stated in the chapter, the nature of multilingualism in different countries in the world is reviewed and presented. Besides, practical aspects of the multilingualism and language choice and use practices from empirical data were also reviewed and discussed for further understanding. Nevertheless, the coexistence of multiple languages in linguistically diversified settings by itself is not inherently the source of conflicts, miscommunication, or misunderstandings as a result of language choice and use of multilingual speakers. The real problem perhaps might be the inequalities existing between individuals and groups or communities who happen to speak and use different languages in various domains.

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Multilingualism: Learning and Communicative Competence

The Interaction of Expectancy-Value Beliefs and Anxiety in Learning Academic Oral English in Bilingual Chinese Postgraduate Students

Meihua Liu and Lianqi Dong

Abstract

Despite the plethora of research on speaking anxiety, most studies focus on speaking for general purposes in various bilingual contexts, particularly ESL/EFL (English as second/foreign language) contexts. Little research has been done on anxiety when speaking English for academic purposes in bilingual students. Even fewer studies are available on the interaction between academic oral communication (AOC) anxiety and expectancy-value beliefs —important concepts of language learning motivation. Hence, the present longitudinal study examined the interaction of expectancy-value beliefs and AOC anxiety in bilingual Chinese postgraduate students when learning academic oral English. In addition to interviews, a set of matching questionnaires on AOC anxiety and expectancy-value beliefs were collected from 74 Chinese postgraduate learners of English in week 2 (phase 1) and week 14 (phase 2) of a 16-week semester. Analyses of the data revealed the following major findings: (1) One-third to half of the participants experienced AOC anxiety and had low expectancy of themselves about AOC, and more than half of them held high attainment, intrinsic value, utility value and cost value of AOC in English, (2) significant increase occurred in expectancy but not in AOC anxiety or any value over the semester, and (3) expectancy was a great negative predictor for AOC anxiety in phase 1, while expectancy, intrinsic value and cost value were powerful predictors for the latter in phase 2. Based on these findings, some implications for teaching and learning AOC to bilingual students are discussed.

Keywords: academic oral communication, anxiety, expectancy-value beliefs, interaction, bilingual

1. Introduction

Posing various obstacles to learners, second/foreign language (SL/FL) learning is far more complicated than first language acquisition. As a consequence, learners inevitably experience a myriad of emotions when learning a SL/FL, which is especially true for adults in the process of becoming bilingual. Negative emotions, such as anxiety, anger, disgust, boredom, scare, and hostility [1], due to their

primarily debilitating effects on learners' learning outcomes, have long caught the attention of researchers in the field of second language acquisition (SLA) [2]. In particular, anxiety has been much researched in SLA since the 1970s [2–5], which shows that speaking is the most anxiety-provoking SL/FL learning activity [2, 5]. Consequently, a large body of research has been done on speaking anxiety in SLs/FLs [2, 6–11], most of which focuses on speaking for general purposes in bilingual students. As English has become the leading language in academia, students of higher education, especially postgraduate students, desire to be proficient in speaking English for academic purposes so that they can be better involved in academic activities such as classroom discussions, conference presentations, seminar presentations and oral research proposal defenses. Obviously, this could be far more challenging and anxiety-provoking. Yet, not much research is available on anxiety in bilingual learners when learning academic oral English [12].

Likewise, learning motivation has proved to be a facilitator in SL/FL learning and interacts with many other factors like anxiety, confidence, learning strategies, task difficulty and so on [13–17]. Nevertheless, as important concepts and components of learning motivation, expectancy-value beliefs have not been adequately researched [12, 13]. Even scarcer studies can be found on the interaction between expectancy-value beliefs and anxiety in bilingual students when learning the second language for academic purposes [12]. For these reasons, the present study aimed to examine the interaction between expectancy-value beliefs and anxiety in bilingual Chinese postgraduates when learning academic oral English, hoping to better the teaching and learning of academic oral communication to bilingual students.

2. Literature review

2.1 Foreign language anxiety

Anxiety is the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system [18]. Such emotion also exists in SL/FL learning and is known as foreign language anxiety (FLA) [2, 19]. In early stages of FLA research, inconsistent findings were revealed due to different definitions and measurements used by researchers [20]. Subsequently, scholars realized the importance of specifying the type of anxiety in research. Thereafter, [2] proposed the theory of foreign language classroom anxiety (FLCA). As explained in this theory, FLCA is a specific type of FLA and refers to the negative emotions arising from the teaching and learning of a SL/FL in classrooms. It covers three dimensions: speech apprehension, fear of negative evaluation, and test anxiety. To measure FLCA, [2] designed the 33-item 5-point Likert Foreign Language Classroom Anxiety Scale (FLCAS), which then has been widely utilized in empirical studies in various bilingual/multilingual learners though the FLCAS primarily measures speaking anxiety [3, 9, 21–25]. These studies generally show that anxiety exists in almost all aspects of SL/FL learning, such as in speaking, reading, listening, writing, and translation, and negatively affects SL/FL learning outcomes [8, 26–32]. They also indicate that speaking is the most anxiety-provoking activity and the greatest source of anxiety in language classrooms [23, 33, 34], and that speaking anxiety is strongly negatively correlated with oral performance in a SL/FL and changes as the learning context changes [6–9, 11, 34]. For example, in [6], three teachers and eighty-eight students from four intact classes in a Thai university voiced their perceptions of speaking anxiety in English classrooms via videotaped interviews. The results corroborated the existence of speaking anxiety

among bilingual learners in classrooms, especially when accompanied by tests, which hindered students' English performance to varying degrees. The study attributed students' speaking anxiety to their lack of self-confidence, low English proficiency, as well as lagging motivation in using English. Qualitative studies even reveal that students with high anxiety may speak with trembling voices, forget what they know, and do not know what to say, suffering from negative impacts rendered by anxiety to their performance and learning of the SL/FL [10, 35, 36].

As English becomes the lingua franca of the world, it also becomes a dominant language in academia. Naturally, what students of higher education desire to be proficient in is not only speaking English for general purposes but also speaking English for academic purposes. This is especially so for postgraduate students who are often more frequently involved in academic activities such as classroom discussions, conference presentations, seminar presentations and oral research proposal defenses [37]. Consequently, their academic oral communication (AOC) ability has become an increasingly crucial measure of their overall academic performance [38]. Still, AOC is far more anxiety-provoking and challenging since it requires both the knowledge of English and research [5, 39–41]. Moreover, fewer chances of practicing AOC also add to the anxiety experienced by postgraduate ESL/EFL (English as a second/foreign language) students. Unfortunately, little research on AOC anxiety is available in the current literature [12].

2.2 Expectancy-value beliefs

As individuals make efforts to learn a SL/FL to become bilingual/multilingual because of interest and/or the desire to seek satisfaction from the learning experience, learner motivation is another heating research topic during the recent 50 years [42, 43]. Along with this, a number of motivation theories have been developed, such as the socio-educational theory [43], the social cognitive theory [44], the L2 motivational self-system [45], the self-determination theory [46], the self-efficacy theory [47], and the expectancy-value theory [48], all of which pinpoint the importance of motivation in SL/FL learning and elucidate factors affecting this motivation. These ideas are generally supported by empirical studies [16, 42, 49–51], which also reveal that language learning motivation is dynamic and interacts with many other factors to have a joint impact on SL/FL learning.

Among these theories, an influential yet not much researched one is the expectancy-value theory (EVT) pioneered by [52] and further elaborated by [48]. This theory emphasizes the multiplicative roles of expectancy and value beliefs in predicting learners' achievement-related activities, such as choices, effort, persistence and performance [17, 53, 54]. According to this theory, 'expectancy' and 'values' specify the strength of learners' achievement motive. 'Expectancy' or 'expectancy for success' concerns an individual's competence beliefs about achieving tasks either immediately or in the future [55], which is closely related to the individual's real life experience of success or failure from task completion. 'Value' or 'subjective task value' deals with learners' impetus and rationale for choosing and doing a certain task or activity [55], which is further divided into four separate facets: attainment value (the importance of doing well in a task), intrinsic value (the enjoyment from completing a task or participating in an activity with interest), utility value (the usefulness of a task in relation to learners' present and future goals) and cost value (the estimated amount of effort, mostly negative, in doing a task). It is assumed that these beliefs vary according to time, task, context and individual learner.

To explore learners' expectancy-value beliefs, several instruments have been developed, such as the Self-Description Questionnaire [56], the EVT model [48] and the Expectancy-Value Beliefs Inventory [17]. Studies applying these

instruments generally show that expectancy has a more long-lasting effect on academic achievement or performance while task values have a stronger connection in predicting academic efforts and the choice of self-regulation strategies [13, 15, 17, 57]. They also demonstrate a strong relevance of expectancy-value beliefs to learner emotions because of its emphasis on the multiplicative effects of learner beliefs and subjective value appraisals on achievement motives [58–60]. For example, [49] collected data from 631 Chinese primary school students aged 9 to 12. They found that expectancy and value components varied markedly with participant characteristics: motivation declined with age and girls were more motivated and had higher values than boys. They also found that expectancy was a stronger predictor for achievement than value components across all ages and for both genders. Xu [60] investigated the levels of expectancy, importance (attainment value), interest (intrinsic value), listening anxiety, listening metacognitive awareness, and listening test scores of 548 Chinese first-year undergraduate students and the interactive effects of these variables by structural equation modeling. He found that learners' FLA was negatively correlated with their expectancy and intrinsic value but positively connected with attainment value. The researcher proposed to enhance learners' expectancy beliefs and intrinsic value and mitigate anxiety to improve their listening competence.

3. Research questions

As reviewed above, motivation is often considered as a facilitator while FLA a debilitator in the process of becoming bilingual/multilingual. Despite that much research has been done on both motivation and anxiety, little attention has been paid to AOC anxiety or motivation in learning AOC, much less to the interaction between expectancy-value beliefs and FLA [59, 60], though it is quite clear that self-perception (or one's thoughts in general) is an important element associated with anxiety [61]. The limited studies available reveal that learners' foreign language anxiety is negatively correlated with their expectancy and intrinsic value while positively connected with attainment value [60], that anxiety mediates the relation between perceived task value and FL achievement [59], and that increased value appraisal boosts positive emotions in FL learning [58]. In spite of such significance, the relation between domain-specific expectancy for success and subjective task values from the developmental perspective still remains inconclusive [53] and calls for more research. All these motivated the present study, which aimed to investigate the interaction between expectancy-value beliefs (attainment, intrinsic, utility and cost value) and AOC anxiety in bilingual Chinese postgraduates when learning academic oral English. The specific research questions were:

1. How do students' academic oral communication anxiety and expectancy-value beliefs change during the 16-week semester?

2. How does students' academic oral communication anxiety interact with expectancy-value beliefs?

By exploring the changes in and interaction between expectancy-value beliefs and AOC anxiety related to learning academic oral English, this study was expected to help improve the teaching and learning of AOC in bilingual/multilingual students by enhancing their motivation and lowering anxiety. The results would also enrich the current literature.

4. Methodology

4.1 Context

The Advanced Speaking Course for Academic Communication (ASCAC) was specifically for postgraduate non-English majors, aiming to integrate English learning into students' research, and provide them with opportunities to practice their conference and seminar presentation and chairing skills. To this end, a variety of activities was practiced in the class, like pair work, group discussion, individual and group presentations on differing topics followed by questions and answers. Example topics for these activities included progress in a project, communication with the supervisor and peers, participation in a lecture/seminar/conference, artificial intelligence, use of technology in different areas, internet and privacy protection, and so forth. The class met once per week for 90 minutes and lasted for 16 weeks.

In order to increase students' exposure to real English speaking scenarios and practice of English speaking, especially English speeches in formal situations, students were encouraged to watch and model on TED talks (www.ted.com) in English at their own paces (TED is a nonprofit organization devoted to spreading ideas, usually in the form of short and powerful virtual talks, and covers almost all fields, from science and business to global issues, such as collaborative consumption, positive emotion, artificial intelligence, bitcoin and design in life).

4.2 Participants

The participants in this study were 74 doctoral students (57 male, 17 female) enrolled in ASCAC at a university in China. With an age range of 21 to 35 and an average age of 24.73 (SD = 3.47), 62 (83.8%) of the participants were first-year Ph. D students, 10 (13.5%) second-year and 2 (2.7%) third-year Ph.D students. These participants came from various disciplines including natural sciences, engineering, arts and humanities. Of these participants, 7 were randomly invited for informal interviews in an effort to elicit more insider views of AOC anxiety and expectancy-value beliefs of AOC. They all reported having little chance of speaking English outside the English class, 4 reported seldom speaking English in academic situations, 2 spoke English for AOC purpose twice a year and 1 did so one to two times per week.

4.3 Instruments

The participants in the present study answered a survey which consisted of three parts. Part 1 covered such background information as name, gender, age, year of study, and major. Part 2 was the 12-item Academic Oral Communication Anxiety Scale (AOCAS) adopted from that used in [12], which was adapted from the Second Language Speaking Anxiety Scale (SLSAS) constructed in [62]. The SLSAS intends to measure SL speaking anxiety in different communicative situations (e.g., in-class and out-of-class situations) to different interlocutors (e.g., the number of speakers, the status of the speakers and whether the speaker is a native or non-native speaker of English). The adapted AOCAS aimed to measure respondents' anxiety levels when speaking English about their research in various formal situations like classroom discussion, individual presentation, seminars and conferences. Example items were 'I feel anxious when talking to other people about my research findings in English' and 'I feel anxious when presenting (or will present) my research in English in an international conference'.

Part 3 was the 15-item Expectancy-Value Beliefs Inventory (EVBI) adapted from [17]. Similar to the original inventory, this adapted EVBI also comprised five dimensions: 5-item Expectancy, 3-item Attainment Value (AV), 3-item Intrinsic Value (IV), 2-item Utility Value (UV), and 2-item Cost Value (CV). To better fit the present situation, the item 'I am good at communicating with my peers in English' was added to the original 4-item Expectancy, indicating the expectation of oneself as a person being able to communicate in English with peers about his/her research. Another example item was 'I have difficulty talking about my research project in English'. The three AV items were reflective of the importance of having the ability to communicate in English about research. An example AV item was 'Being able to communicate academic study in English is important to me'. The 3-item IV was concerned with intrinsic/internal desire to learn academic oral communication. An example IV item was 'I would like to have more classes like this to practice my English for academic communication'. The 2-item UV suggested the value of good academic communication skills. For example, 'Good grades in academic oral English can be of great value to me later'. The 2-item CV was about the investment in learning academic oral English. An example CV item was 'I'd have to invest a lot of time to improve my academic speaking English'.

Items in parts 2 and 3 were all placed on a 7-point Likert scale, ranging from 'strongly disagree' to 'strongly agree' with values 1 to 7 assigned to each of the descriptors respectively. Thus, a higher AOCAS score meant greater anxiety about academic oral communication; a higher expectancy score meant great expectation of oneself at communicating in English about academic study; and a higher AV/IV/UV/CV score indicated greater attainment/intrinsic desire/practical value/investment of/in having the ability to communicate in English about academic study.

As shown in **Table 1**, both the AOCAS and the EVBI scales except Expectancy were highly reliable in both phases, with reliability scores ranging from .764 to .988 in phase 1 and from .676 to 957 in phase 2, respectively.

Meanwhile, some survey respondents were invited to informal interviews to elicit more inside views about AOC anxiety as well as expectancy and value beliefs about AOC in both phases. The lead questions in phase 1 covered such issues as reasons for learning AOC, expectations for the course, efforts intended to learn AOC, importance of learning AOC well, feelings when presenting research in English in different situations, and causes for feeling anxious. The core questions in phase 2

	No. of items	Phase 1		Phase 2	
		Reliability	Mean item-total correlation (p = .01)	Reliability	Mean item-total correlation (p = .01)
AOCAS	12	.968	.831	.957	.786
Expectancy	5	.392	.268	.245	.160
Attainment Value (AV)	3	.936	.867	.775	.634
Intrinsic Value (IV)	3	.837	.541	.676	.511
Utility Value (UV)	2	.793	.657	.844	.762
Cost Value (CV)	2	.764	.618	.820	.696

Notes: AOCAS = Academic Oral Communication Anxiety Scale.

Table 1.
Characteristics of AOCAS and EVBI Scales (N = 74).

included gains from the course, efforts made to learn the course, feelings when presenting research in English in different situations, causes for feeling anxious, etc.

4.4 Data collection procedure and analysis

The data were collected at two time points of the 16 week semester: The first in week 2 and the second in week 14. At both time points, students answered the survey and a consent form in about 10 minutes in class. Additionally, the informants were required to self-rate their anxiety and motivation levels in weeks 3, 6, 9 and 12, respectively in phase 2. Immediately after the students answered the survey, 6 of them were randomly invited to be informally interviewed during class break, before or after the class. Each interview was conducted in Chinese with a mixture of English and lasted around eight minutes. The collected survey data were analyzed via SPSS 20. Paired samples t-tests were run to examine changes in anxiety levels and value beliefs. Correlation analyses were run to answer research question 2 about the relationship between anxiety and value beliefs. Multiple (stepwise) regression analyses were conducted to explore the effects of value beliefs on students' academic oral communication anxiety.

All the interviews were first transcribed, double-checked and then subjected to thematic content analyses [63]. Based on the questions, the interviewees' responses were analyzed according to ideas, which were repeatedly grouped into larger categories. The final themes adopted in the present study included reasons for taking the course and gains from the course, feelings of high/low/no anxiety when communicating in English about academic studies, and causes for AOC anxiety, and so on. To protect privacy, pseudonyms were used for interviewees when their remarks were cited in the paper.

5. Results

5.1 Survey results

5.1.1 Levels of and changes in AOC anxiety, expectancy and value beliefs

As reported in **Table 2**, the respondents scored 3.94 in phase 1 and 3.56 in phase 2 on AOCAS, below though close to the scale midpoint 4. This finding indicated that around one-third of the respondents were anxious about speaking English for

|	Phase 1		Phase 2		Paired samples t-test results		
	Mean	**SD**	**Mean**	**SD**	**t**	**p**	**Cohen's d**
AOCAS	3.94	1.59	3.56	1.45	1.67	.100	/
Expectancy	3.60	.82	3.85	.83	−1.99*	.050	0.04
Attainment	5.89	1.25	5.74	1.27	.791	.432	/
Intrinsic	5.29	1.19	5.54	1.099	−1.38	.171	/
Utility	5.76	1.27	5.97	1.22	−1.06	.295	/
Cost	5.27	1.20	5.35	1.27	−.617	.539	/
Score	35.61	1.52	35.97	.92	−1.65	.103	/

Table 2.
Means, Standard Deviations and Paired Samples t-test Results of AOCAS and EVBI Scales in Both Phases (N = 74).

academic purposes in both phases of the semester. Meanwhile, the students scored 3.60 in phase 1 and 3.85 in phase 2 on Expectancy, below the scale midpoint 4, suggesting that they generally had low expectancy of themselves as people who were good at communicating in English on academic studies. In addition, the students scored 5.27 to 5.89 in phase 1 and 5.35 to 5.97 in phase 2 on Attainment Value, Intrinsic Value, Utility Value and Cost Value, respectively, above the scale midpoint 4. These findings showed that more than half of the students believed that it was important to be able to communicate in English about their research, that they internally liked to and hoped to learn AOC well, that good oral English communication skills were important, and that they must invest a lot to learn AOC well.

Concurrently, comparison of the scores at two time points showed that the respondents scored lower on AOCAS and Attainment Value but higher on other scales in phase 2. This meant that, by the end of the semester, the students became less anxious about speaking English for academic purposes and held lower attainment value, but had higher expectancy, and greater intrinsic value, utility value and cost value about AOC. This tendency was further supported by the students' self-reported anxiety and motivation levels in weeks 3, 6, 9 and 12 respectively, as shown in **Figures 1** and **2**. Nevertheless, significant difference occurred only in expectancy, indicating that the students had significantly higher expectancy of themselves as people who were able to communicate in English about academic study by the end of the semester, as evidenced by paired samples t-test results reported in **Table 2**.

5.1.2 Correlations between AOC anxiety and expectancy-value beliefs

Table 3 presents the coefficients between AOCAS and EVBI scales in both phases. It shows that AOCAS was significantly negatively correlated with expectancy ($r = -.542$, $p \leq .008$) in phase 1, while significantly negatively related to expectancy ($r = -.434$, $p \leq .008$) and intrinsic value ($r = -.358$, $p \leq .008$) but positively to cost value ($r = .307$, $p \leq .008$) in phase 2. This meant that in both phases, a respondent who had higher AOC anxiety held lower expectancy of himself/herself as a person who was able to communicate in English about academic study. In addition, this person tended to place lower intrinsic value and greater cost value on AOC in phase 2.
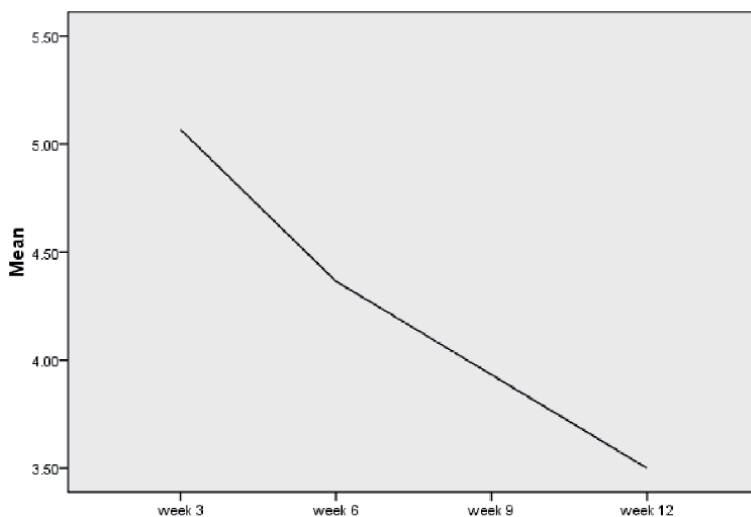
Figure 1.
Self-reported anxiety levels from week 3 to week 12.
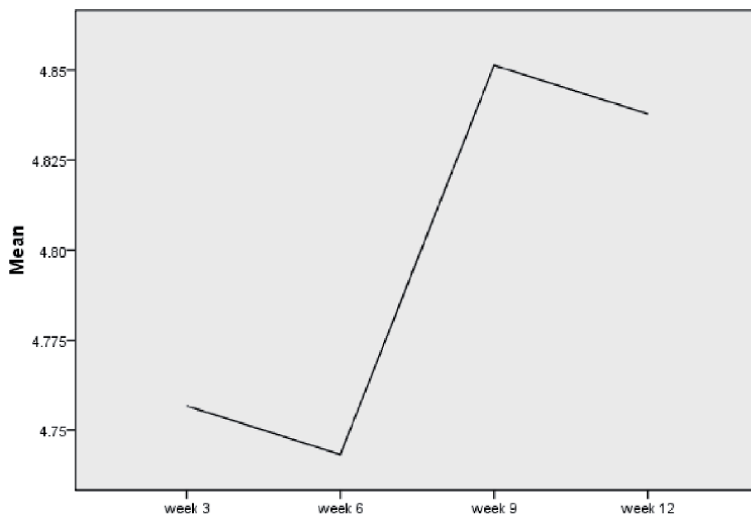
Figure 2.
Self-reported motivation levels from week 3 to week 12.

	Expectancy	AV	IV	UV	CV
OCAS	−.542[**]/−.434[**]	−.095/−.106	−.215/−.358[**]	−.156/−.208	.083/.307[**]
Expectancy		.028/.039	.159/.157	.042/0.060	−.065/−.376[**]
AV			.754[**]/.629[**]	.683[**]/.746[**]	.463[**]/.246[*]
IV				.767[**]/.773[**]	.465[**]/.231[*]
UV					.452[**]/.424[**]

Note: The first number refers to the coefficient in phase 1 and second refers to the coefficient in phase 2; coefficient of determination: small = r ≤ 0.1; medium = r = 0.3; large = r ≥ 0.5.
[*] = $p \leq .05$.
[**] = $p \leq .008$.

Table 3.
Correlations between AOCAS and EVBI Scales in Both Phases (N = 74).

Table 3 also indicates that expectancy was only significantly negatively cor-related with cost value (r = −.376, p ≤ .008) in phase 2, while attainment value, intrinsic value and cost value were significantly positively related to each other in both phases, with coefficients ranging from .452 to .767 (p ≤ .008) in phase 1 and from .231 to .773 (p ≤ .05) in phase 2. Alternatively, in phase 2, a person who had greater expectancy of himself/herself about AOC tended to invest less to learn AOC. By contrast, in both phases, a person who placed higher attainment value on AOC tended to place higher intrinsic value, utility value and cost value on AOC, or vice versa.

5.1.3 Predictive effects of expectancy and value beliefs on AOC anxiety

To examine the predictive effects of expectancy and value beliefs on AOC anxi-ety, multiple regression analyses were conducted in both phases, with AOC anxiety being the dependent variable and the EVBI scales being the independent variables. The results are reported in **Table 4**, which shows that the analyses produced only one model in phase 1 with R2 = .278 (p = .000): expectancy (β = −.527, t = −5.26, p = .000), which was a powerful negative predictor for AOC anxiety.

		Expectancy		
AOC anxiety in phase 1	β	−.527		
	t	−5.26		
	p	.000		
	VIF	1.000		
	Cohen's f2	.39		
		Expectancy	Intrinsic value	Cost value
AOC anxiety in phase 2	β	−.261	−.386	.298
	t	−2.404[*]	−3.727[**]	2.703[**]
	p	.019	.000	.009
	VIF	1.257	1.1400	1.295
	Cohen's f2	.23	.08	.07

Notes. Effect size of Cohen's f2: small = f2 ≤ .02; medium = f2 = .15; large = f2 ≥ .35 [64].
[*] = p ≤ .05.
[**] = p ≤ .01.

Table 4.
Multiple Regression Coefficients and Significance of Predictors for AOC Anxiety.

As seen from **Table 2**, the analyses produced three models in phase 2: model 1 (expectancy) (R^2 = .188, p = .000), model 2 (expectancy, intrinsic value) (R^2 = .274, p = .005) and model 3 (expectancy, intrinsic value, cost value) (R^2 = .343, p = .009), with model 3 being the best one. Model 3 reveals that expectancy was the most powerful predictor for AOC anxiety (β = −.261, t = −2.404, p = .019), followed by intrinsic value (β = −.386, t = −3.727, p = .000) and cost value (β = .298, t = 2.703, p = .009).

When AOC anxiety score at phase 2 was used as the dependent variable and expectancy-value beliefs at phase 1 as independent variables, no model was yielded.

5.2 Interview results

At the beginning of the semester (phase 1), all the 7 interviewees reported that they took the ASCAC because they were required to take an English course to graduate on time and that they held the following expectations of the course: To improve English, especially speaking and listening English (5/71.42%), to become brave to speak English (2/28.57%), to improve academic oral English (2/28.57%), and to learn English way of thinking (1/14.29%). Except for one interviewee who remarked that he would hardly need to speak English for academic purposes in the future, the other six were fully aware of the importance of learning AOC well to their research and future career. They thus all were willing to make efforts to study the course well and planned to "take notes, listen to and practice the instructor's suggestions, work on assignments seriously, and try to speak English as much as possible" (Luo, phase 1). Two interviewees also planned to memorize as many English words as possible. However, they generally could not invest more time in learning English due to heavy load from work or research projects. Hence, during the first few weeks, when speaking English in groups in class, 3 interviewees reported feeling anxious in that they were not confident due to poor spoken English, limited vocabulary, inability to understand what the instructor said, and/or often forgetting words when speaking English. Three reported not feeling anxious because "… It's ok to make mistakes or switch to Chinese, because it was between us

students" (Wang, phase 1) and "… The purpose was to practice and improve spoken English" (Ya, phase 1). Dou said that he was not anxious when the topics were familiar to him but anxious when the topics were unfamiliar or difficult.

When presenting research results in class, Dou reported not feeling anxious if his research was good but the other six did feel anxious to varying degrees because "… The other students were so good at English" (Luo, phase 1), "I'm afraid of forgetting words" (Pan, phase 1) and "I'm not well-prepared" (Ya, phase 1). When presenting research results in conferences, only Luo remarked that he was not anxious because he was prepared, the other six felt anxious to varying degrees due to the following reasons: a) Listeners were experts; b) they could not understand others well; c) the audience was big, d) the situation was quite formal and they feared making mistakes, e) they feared forgetting words when answering questions, and f) experts asked hard-to-answer questions. As passive listeners in lectures and seminars, all the interviewees would not feel anxious. Yet they became anxious when presenting if they were unable to express their ideas clearly in English, forgot words when answering questions, could not understand questions, and/or were not prepared or saw an expert in the audience.

During the semester, in spite of heavy load from work or research projects, all the interviewees managed to increase their English-learning time and the frequency of speaking English and spend (a lot of) time on course assignments. For example, "To prepare for my assignments, I search for information and listen to English every day. And I listen to each of my own recordings several times and redo it until I feel it satisfactory. In addition, I keep on speaking English out in class. I think all these efforts are good and help improve my spoken English" (Ya, phase 2). As Xuan (phase 2) recalled, "I used to learn English kind of mechanically, like memorizing words and doing practice tests. Now to learn this course well, I changed my way of learning English: I came to watch TED talks, English movies and TV episodes and listen to English speeches. I think this kind of input is better than what I got in the past. I learned more practical and more nativelike use of English". Because of these efforts, they all claimed that their expectations of the course were met and that they gained a lot from the course: a) Logical way of thinking, b) correct pronunciation, c) increased use of English, d) the ability to speak English logically, e) the gut to present research results in the front, f) the ability to understand and respond to questions timely, g) the courage to speak English, h) a more systematic understanding of academic English, and i) new knowledge. As remarked by Dou (phase 2), "… As a Ph.D student, I'll highly probably present my research in international conferences, for which logic is important. Then, through the practice of each assignment and Dr. Liu's feedback, I came to understand more logic and English way of thinking. In this way, I gradually know how to develop my ideas."

As the interviewees became (more) familiar with one another, had increased practice and use of English, and became more logical in developing and presenting ideas, they reported becoming less anxious and more confident as the term progressed. Furthermore, as they got more used to the English way of thinking instead of simply translating from Chinese to English, and became more confident, all the interviewees reported feeling much less (or not) anxious when speaking English in groups in class by the end of the semester. Nevertheless, still three interviewees reported feeling anxious when the topics were not familiar, and one did so when not prepared. When presenting research results in class, three interviewees did not feel anxious because of the following reasons: a) increased exposure to and practice of English (e.g., reading literature in English, speaking English aloud, listening to English speeches and getting involved in discussions in English), b) getting more used to the English way of thinking, c) understanding their own research better, and d) having been trained how to present and answer questions in class. Two

reported feeling anxious, though less anxious compared with how they felt at the beginning of the semester, in that they "still need to know more about research" (Wang, phase 2) and "… It takes time to improve English" (Pan, phase 2). Two reported not feeling anxious if well prepared but anxious if the preparation is insufficient, as "If I am fully prepared, I know more than others do. I can answer their questions. So I don't feel anxious when presenting my research results" (Dou, phase 2). If presenting research results at conferences, Luo (phase 2) reported not feeling anxious because of adequate preparation, "… I fully understand my research and rehearse my presentations many times in advance". Ya did not feel anxious either when prepared, yet became anxious in the 'question and answer session' in that "I may not understand others' questions". The other five interviewees were anxious to varying degrees, because "… My research may not be so good" (Pan, phase 2), "… I may not be able to understand others' questions and thus cannot answer those questions" (Xuan, phase 2), and "… The audience are experts" (Wang, phase 2). Nevertheless, they reported feeling much less anxious compared with the beginning of the semester, thanks to increased confidence in presenting research in English because of more practice, preparation, and the learned English way of thinking.

6. Discussion

6.1 Levels of and changes in AOC anxiety and expectancy-value beliefs

The present study revealed that nearly half participants reported to be anxious about AOC, as found in their peers in English for general purpose (EGP) situations [7–9, 34]. Moreover, the reduction in the AOC anxiety level was not significant toward the end of the semester, different from many studies in EGP contexts where the participants often report to be significantly less anxious about speaking English after a period of time [3, 4]. This might be because as their exposure and access to English increase, students naturally become less anxious about speaking English. Nevertheless, it is generally more challenging to learn AOC in a SL/FL in that it demands more knowledge from learners, like academic vocabulary, more logical thinking and content knowledge as well as knowledge of research. As reported by the interviewees in the present study. Coupled with the fact that EFL students generally have fewer opportunities to practice AOC in spite of various activities organized in class, students need more time and practice to become significantly less anxious about speaking English for academic purposes, as revealed in the present study. Nevertheless, this needs to be further researched with larger samples in more contexts.

Meanwhile, this study showed that the students had low expectancy of themselves yet placed high attainment value, intrinsic values, utility values and cost values on AOC in both phases. These findings clearly indicated that the participants were not so confident in communicating with others about research in English. However, they knew quite well that it was important and useful to be able to do so, that they wanted to learn AOC well, and that they must make great efforts to learn AOC well, similar to their peers in [12]. This might be largely because as institutions of higher education began to increasingly stress research and publication and strive to become internationally famous, it becomes increasingly important for post-graduates, especially doctoral students, to be able to communicate effectively with peers and present their research projects and findings in such settings as lectures, seminars and conferences, in both oral and written forms. Another interesting finding was that the participants placed the highest attainment value in phase 1 but the highest utility value in phase 2. This result, if viewed from a cross-sectional

perspective, was consistent with the finding that SL/FL learners often have higher instrumental motives relevant to their current and future goals [65, 66].

In addition, the analyses showed that there was significant increase in students' expectancy and insignificant increase in attainment value, intrinsic value, utility value and cost value over the semester, different from the findings in [12, 67]. This can be attributed to the different roles played by expectancy and subjective task values respectively in the learning process, with the former having a stronger association with academic performance while the latter predicting effort-related decision making [49]. As learners approach the end of a learning period, their proficiency in the language would naturally be improved, which in turn boosts their expectancy beliefs. In addition, the statistically insignificant increase in cost value in the present study might be because the participants had already invested a lot in learning AOC in both phases, leaving little room for further sacrifices, as reported by the interviewees.

6.2 Interaction between expectancy-value beliefs and AOC anxiety

As found in a number of existing studies on relationships between foreign language anxiety and expectancy or self-efficacy [2, 21, 68, 69], the present study showed that expectancy was not only significantly negatively correlated with AOCAS but also a powerful negative predictor for AOC anxiety in both phases, similar to that in [12]. Understandably, a higher expectancy of success or one's ability often leads to higher confidence and lower anxiety. This might also partly explain why the reduction in AOC anxiety was accompanied by the increase in expectancy of success in the present study. Moreover, this result highlighted the long-term impact of expectancy on learning achievement motives. As reported in [53] on applying expectancy-value principles in daily teaching, the expectancy component of motivation has a closer association than subjective task values with learners' conscious learning experience. Consequently, it is of great necessity to help students to establish strong expectancy for success [29].

Echoing with the negative correlation between AOCAS and intrinsic value and the positive correlation between AOCAS and cost value in phase 2, intrinsic value was revealed to be a powerful negative while cost value a positive predictor for AOC anxiety in phase 2, as found in [70]. These findings indicated that learners who had greater internal desire to learn AOC well experienced lower AOC anxiety. This is because intrinsic motivation is a greater force in learning, as discussed in [42]. These findings also suggested that students who believed that they had to sacrifice a lot to be good at AOC experienced higher levels of anxiety. This might be because students knew that it took time and efforts to learn AOC well while they worried about the learning outcome at the same time. They were afraid that their learning outcomes might not deserve the sacrifices they made. This might also in return partly explain why the participants had rather low expectancy of themselves on AOC in the present study. Probably just because the respondents were not confident in speaking English for academic purposes, they experienced high AOC anxiety, even though they had internal desire to and were willing to invest a lot to learn it well. Hence, it remains important to enhance learners' perceived self-worth and expectancy of success/themselves, as discussed in [70]. On the other hand, however, this might alert us to the possibility that exclusively boosting one component may not necessarily translate to an overall increased achievement motive or enhanced learning experience. In effect, the improvement of one component is very likely to be constrained by the others due to interactive effects between them. Therefore, we need to be well aware of the multiplicative effects generated by all expectancy and value components of motivation. This also justifies more research

on the complicated interaction mechanism of expectancy-value beliefs so that the power of the whole really becomes greater than the sum of its parts.

7. Conclusion

The present study investigated the interaction between expectancy-value beliefs (attainment, intrinsic, utility and cost value) and AOC anxiety in Chinese postgraduate EFL learners. Analyses of 74 matching sets of questionnaires and seven interviews at two points of a 16-week semester revealed the following major findings:

1. One-third to half of the participants experienced AOC anxiety and had low expectancy of themselves about AOC,

2. more than half of them placed great attainment, intrinsic value, utility value and cost value on AOC in English,

3. significant increase occurred in expectancy but not in AOC anxiety or any value over the semester,

4. expectancy was a great negative predictor for AOC anxiety at the beginning of the semester, and.

5. expectancy, intrinsic value and cost value were powerful predictors for AOC anxiety by the end of the semester.

Clearly, Chinese postgraduate students' AOC anxiety and expectancy-value beliefs did change during the Advanced Speaking Course for Academic Communication, though not so much as happened in courses of speaking English for general purposes. This further demonstrates the challenging and anxiety-provoking nature of courses of speaking English for academic purposes. To improve competence in AOC and reduce anxiety, it is important to enhance students' motivation to learn AOC in English. Coupled with the finding that intrinsic value and cost value were powerful predictors for students' AOC by the end of the semester, it is necessary for instructors and students to work together to develop proper expectancy of success about and place appropriate values on AOC in English. Thus, students know what they expect to achieve, how they can achieve their goals and what sacrifices they are willing to make to achieve those goals. With these goals and efforts, they may gradually improve their competence in AOC and become increasingly more confident in and less anxious about speaking English for academic purposes [12]. Meanwhile, exposure to and practice of AOC in English are of supreme importance to students, which can be realized by organizing and participating in various activities like presentations and group discussions in class and listening to and modelling on formal speeches like TED talks after class [3, 4]. In addition to this, a cooperative and supportive classroom environment helps reduce anxiety and increase the comfort of speaking English for academic purposes, as discussed in [3]. Moreover, as timely and constant feedback fuels learning motivation [71, 72], it is important for instructors to give feedback on students' performance and encourage them to do peer review as well, so that students can be cognizant of their learning progress timely and be informed how to do better effectively. All of these can in return develop students' interest in the language and foster intrinsic motivation to learn AOC, which is likely to elicit more efforts from the students to invest in AOC.

Consequently, they become more proficient in the second/foreign language during the process of becoming bilingual/multilingual.

The present study enriched the current literature by examining the interaction of expectancy-value beliefs and anxiety in relation to learning academic oral English in bilingual Chinese graduates. The findings would be more generalizable if a larger sample had been studied. An experimental design would have also helped reveal a causal relationship between expectancy-value beliefs and AOC anxiety and the effects of training. All these will be the focus of future research. As reviewed in [2, 42], anxiety and motivation, as emotional and psychological constructs, play influential roles in SL/FL learning and acquisition and hence remain important research topics in the field. A better understanding of the two issues will thus definitely help facilitate the process of becoming bilingual/multilingual, which thus should be continuously researched in various bilingual/multilingual learners in differing contexts.

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The Effect of Bilingualism and Multilingualism on Academic Behavior

Pouria Mahzoun

Abstract

The phenomenon of bilingualism and the effect of it on general and academic purposes is not something that anyone could deny, in one aspect being able to participate and understand others and convey your massage to them is one thing and in another aspect, communicate effectively is other important element in effective relations. In this article researcher strongly claims that if bilinguals and monolinguals evaluate their success in business or in academic places, you could easily understand that the winners are bilinguals because of their ability to understand and create a positive and effective relation with others. They should be more successful in their business and communicate with all peoples around the world.

Keywords: self effective, self efficacy, Task based learning and CLT approach

1. Introduction

The researchers have been attempting to identify the influences or variables that influence foreign language acquisition. The researchers even wanted to know how to tell the difference between good and unsuccessful students. Since achievement is determined by a number of factors, researchers emphasized the importance of learning. Many researchers have identified learning strategies, and they all agree that active learners employ a variety of strategies and techniques to effectively solve problems they encounter when learning or acquiring a language. Investigations into the use of learning strategies by bi- or monolingual students have been conducted all over the world, especially in English-speaking countries.

The aim of this study is to look into the differences in learning strategies used by monolingual and bilingual foreign language learners when learning a language. It also aims to see whether factors like ethnicity and proficiency have an effect on the use of learning techniques.

In certain parts of the world, the number of people who can speak more than one language has grown in recent years. According to [1] about 70% of the world's population is bilingual. This emphasizes the importance of researching the role of bilingualism in the teaching and learning of a foreign language. Bilingualism is a practice that exists in other countries around the world, including Iran. Furthermore, various parts of the world speak a mixture of languages and dialects. As a result, there could be gaps in acquiring a foreign language between monolingual and bilingual students. In Iran, English is a foreign language, and learning a

foreign language in order to communicate with people from other countries is a must in a developing world.

The controversy about whether learning two languages benefits or hinders the production of either language has become one of the most fiercely pursued research questions by contemporary language scientists. During almost every waking minute of our lives, we are surrounded by words. We use language to express ourselves, interact with others, and associate with our history, as well as to comprehend the world around us For certain people, this diverse linguistic world includes not only one, but two or three languages. In reality, bilingual or multilingual people make up the vast majority of the world's population. In a 2006 European Commission poll, 56 percent of respondents said they could communicate in a language other than their mother tongue. Millions of people in the United States speak a language other than English in their daily lives, whether at work or in school. Neither Europe nor the United States are isolated. According to the Associated Press [2], up to 66 percent of the world's children are bilingual. 3 Researchers have been able to look further into the brain to explore how bilingualism communicates with and affects the neural and physiological processes thanks to scientific advancements in recent decades.

2. Cognitive consequences of bilingualism

When a bilingual person uses one language, the other is almost always present at the same time, according to research. When a human hears a phrase, he or she does not hear the whole word at once; rather, the sounds are delivered in sequence. Long before the word is done, the language machine in the brain starts to infer what it is by triggering a large number of words that complement the signal. If you hear the word "may," you are likely to think about words like "candy" and "candle," at least in the early stages of word comprehension. This stimulation is not limited to a single language for bilingual people; auditory feedback triggers matching words regardless of the language they belong to. Dealing with this constant linguistic rivalry will lead to linguistic difficulties. Knowing many languages, for example, will allow speakers to name pictures more slowly7 and increase tip-of-the-tongue states.

As a consequence, the frequent balancing of two languages necessitates the need to limit how much time a person spends in - language. This is a valuable attribute from a communicative standpoint—it can be tough to interpret a message in one language if the other language is constantly interfering.

Similarly, if a bilingual person switches between languages constantly while speaking, the listener can become confused, particularly if the listener only knows one of the speaker's languages. The bilingual brain depends on executive functions, a regulatory mechanism of general cognitive skills that involves mechanisms including concentration and inhibition, to maintain the relative equilibrium between two languages.

Since a bilingual person's two language systems are both alive and competitive, she or he employs these control structures while she or he speaks or listens. Consistent activity enhances regulation systems and alters brain regions associated with them. When it comes to activities that include dispute resolution, bilingual people often outperform their monolingual counterparts. People are asked to name the color of the font of a word in the classic Stroop task. Where the color and the term complement each other. If the color and the word do not align, people are more likely to call the color wrong. To ignore the meaningless term and concentrate on the correct color, the neural system must use additional tools. Inhibitory regulation refers to the capacity to suppress conflicting visual stimuli and concentrate on the specific features of the input. When it comes to activities that need inhibitory regulation, bilinguals often outperform monolinguals. Bilinguals are also faster

than monolinguals at switching between tasks; for example, when converting from categorizing objects by color (red or green) to categorizing them by form (circle or triangle), bilinguals transition more quickly than monolinguals. 13 When adjusting tactics on the move, this reflects greater cognitive function.

According to research, bilingual benefits of executive performance are not limited to the language networks of the brain. 9 Researchers have investigated which brain regions are involved as bilingual people undergo activities that require them to alternate between their two languages using brain imaging techniques such as functional magnetic resonance imaging (fMRI).

When bilingual people have to transition between naming pictures in Spanish and English, the dorsolateral prefrontal cortex (DLPFC), a brain area correlated with processing abilities including concentration and avoidance, shows increased activity. Language switching has been discovered to include mechanisms such as the anterior cingulate cortex (ACC), bilateral supermarginal gyri, and left inferior frontal gyrus (left-IFG), both of which are involved in cognitive function. The left-IFG, which is also referred to as the brain's language processing node, tends to be active in both linguistic15 and non-linguistic processes. The bilingual benefit has neural origins in subcortical brain regions that are typically concerned with sensory perception. Simple speech sounds are heard by monolingual and bilingual teenagers. They exhibit very close brain stem responses to sensory input when there is no external noise. When the same sound is played to both classes in the presence of external noise, the bilingual listeners' neuronal response is even greater, indicating improved decoding of the sound's fundamental pitch.

A sound quality that is closely linked to pitch perception To put it another way, when bilingual people hear a sound, blood pressure (a measure of neuronal activity) increases in the brain stem. Surprisingly, this increase in sound encoding seems to be linked to improved auditory attention.

The cognitive regulation taken to manipulate multiple languages tends to have a wide range of effects on neurological performance, fine-tuning both cognitive and sensory functions.

3. Improvements in learning

Being bilingual will have real-world benefits. Bilingual experience can enhance cognitive and sensory processing, allowing a bilingual person to better process information in the environment and provide a clearer signal for learning. This increased attention to detail could explain why bilingual adults learn a third language more quickly than monolingual adults learn a second. The desire to concentrate on knowledge about the new language while eliminating intrusion from the languages they already speak could be at the core of the bilingual language-learning benefit. Bilingual people will be able to navigate newly acquired words more quickly, resulting in greater vocabulary improvements than monolingual people who aren't as skilled at inhibiting competitive knowledge.

Furthermore, the advantages of bilingualism seem to begin early—researchers have shown that bilingualism improves focus and conflict control in children as young as seven months.

4. How bilingualism puts emergent readers at an advantage

To fully understand the benefits, it is important to understand what we are talking about when we say "bilingual". The definition of bilingual is a person who

speaks two or more languages fluently; therefore, bilingual people can be divided into two categories: simultaneous and sequential; Simultaneous bilinguals start learning two languages at birth or before age three, and sequential bilinguals learn a second language later. Both subsets suffer from the misunderstanding that knowing two languages makes it difficult to learn to read. But one of the main advantages of being bilingual is literacy, and the reason for this lies in metalinguistic. Language learners develop metalinguistic skills at a younger age than most other children. Linguists believe that they are better equipped to grasp the structure of words because of exposure to multiple languages at a young age. This can help bilingual students develop phonological awareness skills, an essential pre-reading skill, faster than their classmates.

A larger vocabulary is another benefit of bilingualism, which affects the development of reading and writing skills. Bilingual students tend to be exposed to more words in both languages than children who speak only their mother tongue, so they are more likely to learn the equivalent of any word they learn in the other language. With more words in your vocabulary, spelling words and learning the alphabet will be more natural. In addition, in later grades they will be predisposed to spell more complex vocabulary. The prevalence of these reading advantages depends on several factors, particularly how similar the languages of a bilingual student are. For example, a student who speaks Spanish and Portuguese will learn to read and write faster in both languages than a student who speaks Chinese and English. These benefits are also generally more pronounced if the student has strong, though not necessarily equal, knowledge of both languages. However, any level of bilingualism can strengthen a student's vocabulary and metalinguistic skills.

5. Advantage and disadvantages of bilingualism

The ability to communicate in two languages is often regarded as a remarkable accomplishment, particularly in English-speaking countries. Given that 70 percent of the world's population is estimated to be bilingual or multilingual [1] there is reason to think that bilingualism is the standard for the vast majority of citizens. Researchers in the region have shared differing viewpoints on the benefits and drawbacks of bilingualism or multilingualism.

The majority of previous research indicated that bilingualism has negative effects. Internalizing two languages instead of one can result in a more complicated, well-equipped theoretical calculus, allowing the infant to switch between two sets of laws while using symbols.

Bilingualism also has a positive impact on foreign language achievement, according to several studies. Childhood bilingualism, for example, was found to have a beneficial impact on adult ability to learn a foreign language. That is, people who learned a second language as a child have a better chance of understanding foreign languages as adults. Thomas [3] also looked into how English monolinguals and English–Spanish bilinguals learned college French. The bilinguals outperformed the monolinguals in her research, with the bilinguals outperforming the monolinguals. Since the findings of studies on the effects of bilingualism get mixed up, some researchers decided to perform tests using more controlled variables. Any of these studies' results resulted in a neutral stance toward bilingualism. In a study comparing the development of an artificial grammar by monolingual, bilingual, and multilingual students, [4] found that while multilinguals performed better in some situations, there was "no convincing indication that they were superior in language learning ability.

Having the required material information in L1 seems to make learning the right vocabulary elements in L2 much easier.

The concept of competence conversion is backed by cognitive science studies, which looks for representational schemas for dynamic narratives in two languages. Given that skills do migrate through languages, it's possible to think about transfer as happening on a componential, skill-by-skill basis, or as occurring more broadly, where the whole structure of skills in a domain moves [5].

6. Benefits of bilingualism

For all of us, learning a foreign language has been a lifetime ambition. It's a must for children whose parents have moved to a country where they cannot speak their native tongue. However, an increasing body of evidence suggests that bilingual schooling has many advantages beyond the potential to work in a different country and community. The tradition of teaching school subjects in two distinct languages is known as bilingual education. It can be used to assist students in transitioning from their original language to the languages spoken in the country where they currently reside, but it can also be used to teach academic material in two languages at once. It is important because it contributes to bilingualism, which is the practice of speaking and recognizing two languages: one's native tongue (L1) and another's native tongue (L2) (L2). Transitional Bilingual Education, Dual Language Immersion Bilingual Education, and English as a Second Language are also examples of bilingual education curriculum models. Transitional Bilingual Education was once the most common curriculum model, but it has steadily fallen out of favor as many educators contend that it does not adequately support diversity and bilingualism. Dual Language Immersion Bilingual Education, on the other hand, is gaining attention because it supports both native and non-native students. English as a Second Language (ESL) can be thought of as an alternative to other services for individuals who choose to develop their English skills through a combination of methods and approaches, such as school courses and self-directed learn at home programs [6].

7. Pro: enhanced mental skills

People who speak two or more languages outperform monolinguals in some mental activities, such as retaining emphasis on essential facts, according to research. This advantage of bilingualism has been shown in both children and adults, dispelling the misconception that bilingualism hinders academic growth by "confusing "the brain. Bilinguals, on the other hand, find it easy to focus their attention when they are used to flipping between languages. Judith Kroll, Distinguished Professor of Psychology at Penn State, said, The bilingual is somehow able to compromise between the rivalry of the languages. This balancing in languages is thought to be the source of these cognitive abilities. Since the opportunity to pay attention to the environment around us and prioritize useful facts while avoiding irrelevant knowledge is crucial for learning, bilingual children are slightly more competitive than their monolingual peers in problem-solving and creativity activities.

8. Con: education can be expensive

Teaching academic material in two languages can be very costly, as shown by the costs of bilingual education systems all around the world. This is one of the reasons

that, in its most intensive ways, this college curriculum concept is traditionally exclusive to private colleges, which are out of reach for the majority of students and families. Modern language learning applications like Encore!!! have been leveling the playing field of bilingual education in recent years, allowing language learners to immerse themselves in engaging language content on an equal footing. Rather than paying for pricey lessons, language learners can easily download a mobile app, choose a lesson plan depending on their level of proficiency, and follow along. Encore!!! is an excellent example of an app that all language learners should be aware of whether they want to learn how to become bilingual without costing a lot of money. There are 12 language pairs included in the free edition, as well as five free lesson plans. Vocabulary, greetings, and helpful phrases are included in both proposals, as are verb conjugations, sentences with similar vocabulary, and discussions led by native speakers.

9. More cognitive benefits of being bilingual

While early linguists believed that learning a second language induced developmental delays, current evidence indicates that this is not the case. (8) Bilingual pupils have a number of distinct advantages in school and beyond. Bilingual pupils, for example, have better functioning memory and attention spans. These abilities can contribute to both academic and professional success. On activities requiring executive coordination, bilingual students outperform monolingual students. This includes self-discipline, perseverance, and other abilities that aid students in achieving their objectives. Bilingual students also have the intelligence and drive to take on challenging school tasks when paired with the higher abstract thinking skills they acquire. And the benefits do not end with academic success. Bilingual people are more creative than monolingual people, which can lead to satisfaction as well as success. They're also better at multitasking and resolving conflicts, qualities that help both themselves and others. Best of all, bilingualism has been attributed to a lower risk of cognitive loss later in life. Bilingualism's cognitive gains favor students throughout their lives, from birth to old age. Bilingual students can learn to read not just as well as monolingual students, but much better. You will help them learn pre-reading skills as an educator, particularly if you teach a primarily bilingual classroom.

10. Conclusion

There is no controversy when it comes to the value of a bilingual education. In my head, it does not happen. Bilingual schooling, in my opinion, should be not only considered helpful and useful, but also promoted and possibly implemented by society. Being literate in two languages has only positive consequences in life. I'd take that a little further and encourage students to study as many languages as they can! There is no risk in doing so, because the rewards are enormous. Bilingual (at least) schooling is common sense in a variety of contexts, from travel to job prospects to general interactivity with others there is no compelling explanation why capable individuals do not get at least a bilingual education.

11. Key findings

Bilingual programs, Dynamic bilingualism, Enrichment bilingual programs, Heritage/indigenous programs, Immersion programs.

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Chapter 6

The Role of Multilingual Script Systems in Face Processing

Qi Yang, Xiaohua Cao and Xiaoming Jiang

Abstract

Becoming multilingual has a broad impact on cognitive abilities, especially visual processing. An important theoretical issue is whether the acquisition of distinct script systems affects face processing in an identical way, or, if not, how this acquisition may exert differential impacts on face processing. By reviewing the existing literature, we propose that Asian participants with the logographic script system differ from Western counterparts with the alphabetic script system in viewing faces. The contribution of the chapter is to identify the possible role of types of script systems in face processing mechanisms and to put forward the research direction in the future with several new methodological efforts.

Keywords: bilingualism, script system, face processing, neural recycling hypothesis, literacy acquisition

1. Introduction

As globalization progresses worldwide, more and more individuals have become bilinguals or even multilingual. Multilingual differ from monolinguals in at least two aspects. First, multilingual usually have a larger vocabulary size compared with monolingual because these multilingual need to use words from different languages to express the same concept. Second, multilingual may have to deal with differences in many linguistic aspects of different languages, such as word-to-sound mapping, phonemes and the number of letters/letters, and orthography/word forms [1]. Such differences affect cognitive abilities (visual working memory [2], attentional control [3]), and efficient communication [4, 5] of multilingual. However, little attention was paid to the question of how acquiring different script systems, for example, with different phonological transparency of orthography and different visual configurations, impacts the visual perception of words, and even non-words (such as faces).

Before discussing the relationship of the acquisition of multiple script systems with face processing, we first reviewed the link of the script system to face processing in a single language. One important aspect of literacy acquisition is to use script systems to write and read in daily life. An interesting and fundamental issue underlying literacy acquisition is how our brain deals with faces. Why does literacy acquisition (in particular, what script system is learned to read) affect face processing? One dominant view, i.e., the neural recycling hypothesis [6], has been proposed. Since the script system is not fully formed until 5000 ~ 6000 years ago due to a recent cultural invention, unlike faces, it is possible that our brain does not evolve in time to develop a specific cortical territory dedicated to processing words, relative to faces. This invention of the script

system inevitably invades the pre-existing brain cortex, originally acted as other functions (such as recognizing faces and other objects), and re-organizes these brain structures to adapt themselves to word processing. That is, the process of acquiring a new script system may share some neural resources with recognizing faces. This opinion is called the neural recycling hypothesis [6], which assumes that: first, the anatomy of connection constrained strongly by the evolutionary pressure determines our brain organization, which, in turn, guides our subsequent learning. Second, learning to read must find suitable neural substrates, which are a set of circuits close enough in their function and revealing enough plasticity, in order to recycle a large part of the circuits for this new function. Third, although these other-serving cortical territories are (partially) occupied by literacy, their prior organization is never completely erased. Thus, prior neural constraints have a powerful impact on the acquisition of cultural invention and individual brain organization. Based on this recycling process, it is reasoned that literacy acquisition most likely has much to do with face processing.

This chapter is organized as follows. We first briefly introduced empirical evidence with respect to the impact of literacy acquisition on linguistic and non-linguistic (especially face) processing. Then, experimental evidence on cross-linguistic and cross-cultural comparisons provided insights into the role of script systems in processing faces, which echoes controversies about two kinds of theoretical hypotheses, i.e., language specificity and cross-language universality. Moreover, multilingual differences in face processing could be accounted for by different possibilities, such as the perceptual expertise hypothesis and attention-reshaped-by-language hypothesis. Finally, further studies are encouraged to increase the weight of the script system in explaining face processing (or reduce the weight of social and cultural interpretation) and to distinguish the visual form of the script system and the role of speech in face processing.

2. Literacy effect on the processing of linguistic and non-linguistic materials

According to the neural recycling hypothesis, literacy acquisition reshapes the processing of linguistic and non-linguistic materials (e.g., faces). Without a doubt literacy acquisition impacts the linguistic materials owing to that the brain structures of faces and objects are engaged in the representation of words.

2.1 Literacy effect on the processing of linguistic materials

Literacy acquisition is a milestone for human civilization. It is well-documented that literacy acquisition modulates our ability to deal with linguistic information [7], such as word repetition, speech segmentation, and character identification. For example, using an auditory-verbal repetition paradigm, Petersson et al. revealed that literates performed better than their illiterate counterparts in the pseudo-word repetition task [8]. Also, Morais et al. showed that ex-illiterates, who attended classes of elementary instruction during adulthood, were superior to the illiterate in multiple speech segmentation tasks [9]. Besides, Duñabeitia et al. found that, in two perceptual matching tasks, literates showed great sensitivity to changes in the letter position (i.e., transposed-characters) and identity (i.e., replaced-characters) of a character, whereas illiterates were less sensitive to these changes [10]. These findings suggested that literacy acquisition has a profound influence on processing different linguistic aspects, and the supportive evidence mostly is obtained in the monolingual context.

2.2 The effect of literacy on the processing of non-linguistic face materials

Many studies have demonstrated that literacy acquisition modulates the ability to process non-linguistic objects [11], especially faces. We here review a tremendous amount of work on children, adults, and special populations.

One way of understanding the associations between literacy acquisition and face processing is to track the development of face processing ability with the size of literacy or to the relations between lexical and face processing in children. Evidence from the functional magnetic resonance imaging (fMRI), a high-spatial-resolution technique, has suggested that, during literacy acquisition in children, there may be coordination between word and face processing in the left fusiform gyrus (FFA), also termed visual word form area (VWFA) [12, 13]. For instance, neural responses to faces in VWFA declined gradually with the increase in children's letter knowledge [14]. Consistently, event-related potentials (ERPs) studies have identified a stable electrophysiological hallmark, N170 response, of viewing words, which was elicited at electrodes over the left occipitotemporal areas (roughly corresponding to the VWFA). The N170 peaks about 150–200 ms after word onset, and may index the visual processing of words at an expert level. Using the color-matching task, Li et al. found that both the left-lateralization indexed by the N170 of words and the vocabulary was associated positively with the right-lateralization of faces in Chinese preschool children [15]. Similarly, employing the "half-field" paradigm, Dundas et al. showed that the emergence of face lateralization was related positively to reading competence with the control of age, reasoning scores, and face discrimination accuracy [16]. Furthermore, they also reported that the N170 evoked by faces in the right hemisphere was positively related to that by words in the left hemisphere in American children [17]. In a word, there is a tight link between visual face processing and word lateralization or between this processing and the size of literacy.

Also, empirical work from normal adults' study provided stronger evidence of the relationships between word and face processing. For example, using the adaptation paradigm, in which the first adaptor face (or word) was followed subsequently by a target face (or word) of either the same or different identity, Cao et al. found that the adaptor face led to the reduced N170 response to the target word, while the adaptor word did not result in the decreased N170 response to the target face [18]. Neural adaptation occurred because the neural response to the test stimulus was reduced when the stimulus was preceded by a physically identical or categorically identical adaptor stimulus. Therefore, the results of this study may indicate that the facial N170 function partially encompasses the N170 function of word processing, which is consistent with the neural recycling hypothesis. In another study, subjects were asked to view artificial objects (i.e., face-like Greebles) centrally presented with the concurrent lateral presentation of faces and then to judge which side each face was presented. Results showed that the N170 response to faces tremendously decreased after subjects were trained to recognize Greebles compared to before those Greeble novice [19]. Analogously, the bilateral N170 response to faces decreased in identifiable Chinese characters and faces as compared to unidentifiable conditions [20]. In Robinson et al.'s study with an attentional blink paradigm, they found that word (target 2) recognition performance was inferior at short inter-target lags when the word stimulus was preceded by faces compared to glasses and words condition. No effects were observed when words were followed by other objects. Furthermore, ERP results indicated that N170 responses to face (target 1) were associated with the reduction of N170 to words within the face–word condition in the left hemisphere, but not for other object-word conditions [21]. These findings indicated that face and word shared some overlapping neural resources, possibly associated with the same specialized processing module.

In contrast with these studies mentioned above, the special population, such as dyslexia, alexia, prosopagnosia, illiterates, and so on, can provide stronger evidence for the relationship between words and face processing. For example, dyslexic readers performed poorer on recognition of both word and face and even decreased level of hemispheric lateralization to words and faces compared with normal readers [22]. Face recognition was impaired severely with bilateral compared to unilateral temporo-occipital cortex lesion [23], and a left occipital impairment gave rise to both pure alexia and prosopagnosia [24]. Also, prosopagnosic patients showed mild but reliable words recognition deficits, and pure alexic patients showed face recognition deficits [25]. Another important avenue is to examine the differences in face processing between literates and illiterates. The ideal illiterate and literate groups differ only in whether the script system could be used to read and write by them, so they are the ideal group for researchers to understand the relationship between face and word processing. For example, Deheane et al. found that reduced responses to faces in VWFA were observed for literates compared to illiterate adults [26]. And ERP results showed that the literacy effects were observed not only in the letter strings but also in faces, revealing the impact of literacy on common early visual processing [27]. These findings have led to a proposal that face and word processing engage some overlapping neural substrates, and there are interactions between the development of visual representations for faces and words [28]. However, these studies did not weigh the potential contribution of the script system to face processing because they used the script system of one language in a particular social culture.

3. The differences in face processing between Western and eastern participants

Although the neural recycling hypothesis points out the possible relationships between word and face processing in VWFA, it does not postulate whether different script systems affect face processing in the same way, and if not, how the script system influences face processing. There are two possible theoretical hypotheses, the language specificity hypothesis, and cross-language universality hypothesis, to explain the impact of literacy on face processing.

The first hypothesis holds that neural computations are functionally independent underlying languages of different script systems. Evidence for the language specificity hypothesis comes from Siok et al.'s study [29], showing that the left medial frontal gyrus is crucial and unique to normal Chinese reading, and its dysfunction is only linked with reading difficulty in Chinese, but not other languages. Similarly, prior studies have consistently found declined activation in left temporoparietal regions, which is a biological signature of English reading difficulty in a homophone judgment task [30, 31]. Moreover, Xu et al., using a passive reading task, found that distinct activity patterns in the middle occipital cortices, fusiform gyri, and lateral temporal, temporoparietal, and prefrontal cortices were observed between Chinese and English [32]. In contrast, the second hypothesis deems that VWFA consistently and equally responds to words of different script systems. For instance, Feng et al. measured the fMRI responses to words, faces, and houses among Chinese and French 10-year-old children, half of them with reading difficulties. The results did not reveal any effects of language on the peak locations and activations in the bilateral FFA [33].

These findings mainly focused on whether there are differences in neural substrates underlying different script systems. It remains unclear whether and how these different script systems affect face processing. However, behavioral, eye-tracking, and neural evidence of face processing from cross-cultural studies provided insights into this issue.

3.1 Behavioral evidence

Holistic face processing, a typical hallmark of perceptual expertise for faces, refers to that participants tend to deal with face parts as a whole, rather than as separate features [34, 35]. Numerous studies have demonstrated that Asian adults outperformed Western adults in holistic face processing [36–39]. For instance, Miyamoto et al. found that the Japanese performed more holistic, rather than featural, strategies in comparison with Americans in choosing to match the prototype faces [37]. Furthermore, Rhodes et al. found that, with the face inversion paradigm in which there is an impaired recognition in inverted compared to inverted faces [40], Chinese subjects exhibited a larger face inversion effect than European counterparts. Some studies used the complete composite face paradigm to tap the holistic face processing, in which the top and bottom parts of two faces are constructed to form a new composite face. In this paradigm, two factors were manipulated. The first manipulation is whether the study face is aligned, meaning that the position of the bottom part of the face is shifted right or left from the top part (misaligned) or not (aligned). And the second is consistency: the consistent trials refer to which the top and bottom parts of the study face are the same as the test face or changed simultaneously; In inconsistent trials, the study face is different from the test face in either the top part or the bottom part. And observers are asked to attend to the target part (such as the top part of the face) and meanwhile to ignore other parts (such as the bottom part of the face). Results showed that the recognition accuracy was better in consistent than inconsistent conditions when faces were aligned, while the consistency effect became weak or disappeared when faces were misaligned [41]. Using the composite face paradigm, Michel et al. showed that Asians had stronger holistic processing (indexed by the composite face effect) as compared to Caucasians [42]. Employing the part-whole paradigm, Tanaka et al. asked Caucasian and Asian observers to recognize facial features of Caucasian and Asians in isolation or in the whole face, showing that Caucasians processed own-race faces holistically compared to Asian faces, while the pattern of holistic processing was observed for both Caucasian and Asian faces in Asians [43]. In summary, converging evidence from different experimental paradigms reaches a consistent agreement that Asians were superior to Westerners in the holistic face processing.

3.2 Eye-tracking evidence

Evidence from eye-tracking studies has suggested that participants employed distinct processing strategies to fetch visual information from faces in cross-cultural studies. For instance, participants are instructed to learn, recognize, and categorize faces of Western Caucasians and East Asians according to race, and their eye movements were monitored. Results revealed that Western participants tended to fixate on a triangular region (eyes and mouth) of faces, not affected by facial races and tasks; While East Asian observers paid more attention to the central region (nose) of faces [44]. Moreover, Kelly et al. asked children aged 7–12 from the UK and China to complete an old/new face recognition task while simultaneously recording their eye movements. The patterns of fixations observed in children are consistent with those of adults from their respective cultural groups reported in previous studies [44, 45], that is, children from the UK fixated more on the eyes and mouth regions whereas children from China fixated more centrally on the nose region. These findings distinguished different fixation patterns for western and eastern subjects during face recognition.

3.3 Neural evidence

Many studies have also examined differences in neural responses to faces in observers from different countries. For example, Wang et al. investigated whether distinct attended areas between two cultures tunes the time course of face processing towards configural and featural information respectively. In this experiment, participants were asked to judge the two concurrent faces identical, the two faces either different in the distance between the face features (configural processing), or in the face features (featural processing). Results showed that a configural processing bias is associated with P1 amplitude in their own-race faces and other-race faces and a featural processing bias is associated with P2 amplitude for own-race faces in Chinese participants. In contrast, both a featural processing bias for their own-race faces and a configural processing bias for other-race faces are correlated with P1 amplitude, and a configural processing bias for both own- and other-race faces is related to P2 amplitude in Western participants [46]. A recent study conducted by Ma et al. revealed that relative to German children in the second grade, the N170 response to face is remarkably higher in Chinese children [47]. During an fMRI experiment conducted by Goh et al. [48], East Asians and Westerners were asked to passively view Singaporean and American faces and the corresponding scrambled pictures. They found that more neural responses to faces in the bilateral FFA, especially in the left FFA, were found in Western participants, while more neural responses to faces in the right FFA were observed in East Asian participants. In a nutshell, there are stable and reliable neural mechanisms of different participants underlying face processing.

The existing studies showed that differences in processing faces can be attributed to distinctions among disparate social cultures. Indeed, prior work has been made with respect to scene perception [49, 50], description [51], and categorization [52] in support of cultural differences. For example, Western participants paid attention to objects with more salience in an analytic fashion and based on categorization, while East Asians (e.g., Chinese, Japanese, and Korean) paid more attention to relationships and similarities among objects in a holistic fashion when they organized their environment [44]. However, most of these studies did not try to control the participants' second language experience. Therefore, the cultural differences in face processing between Western and Eastern subjects may be confounded by linguistic experiences as well.

4. Multilingual experience and face processing

A great deal of evidence has suggested that the multilingual vs. monolingual experience has a differential impact on the processing of linguistic and non-linguistic stimuli. For instance, the cerebral lateralization of the word [1] and face processing [53] has been reduced in bilinguals. Regarding how multilingualism affects linguistic and non-linguistic stimuli processing, three hypotheses were proposed to explain the effect of multilingualism on face processing. One hypothesis is the perceptual expertise hypothesis, that is, the amount of exposure to face modulated face processing [54, 55]. For example, in Canada, there are many immigrants whose children have to learn not only English, but also their mother tongue, and even other languages. At the same time, they are also exposed to different faces, which may make them process faces more efficiently when viewing different faces. This chapter does not intend to spend much time in discussing the relationship between the amount of exposure to face and face processing given that much work with respect to this hypothesis has been done.

The second hypothesis is that attention is reshaped by visual features of the script. According to the second hypothesis, during the process of learning words,

language shapes how its language user deploys the attentional resource to the visual processing of words. For example, Awadh et al. found that French and Spanish individuals possess lower visual attentional span than Arabic individuals [56]. This advantage concerning the visual attention span may have been transferred into the processing of faces. Face processing can be attentionally-driven, so it is possible to change the outcomes and mechanisms of face processing by changing individuals' attentional allocation [57, 58]. This hypothesis is partly supported by two recent studies using different script systems, with individuals exposed to different systems behaving differently in the visual processing of face tasks. For example, in the Portuguese script system, Ventura et al. showed that illiterate participants processed faces and houses consistently more holistically compared to literate participants with the composite face paradigm [57]. However, in the Chinese script system, Cao et al. found that literates had a great sensitivity to the spatial configuration of upright, rather than inverted, faces, compared to illiterates in a second-order configuration task [58]. Since social culture was kept constant in the two studies, the inconsistent findings are difficult to be accounted for by the cultural differences, but instead, can be explained by differences in orthographical and visual features in the respective script systems (and possibly the experimental paradigms). On one hand, the face composite paradigm is reflected as the failure to selectively attend to and compare some parts of the face [41]; while the spatial configural distance paradigm typically emphasizes that the viewer attends to the spatial relationship between different parts of the face [59]. Distinct experimental paradigms may ease the level of face processing in different groups of language users. Since the majority of the previous studies demonstrated a generally consistent pattern that East Asian participants show stronger holistic processing compared to Western counterparts, regardless of experimental demands in a short-term task setting, it is more likely that the long-term exposure to the different visual form of a script system (e.g. alphabetical vs. logographic) can be the reason why the attentional allocation is reshaped. On another hand, in terms of visual characteristics, one Chinese character comprises strokes and sub-character components, which is packed into a square configuration with similar size. And Chinese characters are possessed in a highly nonlinear visual complex shape [60, 61]. Portuguese words are comprised of some basic letters, and line-shaped. Extensive exposure to these differences in visual features between both script systems could give rise to distinct reading demands for Chinese in comparison with Portuguese words, which are further transferred into face processing. Additionally, some experts have proposed that the research on the impact of literacy acquisition on cognitive ability should always take differences among the distinct script systems into consideration [62].

Last but not the least, the impact of multilingualism on face processing can be traced to the effect of phonemic differences and their impact on the attentional allocation to a speaker's face (attention-reshaped-by-speech hypothesis). Robust and reliable evidence comes from the comparison between monolingual and bilingual infants. Infants in a bilingual environment fixated more at the mouth region of talking and non-talking faces compared to those in a monolingual environment [63]. Given the absence of the script exposure, these findings cannot be attributed to the differences in visual features between writing systems; In contrast, it is more possible that the language environment to which infants are exposed constrain their visual processing. Using the Cambridge Face Memory Tests, Burns found that bilingual Singaporean Chinese participants showed a decreased other race effect with the increase of reported cross-language proficiency [64]. This relationship was driven by Chinese, rather than English, listening ability. These findings suggested that multilingual exhibit different processing of faces compared with monolinguals is attributed to how words are realized in the face in communication.

Given these remarkable differences between the logographic and alphabetic scripts outlined above, extensive exposure to distinct script systems may result in differences in processing faces. Combined with the existing findings and theories, we proposed that Asian participants with logographic script system process face different from Western counterparts with alphabetic script systems. Future studies are encouraged to clarify these confounding explanations.

5. Future studies

Despite much evidence from the cross-cultural and cross-linguistic studies that indicate differences in face processing, more efforts should be devoted to effectively dissociate possibly separate contributions of social culture and script system to the explanation of differences in face processing and to clarify how multilingualism affects face processing. Moreover, the relationship between the script system and face processing provides an important window into the understanding of brain plasticity. To answer the issue, we proposed to test multilingual speakers to unveil the impact of a distinct script systems on face processing. Several possible research directions are put forward, such as 1) training illiterates to acquire distinct script systems respectively in an identical culture; 2) comparing monolingual Chinese and Korean subjects sharing the East-Asian culture; 3) comparing monolinguals and bilinguals (or multilingual) speakers; 4) using one artificial language to train participants to either learn the visual form or the speech in communication.

5.1 Training illiterates to learn distinct script systems respectively

One way to dissociate the contributions of social culture and script systems to holistic processing is to train the distinct types of script systems on illiterates from an identical social culture. Illiterates are a special population who share the social culture (including spoken language) with literates. One important distinction between literates and illiterates is that literates acquired the script system. Therefore, it helps to understand how a script system shapes the processing of faces in a particular social culture. Two previous studies, Ventura et al. [57] and Cao et al. [58], examined the relationships between the acquisition of a script system and face processing in the Western and the Eastern culture respectively. However, these studies cannot reveal the potential contributions of the distinct script systems to face processing because of the absence of a direct comparison. Based on the previous studies, we proposed one possible way of segregating the role of social culture from script system in face processing, in other words, we propose ways to heighten the weights of the script system in the explanation of face processing, thus merely representing the influence of different script systems on face processing after controlling social culture. More specifically, this can be achieved by teaching Western illiterates in Chinese and English respectively or teaching Chinese illiterates in Chinese and English respectively. Combined with a variety of experimental paradigms which tap distinct dimensions of holistic face processing, the relationships between script system and face processing could be systematically investigated.

5.2 Comparing face processing mechanisms between monolinguals and multilingual

The first suggestion is proposed against the monolingual context. With the development of globalization, more and more individuals have become bilingual or multilingual. It is possibly easier for bilinguals to acquire the script system of a second language than master the social culture. Therefore, one viable way of

examining the relationships between distinct types of script systems and face processing is to recruit the monolinguals and bilinguals (or multilingual) and compare the differences between these groups. In this case, Chinese-English bilinguals (or multilingual) and Chinese monolinguals, whose mother tongue is Chinese, or English-Chinese bilinguals (or multilingual) and English monolinguals, whose mother tongue is English, are recruited to decrease the possible role of social culture in the explanation of face processing.

5.3 Comparing face processing mechanisms between Chinese and Korean

Here, we focused on the role of script or spoken form of one language in face processing. Previous studies have shown that too many differences in face processing existed between East Asian and Western cultures that prevent attribution of sole factor to the cultural difference in face processing. Therefore, one way is to investigate the role of two disparate script systems in face processing in East Asian culture. As we know, respecting the East Asian culture are people from China, Japan, and Korea, and so on. Notably, one possibility is to explore the relationship between script systems and face processing by recruiting subjects with different script systems in East Asia, which lies in an identical culture. A typical way to achieve this is to compare individuals from China and South Korea. One unique feature of this comparison is that the pronunciation of Korean resembles that of an alphabetic language, however, the visual characteristics are closer to Chinese [65]. Therefore, employing the identical experimental task, one could morph the Chinese and Korean faces. By doing so, one could eliminate the impact of the amount of exposure to face processing, and explain face processing by the weights of speech.

5.4 Training the participants to learn words via visual or speech forms in an artificial language

Compared with the natural language, an artificial language has some advantages in studying how the script system affects face processing. For example, the artificial language can allow researchers to train participants to learn only the visual features of characters or only the pronunciation of characters, which facilitates understanding of through what mechanisms the script system could affect the face processing.

6. Conclusion

Massive evidence revealed a tight link between the acquisition of script systems with face processing, and by reviewing prior studies, we proposed that distinct script systems impact face processing in a different way. To clarify how the script system affects face processing, we proposed the attention-reshaped-by-language hypothesis. Finally, further research directions were proposed.

Acknowledgments

Conflict of interest

The authors declare no conflict of interest.

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Section 3

Multilingualism: Media, Health and Society

Chapter 7

Multilingual Broadcasting Practice by Rural Radios in Kumbo, Cameroon

Delphine Nkahmenyuy Veranso and Fogwe Evelyn Chibaka

Abstract

Rural multilingualism in the platform of radio broadcasting is a complex sociolinguistic phenomenon that can, if not strategically managed it can lead to chaos and societal conflict especially in a rural setting with intergenerational migrants co-existing. This study examines the languages used by the four rural radios in Kumbo, a rural area in the North West Region of Cameroon, during multilingual broadcasting. It presents findings on the languages used during multilingual broadcasting as well as how they are managed. Here, we bring to mind the importance of multilingual broadcasting practice in rural communities especially in Cameroon, and Kumbo where nothing has been done in this domain. The data used were collected through the use of 118 questionnaires (100 for the radio audience and 18 for the radio staffs), "conversational" interviews with the radio staffs and 2 focus group discussions. The data were analyzed using the SPSS and Content Analyses models. Being a multidisciplinary study, there were two theoretical frameworks employed from two inter-related disciplines. They are the Social Responsibility Theory which accounts for the things needed to be done by journalists to satisfy and provide their audience with accurate information and the Communicative Competence Theory which deals with the effectiveness of the messages broadcast in line with the respect of the structures of these languages to communicate effectively. The first theory is in line with the field of Journalism while the second is within the field of Linguistics. It was discovered that there are eight (8) languages used by all radios houses. Six (6) are national languages of the country and two (2) are the official languages of the country. Out of the national languages used, four (Cameroon Pidgin English, Fulfulde, Lamnso) are used for wider communication, three (Limbum, Noni/Noone and Oku) are developing while one (Hausa) is dispersed.

Keywords: multilingual broadcasting practices, multilingual broadcasting, rural radios and language use, rural communities, Kumbo

1. Introduction

Languages serve as a means of communication between groups of people. They are used to express thought, emotion and to spread information. In the Cameroonian context, language serves as the main form of identification between two groups of people who dress alike and have the same native meals. It serves as a

means of unity, strength and growth in communities. According to [1], the languages of a community can be compared to its natural resources. This therefore means that if a country has so many languages, that is multilingualism, the country should be considered wealthy.

1.1 The description of Kumbo

Kumbo, also known as 'Kimboh' is the capital of Bui Division, North West Region of Cameroon. It has a population of about eighty thousand two hundred and twelve (80,212) based on the 2005 census report. It is divided into three distinctive hilly settlement areas: Tobin, Mbveh and Squares.

Apart from the popularity of its boarding schools, it is host to two referral hospitals - St. Elizabeth Catholic Hospital Shisong and Banso Baptist Hospital (BBH). It is also host to the Nso palace. There are four radio stations in Kumbo. One is owned by a non-governmental organization (City Community Radio (CCR)), another by the Roman Catholic Church (Radio Evangelium (RE)), the other by a private individual (Helen Kris FM Radio (Helen Kris)) and finally by the community (Bui Community Radio (BCR)). All four radio stations work for the service of the community and are highly competitive. Religiously, there is a Roman Catholic denomination, a Protestant order, an Islamic order and a Pentecostal order.

It is an area where farming is considered as the source of livelihood. Crops such as maize, coffee, beans, groundnuts, potatoes, kola-nuts, cabbage are produced here and exported to urban cities like Douala, Bamenda, Yaounde, and the Far North. Also, some of the products are transported to neighboring countries like Nigeria, Chad and Gabon.

1.2 The linguistic situation of Cameroon

In the twenty-first edition of Ethnologue present Cameroon as a multilingual country with two hundred and eighty three languages (283) [2]. Out of these, two hundred and seventy seven (277) are living while the remaining six (6) are dead. According to the description of language statuses in the world, Cameroon is presented as a bilingual country, with English and French languages as the languages used for administrative transactions both nationally and internationally. With this in mind, it does not mean that the two hundred and seventy seven languages identified by [2] are neglected. The 1996 Constitution of the Republic of Cameroon states that.

"The official languages of the Republic of Cameroon shall be English and French, both languages having the same status. The State shall guarantee the promotion of bilingualism throughout the country. It shall endeavor to protect and promote national languages" [3].

Since language determines and influences thought as presented by the famous Sapir-Whorf hypothesis, it is in line with this that this paper looks at multilingual broadcasting practices by the four radio stations in Kumbo - two privately-owned radio stations (Helen Kris and City Community Radio), a Christian-owned radio station (Radio Evangelium) and a community radio station (Bui Community Radio) – who have decided to not only use English and French languages during broadcasting, but also other native languages.

In terms of the languages used, these radio houses prefer not only to use the native language of the area where they are located but those of neighboring communities to convey information because as [1] states, "language is a right; a human right of the same level of importance as all other inalienable human rights" so that when information is disseminated, the people can be involved.

At the level of the media landscape in Cameroon, the languages in use by the national broadcasting service, Cameroon Radio and Television (CRTV) are French and English. However, regional stations of the service broadcasting house use the native languages of the area, as is the case in Buea (Mokpwe), North (Fulfulde), and West (Ngemba). In Kumbo however, the case seems to be different as it does not only make use of Lamnso but other languages around the area.

This then leads us to the main point of focus of the paper, which is to find out the number of languages used during broadcasting by the rural radios in Kumbo and how these languages are managed.

2. Theoretical framework

Being a multidisciplinary study involving the fields of Journalism and Linguistics, this paper makes use of two theories. The Social Responsibility Theory (SRT) by [4] is used in line with the journalism aspect of the study while the Communicative Competence Theory (CCT) by [5] will be used in line with the linguistic aspect of the discourse.

Even though politically motivated, SRT was developed as a result of the impracticality of individual media experts and tried to bond them in the service of cultural diversity even though it knowingly acknowledged the fact that the strategy might reduce their profits. In line with this paper, it will be used to present what the journalists need to consider as social obligation to the community they intend to inform before sending across their message. These obligations should avoid the promotion of crime, disunity, instability and violence. It rather guides them on issues of accountability, truth, accuracy, objectivity, and balance especially when they make use of the languages involved in the broadcasting process.

The term Communicative Competence was adopted by Dell Hymes. He defined communicative competence not only in line with Chomsky's essential grammatical competence but also as the ability to use this competence in various communicative (society) situations. There are three models under this theory.

They are the models of [6–8], and the description of components of communicative language competence in [9].

In this paper, these models are used to address sociolinguistic and pragmatic issues related to multilingual broadcasting. The role of linguistic or grammatical competence is used to look at the effectiveness of translation messages into other languages and the effect it has on the community. Also, Bachman and Palmer's goal setting, assessment and planning strategies are used.

3. Results

A mixed method of data collection and analysis was used. This mixed method has to do with the use of qualitative and quantitative approaches. The quantitative part of the data collection made use of 118 questionnaires (100 for the radio audience and 18 for the radio staff), while the Statistical Package for Social Sciences (SPSS) is used to analyze the data collected. The qualitative data were collected through the use of "conversational" interviews with the radio staffs and 2 focus group discussions. They were analyzed using Content Analysis. All of these will be done based on [10].

The adoption of multilingual broadcasting in a rural community like Kumbo warrants motivations. In order to comprehend this, the radio staff were asked to present these reasons. As seen on the frequency table and pie chart below (**Table 1** and **Figure 1**), two reasons (with equal representation), the possibility of getting a

	Frequency	Percent	Valid percent	Cumulative percent
to send information	2	11.1	11.1	11.1
the presence of a multilingual audience	4	22.2	22.2	33.3
to educate the community	2	11.1	11.1	44.4
to provide first- hand information	2	11.1	11.1	55.6
cultural boost	2	11.1	11.1	66.7
vast outreach	4	22.2	22.2	88.9
no response	2	11.1	11.1	100.0
Total	18	100.0	100.0	

Table 1.
Reasons for using multilingual broadcasting.
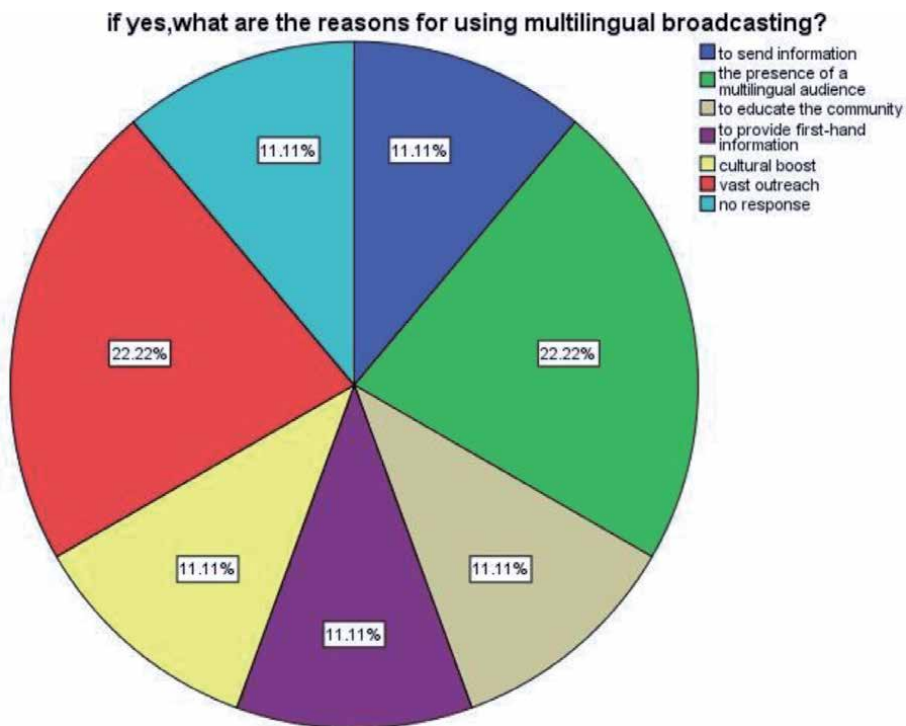
Figure 1.
Reasons for using multilingual broadcasting.

larger audience and the presence of a multilingual audience were seen as the main reasons for this adoption with a 22.2% (4 respondents) response rate, while the need to provide firsthand information, educate, inform the people and boost their culture all came in second place with an 11.1% (2 respondents) response rate per response.

To know whether multilingual broadcasting was used by these radios, the participants were asked two questions (one from the questionnaire administered to the staffs) and (one from the questionnaire administered to the audience) to identify the languages used by these radio houses during multilingual broadcasting.

Since the staff make use of these languages, it was imperative that they give the total number of languages they use during broadcasting. On **Table 2**, the results

	Radio Evangelium	City community radio	Bui community radio	Helen Kris FM radio
Lamnso	√	√	√	√
Limbum	√	√	√	√
Kom	0	0	0	0
Noni	√	√	√	√
French	√	√	√	√
English	√	√	√	√
Hausa	0	0	0	0
Fulfulde	√	√	√	√
Pidgin	√	√	√	√
Oku	√	√	√	√

Table 2.
Radio staff identification of languages used during broadcasting in their respective radio stations.

	Frequency	Percent	Valid percent
2	3	3.0	3.0
3	21	21.0	21.0
4	15	15.0	15.0
5	14	14.0	14.0
6	16	16.0	16.0
7	21	21.0	21.0
8	7	7.0	7.0
9	2	2.0	2.0
10	1	1.0	1.0
Total	100	100.0	100.0

Table 3.
Audience identification of the number of languages used during multilingual broadcasting.

clearly present the number of languages used during multilingual broadcasting by each radio house. From the data collected, it was discovered that all four radio houses make use of eight languages. These languages are; Noni, Fulfulde, Lamnso, English, Limbum, French, Oku, and Pidgin.

To achieve a balance as to the number of languages used during multilingual broadcasting, the audience was asked to identify the languages they hear when they listen to the radio during broadcasting.

We discover however in **Table 3** that the audience identifies the use of ten languages during broadcast. We also discover that the number of languages identified by the audience is not specific, but varies per participant. For the purpose of the study, we will limit ourselves to the eight languages identified by the radio staff due to their frequencies of identification. This variation ranges from the use of 2 languages up to the use of 10 languages.

As a follow-up to this question, the audience was asked in another question to present these languages as seen below.

In total, 10 languages (Lamnso which was identified in all 100 questionnaires, followed by English which was chosen by 95 participants, French by 84, Oku by 60,

Fulfulde by 56, Limbum by 33, Noni by 27, Pidgin and Hausa by 24 and Kom by 6) were identified.

Based on the data presented on **Figure 2**, we discover that there is an unequal representation of some languages as compared to others. With this in mind, we asked how these languages, are managed by these radio stations and the following results were achieved.

From **Table 4**, it is clear that these languages are used in different situations by the various radio stations. Also, it can be observed that some of these languages seem to be used more extensively than others. From the statistics above, it is clearly seen that there is a greater use of certain languages during broadcasting as
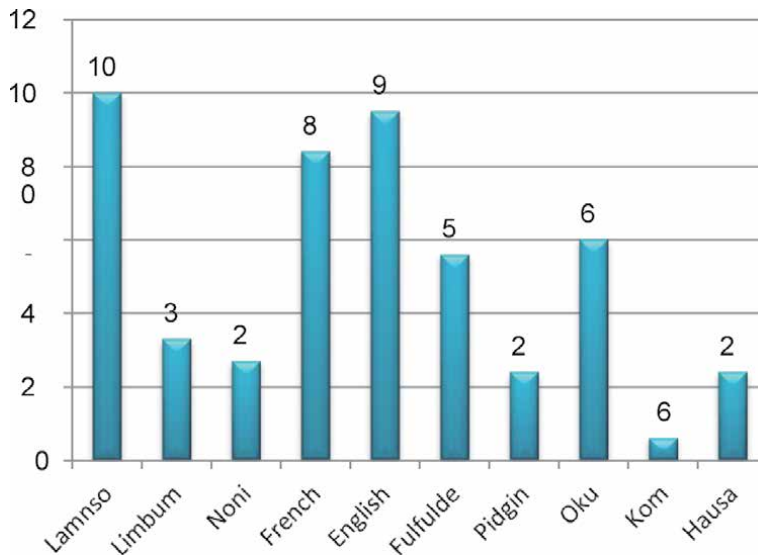
Figure 2.
Audience language identification during broadcasting as used by the radio stations.

Languages	News	Adver ts	Publicity	Promos	Programs
Lamnso	√√√√	√√√√	√√√	√√	√√√√
Limbum	√√√	√√	√√√√	O	√√
Noni	√	√√	√√	√√	√
French	√√√√	√	√√	√√	O
English	√√√√	√√√√	√√√	√√√	√√√√
Fulfulde	O	√√	√	√	√√
Pidgin	√√√	√√√	√√	√√	√√
Oku	√	√	√	√	√

(√) represents Radio Evangelium, (√) represents City Community Radio, (√) represents Helen Kris Radio, and (√) represents Bui Community Radio. Where there is a (O), it signifies the absence of the use of a particular language by all four radio stations. Also, there are situations where you have just two languages two or even one language used in a domain by the radio stations such as the case of Noni, Fulfulde and Oku Languages which are not really used by radio stations in all the domains at some point in time as are the cases with languages like Lamnso, English and French.

Table 4.
Frequency of language use per program by the radio stations in Kumbo.

compared to others. These allocations given to these languages are justified by the radio staff in the data collected with the use of "conversational" interviews.

There is a high use of Lamnso (present in all 6 slots by all the radio stations) as compared to the other languages. This is followed by English Language, which is considered as the appropriate language of exchange between the working class and the students, who make up the bulk of listeners per radio. This language also runs relay programs like 'Luncheon Date', 'Cameroon Calling' and 'Cameroon this Morning' from the main national radio station, CRTV. The other native languages have programs run in their languages by these radio stations. These programs are centered religious issues and "partial" cultural awareness issues. As for French, it is considered less active and it is only used when the information to be broadcast is paid for by those who wish to send across the information. It is used during news broadcast by all four radio stations because they relay the news from CRTV.

The radio houses in Kumbo have gone the extra mile to try to provide the information needed by these communities. However, with such representation of language use, there is obviously a clear revelation of language marginalization which is seen in how they are used and the justifications presented by the media staff. There is limitation as to the amount of information provided during broadcast to satisfy these communities whose languages are marginalized during broadcast [11]. May be with more financial sources to manage issues such as payment of staff and funds for constant maintenance of equipment, they may be able to allocate equal functions to the languages used during broadcasting.

During programs, there are also issues of language use in that there are programs that are: (1) Monolingual (cultural program). These programs are presented strictly in one language like Lamnso. "Lan e wong Nso" is an example of such programs. (2) Multilingual (adverts, entertainment) which run with the use of more than one language per episode. They include programs like "salut ya neighbor".. (3) Others which make use of more than one language (news, publicity, adverts, education, religion), in different episodes of the programs.

There are monolingual programs that run in different languages per episode. Just like what was got from the answers from the respondents from the radio stations, programs that are important to the communities in general are multilingual while those that are considered "less important" to the general audience are monolingual. That is why instead of looking at balancing air-time between African and European languages [12] ways should rather be employed into looking at how these native languages can be balanced during broadcasting. A wide variety of the respondents believe that African languages cannot carry discussion of all topics. Interestingly studies like [12] show that "African languages can be used to discuss all possible subjects". Other reasons to the equal use of these languages are to promote and develop them. The implication of this is that if correct measures are taken, these languages can be developed and more widely used such that the inevitable array of advantages of multilingualism is benefitted by the citizens of this community.

To determine the effects of multilingual broadcasting, we will first look at audience program preferences because whatever effect they portray is as a result of the kind of programs they listen to. Question 14, Section 3, on the questionnaire administered to the radio audience asked the audience about their favorite programs on each of the four radio stations used in this study. The following results were obtained.

Out of the 100 participants who were administered questionnaires, we had 6 respondents who did not respond to this question and 1 respondent, who did not love any of the programs on BCR. Out of the remaining 93 participants, 31 enjoy listening to newscasts, 21 to culture, 14 to entertainment and 10 to educative

	Frequency	Percent	Valid percent
good programs	1	1.0	1.0
Music	5	5.0	5.0
religious matters	2	2.0	2.0
News	31	31.0	31.0
None	1	1.0	1.0
cultural issues	21	21.0	21.0
Advertisement	2	2.0	2.0
Educative	10	10.0	10.0
Advice	1	1.0	1.0
Entertainment	14	14.0	14.0
Announcements	3	3.0	3.0
Interactive programs	2	2.0	2.0
Others	1	1.0	1.0
no response	6	6.0	6.0
Total	100	100.0	100.0

Table 5.
Audience program choice for BCR.

programs. The love for other programs by the other respondents has a low interest rate because there are programs loved by 6 and less participants (**Table 5**).

As for program reference with regards to CCR, 14 out of the 100 participants who were administered questionnaires did not respond to this question. Out of the remaining 86 participants who responded to the question, 25 prefer entertainment, 16 prefer news, 13 prefer cultural programs, 11 prefer music while the remaining 21 records low program choice responses ranging from 7 to 1 (information, advertisement and interactive) per program (**Table 6**).

On Helen Kris radio, 91 out of the 100 who were administered questionnaires responded to the question while 9 respondents did not plus 2 other respondents who did not like any of the programs. Out of the 91 respondents, 23 enjoy entertainment, 18 enjoy news, 15 enjoy cultural programs, 10 enjoy music while the remaining 25 fall within the least loved programs with participants ranging from 6 to 1 (sports and information) per program (**Table 7**).

Out of the 100 questionnaires administered, 8 participants did not respond to the question leaving 92 respondents with program choices. 40 enjoy listening to Bible and religious matters, 10 enjoy Bible teaching, 9 enjoy prayers with 33 respondents left within the least loved programs.

Looking at the responses from the above question, we realize that the top response on each of the tables reflects each of the radio station's main objective of creation as was presented in chapter three of this study.

Having looked at program choices, we will now present the effects of multilingual broadcasting on the community (**Table 8**).

As presented on **Table 9**, 6 participants out of the 100 used for this study did not respond to this question. Out of the 94 participants who responded, 24 participants said they receive information from the radio that affects the smooth running of their communities since important information is shared during meetings.10 receive information on educative talks that affect them in terms of health, agriculture and academic issues while 14 said they have changed the way they do certain

	Frequency	Percent	Valid percent
Music	11	11.0	11.0
religious matters	2	2.0	2.0
News	16	16.0	16.0
Information	1	1.0	1.0
health issues	3	3.0	3.0
cultural talks	13	13.0	13.0
Advertisement	1	1.0	1.0
Educative	7	7.0	7.0
Entertainment	25	25.0	25.0
Sports	2	2.0	2.0
Announcements	3	3.0	3.0
Interactive programs	1	1.0	1.0
Others	1	1.0	1.0
no response	14	14.0	14.0
Total	**100**	**100.0**	**100.0**

Table 6.
Audience program choice for CCR.

	Frequency	Percent	Valid percent
Music	10	10.0	10.0
religious matters	2	2.0	2.0
News	18	18.0	18.0
None	2	2.0	2.0
Information	1	1.0	1.0
health issues	3	3.0	3.0
cultural talks	15	15.0	15.0
Advertisement	2	2.0	2.0
Educative	4	4.0	4.0
Politics	2	2.0	2.0
Entertainment	23	23.0	23.0
Sports	1	1.0	1.0
Announcements	2	2.0	2.0
Interactive programs	6	6.0	6.0
no response	9	9.0	9.0
Total	**100**	**100.0**	**100.0**

Table 7.
Audience program choice for Helen Kris.

things because they listen to these radio stations. 8 said there is unity in their community because they receive information from these radio stations in languages they can easily understand. 5 participants said there is change in the way they do things because of multilingual broadcasting. 6 said there is peace in their

	Frequency	Percent	Valid percent
Bible teaching	10	10.0	10.0
good programs	2	2.0	2.0
Music	5	5.0	5.0
religious matters	40	40.0	40.0
News	7	7.0	7.0
Prayers	9	9.0	9.0
cultural talks	1	1.0	1.0
Advertisement	1	1.0	1.0
Educative	6	6.0	6.0
Politics	1	1.0	1.0
Entertainment	6	6.0	6.0
Announcements	1	1.0	1.0
Interactive	2	2.0	2.0
Others	1	1.0	1.0
no response	8	8.0	8.0
Total	100	100.0	100.0

Table 8.
Audience program choice for RE.

	Frequency	Percent	Valid percent
information	24	24.0	24.0
progress	2	2.0	2.0
development	13	13.0	13.0
educative	10	10.0	10.0
religious life	1	1.0	1.0
unity	8	8.0	8.0
cultural awareness	1	1.0	1.0
advice	1	1.0	1.0
entertainment	2	2.0	2.0
announcements	1	1.0	1.0
change	14	14.0	14.0
news	2	2.0	2.0
morality	5	5.0	5.0
health	2	2.0	2.0
awareness	6	6.0	6.0
others	1	1.0	1.0
job openings	1	1.0	1.0
no response	6	6.0	6.0
Total	100	100.0	100.0

Table 9.
Multilingual broadcasting effects on the community.

community while the remaining 37 who are positively affected when listening to multilingual broadcasting programs fall within the range of 6 to 1 participant per effect.

4. Theoretical analysis

4.1 Social responsibility theory

1. Media should accept and fulfill certain obligations to society.

   This will include the use of rural methods to satisfy the community or society which will include the use of their languages to provide them with first-hand information important to their welfare and wellbeing.

2. These obligations are mainly to be met by setting high or professional standards of 'informativeness', truth, accuracy, objectivity, and balance.

   These high standards of 'informativeness' well be to inform people about what is going on around them and out of their environment; truth, balance, objectivity and accuracy is to give them the right information accurately without favoring a party especially since most of the information to be broadcast in the native languages need to be translated.

3. The media as a whole should be pluralistic and reflect the diversity of their society, giving access to various points of view and to rights of reply.

   This is done through the use of multilingual broadcasting in this case since the audience in question is diverse. Judging from the purpose of multilingual broadcasting by these radio stations, there is the aspect of inter-activeness between the audience and some of the radio programmes. The possibility of feedback is also available since it is necessary for the running of the radio as well.

4. The media should avoid whatever might lead to crime, violence, or civil disorder or give offense to minority groups.

   These radio stations in order to promote unity, peace and love avoid the promotion of war by giving the audience the information they require. This is why multilingual broadcasting is important because the diverse audience is provided with the same information without issues of miscomprehensions especially when it has to do with people sharing the information.

5. Journalists and media professionals should be accountable to society as well as to employers and the market.

   In relation to this work, this theory is used to look at the responsibilities of the journalists in the target media houses in informing their multilingual population. We will look at the use of multilingual broadcasting in information dissemination by these radio stations to satisfy their multi pluralistic audience. It is with this in mind that in a diverse environment like Kumbo, the journalists have to satisfy the people by not only giving them information but also, by giving them information in a language they will understand. This language however is none other than their Mother Tongues or native languages.

4.2 Communicative competence theory

When we look at Bachman and Palmer's goal setting ideology, the use of multilingual broadcasting by these radio stations are to achieve goals related to specific objectives of these radio stations in adopting multilingual broadcasting. Also, assessment which is seen as a means by which language use context is related to other areas of communicative language ability such as topical knowledge and affective schemata is necessary for this work in that even though these radio stations make use of multilingual broadcasting, they translate and sometimes code-switch specific contents which they consider important to their audience such as news and adverts. At the level of planning which deals with deciding on ways to make use of language knowledge and other components found in the process of language use to complete the chosen task successfully, these radio stations use these languages in specific domains of the radio programming which have been seen in the wat the languages are managed.

5. Conclusion

The study was carried out in Kumbo. A triangulation approach was adopted:
(1) At the level of the theoretical framework 2) to collect data by means of multiple instruments, questionnaires, focus group discussions and 'conversational' interviews and 3) the period of time and place estimated for the data collection which was over a period of six weeks and in four different locations.

In the course of the study, it was found that apart from the multilingual nature of the Kumbo community and the need to provide the community with information needed for their well-being, the need to achieve objectives set up at the time of creation and financial assistance for the functioning of the radio stations were other motivations for the adoption of multilingual broadcasting.

Secondly, 8 languages were identified as languages of multilingual broadcasting. To effectively use these languages, they were allocated uses by fitting them in slots. It was also discovered that these languages were used during monolingual and multilingual programs either 'monolingually' or 'multilingually'.

The study confirmed that the effects of multilingualism on the audience is positive and mostly reflects their daily activities. They promote ways of improving farming activities through seminars and workshops which teach the people about new methods of farming and ways of fighting pests.

Acknowledgements

Conflict of interest

The authors declare no conflict of interest.

Appendix 1

Questionnaire for the community

Date

Questionnaire N°

University of Buea

Faculty of Arts

Department of Linguistics

Dear Sir/madam,

This questionnaire is an important part of our research study. It has been designed to serve strictly academic purposes. As such, it will not be used for any purpose other than the one for which it has been designed. It aims at investigating "The Effect of Multilingual broadcasting in a rural community: the case of Kumbo central". Therefore, your answers and suggestions will be very helpful and useful in our research project.

"The Effect of Multilingual broadcasting in a rural community: the case of Kumbo central"

Instructions

Please tick (√) in the appropriate box or write full statements where necessary.

Section 1: Demographics

1. Age _____

2. Sex (1) Male ☐   (2) Female ☐

3. Location _____

4. Level of education

    1. FSLC ☐
    2. GCE O/L ☐
    3. GCE A/L ☐
    4. CAP ☐
    5. BEPC ☐
    6. PROBATOIRE ☐
    7. BAC ☐
    8. FIRST DEGREE ☐
    9. MASTERS ☐

5. Religion _____

Section 2: Identification of the multilingual status in the radio stations

6. How many radio stations here in Kumbo do use many different languages for their broadcasting? _____

7. List the radio station(s).

   (1) _____

   (2) _____

   (3) _____

8. How many languages are used by the radio stations in Kumbo?

9. What are the languages involved?

   (1) _____

   (2) _____

   (3) _____

   (4) _____

   (5) _____

   (6) _____

10. How often do they use these languages in their programs?

11. Which radio(s) make use of your favorite language?

Section 3: Identifications of the radio stations and their programs

1. On a scale of 1-3, where 1 is the lowest and 3 the highest, rank these radio stations according to the one you love.

Radio	1	2	3
Bui Community Radio			
City Community Radio			
Helen Kris			
Radio Evangelium			

2. Why do you prefer the radio stations in that order?

   1. Lowest _____

2. Median _____

_____

_____

3. Highest _____

_____

_____

3. What are your favorite programs on each radio

1. Bui Community Radio _____

_____

_____

2. City Community Radio _____

_____

_____

3. Helen Kris _____

_____

_____

4. Radio Evangelium _____

_____

_____

Section 4: The Effect of multilingual broadcasting

1. How does the use of multilingual broadcasting affect;

1. You _____

2. Your family _____

3. The community _____

4. The nation _____

Thank you for filling the questionnaire

Appendix 2

Questionnaire for the Radio Staff Date

Questionnaire N° [＿＿＿]

University of Buea

Faculty of Arts

Department of Linguistics

Dear Sir/madam,

This questionnaire is an important part of our research study. It has been designed to serve strictly academic purposes. As such, it will not be used for any purpose other than the one for which it has been designed. It aims at investigating "The Effect of Multilingual broadcasting in a rural community: the case of Kumbo central". Therefore, your answers and suggestions will be very helpful and useful in our research project.

Instructions

Please tick (√) in the appropriate box or write full statements where necessary.

Section 1: Demographics

1. Age ＿＿＿＿＿＿＿＿＿＿＿

2. Sex (1) Male [＿＿＿]   (2) Female [＿＿＿]

3. Radio

   name ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

4. Location

   ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

5. Level of education

   1. FSLC   [＿＿＿]
   2. GCE O/L   [＿＿＿]
   3. GCE A/L   [＿＿＿]
   4. CAP   [＿＿＿]
   5. BEPC   [＿＿＿]
   6. PROBATOIRE   [＿＿＿]
   7. BAC   [＿＿＿]
   8. FIRST DEGREE   [＿＿＿]
   9. MASTERS   [＿＿＿]

6. Religion

   ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

Section 2: Objectives of your radio in line with multilingual broadcasting

1. Does your radio make use of many languages during broadcasting?

   1. Yes [＿＿＿]   2. No [＿＿＿]

2. If yes, what are your reasons (objectives) for using multilingual broadcasting?

_____

_____

_____

3. What is/are the language(s) involved?

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

Section 3: Attained Objectives

4. Have your objectives being achieved?

    1. Yes [   ]   (2)   No [   ]

5. If yes, how have they been achieved?

_____

_____

_____

Which languages are used during

    1. News?

    _____

    2. Adverts?

    _____

    3. Publicities?

    _____

    4. Promos?

    _____

6. Programs? _____

7. How does multilingual broadcasting contribute to development;

    1. Locally? _____

    2. Nationally? _____

8. How do these languages contribute to development?

_____

_____

_____

Section 4: Problems encountered

9. What are some of the problems you encounter when you use multilingual broadcasting? _____

_____

_____

_____

10. What are the possible solutions to these problems you are facing? _____

_____

_____

_____

Thank you for filling the questionnaire

Appendix 3

1. Interview Guide

1. What are the motivations to the adoption of multilingual broadcasting?

2. After looking at the way languages are managed during broadcasting, there are some languages which seem to marginalize others. Why are they partitioned in this manner?

3. How is this multilingual broadcasting practice effective if the languages are not given equal status during broadcast?

4. How are these languages used per program?

2. Focus Group Discussion Guide

(1) What are the effects of multilingual broadcasting on you as an individual?

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Multilingualism and Personal Health Benefits: Connecting the Dots

Mohammed H. Al Aqad

Abstract

Being multilingual is a valuable advantage in today's global society, which is right at everyone's doorstep. Language and the ability to communicate are important skills to possess. These skills are particularly useful for healthcare professionals because without effective communication, it is tricky to collect reliable information, inform patients of a diagnosis, and/or engage them in developing a management plan. This chapter discusses the connection between speaking several languages and speaker's mind health. New research on multilingualism has impacted the author insight into the effect of learning and using two or more languages on cognition, the brain, and success and well-being across the lifetime in the last twenty years. The notion of learning various languages expose the linguistic and cognitive development in the community, the latest findings imply that people gain a swathe of health benefits, becoming more open to different languages and new learning in general. An old saying says, speaking more than one language inevitably means that one's have access to more than one culture, the person tend to have a better understand of intercultural differences and the nuances of different subcultures within an entire culture. The finding of the study shows that knowing several languages support ones life style, boost to live longer and the speaker become a certain kind of personification of cultural dynamicity and cross-culture exchange. Consequently, multilingualism has a range of social, psychological, and lifestyle benefits. Furthermore, experts are discovering a slew of health benefits from learning multiple languages, including quicker stroke recovery and delayed dementia development.

Keywords: Multilingualism, global society, cultural dynamicity, personal health benefits, stroke recovery

1. Introduction

Multilingualism is a complex phenomenon, alive and always. Today, the importance of multilingualism has gone beyond its private local roles to have a much broader global importance It is one of the most essential social practices in the world. The term multilingualism is used here to denote the use of three or more languages and distinguishes, in the case of bilingualism, the use of two languages. From this perspective, bilingualism is considered as a particular of multilingualism rather than the other way around.

The answer to the question "What is multilingualism?" is not as straightforward as it appears at first glance. Decades have passed with intense debates over what

type of person a bilingual is. The narratives of various multilingual communities differ in their definitions and depictions. Researchers' core understandings of what multilingualism is often differ due to their diverse backgrounds and views.

Multilingualism was documented in ancient Greece, Egypt, and Rome, and included languages such as Hebrew, Aramaic, Egyptian, Lycian, Greek, and Latin. This is demonstrated by the iconic Rosetta stone. 'Multilingualism is the presence of numerous languages in one country, community, or city,' 'Multilingualism is the use of three or more languages,' and 'Multilingualism is the ability to speak several languages,' according to the definitions. Multilingualism is often recognised as a "natural state of humankind" in this last sense [1]. Furthermore, neuroscientists explore multilingualism in the context of how people who speak multiple languages organise their brains.

The aforementioned accounts are sufficient for a general understanding of multilingualism's various dimensions. Despite this, there has yet to be a straightforward, short, and universally applicable solution to the question "What is multilingualism?" This talk will demonstrate why we should not expect one. Rather, it will introduce the reader to the various forms, manifestations, and key characteristics of multilingualism. It will go over the fundamental terminology and concepts of multilingualism, introduce the fundamentals that have been established in the field thus far, mention some theories and concepts that have been proposed and used for the study of multilingualism, and provide an update on recent developments.

Multilingualism refers to the presence of more than one "variety of language" in a geographical area, whether large or small, i.e. the mode of speaking of a social group, whether formally recognised as a language or not; individuals in such an area may be monolingual, speaking only their own variety.

2. Attitudes to multilingualism

Multilingualism is often unnoticeable. Even in major multilingual cities, a huge number of languages are mostly spoken in the home or community (the private sphere) and only come out in public on rare occasions. Then it may become an integral part of many people's urban experience, including those from other language groups. In various ways, persons are practically unwittingly exposed to multilingualism in their daily lives. The most common example is commercial - for example, a local business managed by members of various language communities (Bengali, Turkish, Kurdish, Chinese, Polish, and Italian) but serves the entire community.

The image of multilingualism is as different as the realities of multilingualism. There is a strong desire in many areas to regard multilingual identity as a sign of global vitality, something to be proud of. For example, the city of Utrecht in the Netherlands promotes itself as a "multilingual hotspot," where people speak more languages than anyplace else in Europe, and the municipal administration promotes this as a good thing and an indication of a better way of life. Melbourne defines itself as a richly cosmopolitan city with residents from more than 140 nationalities, whose history, economy, and current identity are all intertwined with migration.

This concept is powerfully defined in Melbourne's city centre's Sandridge Bridge development, which depicts the history of all the nations and individuals who have influenced the city's (and state's) contemporary character. Cities from Johannesburg to Kuala Lumpur are proud of their multilingual assets – 'Kuala Lumpur is an ethnically diverse city with well-educated, multicultural, multilingual residents.' However, the importance of English in this equation is also emphasised: 'Even if the official language is Bahasa Malay, most people speak good English.' All schools require students to take English as a subject.'

Many towns today claim to encourage multilingualism as a beneficial factor in a globalised society, which is undeniably relevant. Other areas, mainly newcomers to the globalised table, are not regarded multilingual by its residents in the same way that more traditionally diverse cities like London, New York, Mumbai, or Melbourne are. People living there may see this as practically accidental, if not transient, despite the fact that people may cover multiple languages. Individual residents may also hold a different viewpoint than the city government.

For many people, London, the most iconic example of a European cosmopolis, is the quintessential bustling, cosmopolitan, creative metropolis of over 200 languages. It is the location in which one's wish to reside, and linguistic diversity plays a role in that decision. However, some people find the environment unpleasant because there are so many languages spoken on the train that one's feel "a little strange." Multilingualism, on the other hand, is a part of their new and broader identity for others, as David Block's book Multilingual identities in a global city: London stories demonstrates. 'And sometimes I think to myself, Oh my God, she's so cruel… and it's because I'm used to the English way of communicating, and when I go back to France, I think to myself, "They're so rude," because they never say "sorry.""I believe that combining English and Bengali makes me truly me.' One's get completely absorbed in another person once he/she communicate with a new language', [2].

2.1 Linguistic processing in multilinguals

2.1.1 Parallel use of languages

In multilingual communication (with or without a translation or interpreter), utterances are frequently received in a language other than the one in which interpreters are created, therefore language processing in various mental and cognitive phases becomes a multilingual procedure in and of itself. In terms of psycholinguistics, reception and production are not two polar opposites in the sense of a "bottom-up" versus "top-down" method. The possible receivability of linguistic forms, as well as the producibility of linguistic forms, is relevant here, since it is linked to the transient nature of the communicative act and the interactant's co-construction of it [3].

A logical possibility for the structure of a bilingual mind is that it is made up of two independently represented language systems that are accessed differently depending on the situation: A fluent French-English bilingual ordering coffee in a Parisian café has no need to think about how to phrase the request in English, while a Cantonese-English bilingual studying psychology in Boston has no need to recast the subject in Chinese. Despite this, extensive research suggests that the bilingual mind is not organised in this way. Fluent bilinguals, on the other hand, demonstrate some activation of both languages and some interaction between them at all times, even in situations where only one of the languages is used.

Psycholinguistic studies show the influence of the currently unused language fo cross-language priming (in which a word in one language facilitates retrieval of a semantically related word in the other language) and lexical decision (in which participants decide whether a string of letters is a legal word in one of the languages), according to Beauvillain, and Grainger [4], Crystal [5] and De Groot and Kroll [6].

More evidence comes through Patient studies demonstrating incursions from the irrelevant language or improper language switches, cited in Fabbro et al. [7], as well as imaging studies showing non-target language participation while conducting a linguistic task in the targeted language according to, Martin et al. [8]. Marian et al. [9], used eye-tracking technology to find that English-Russian bilinguals performing an English task in which they had to choose the named picture from four alternatives were distracted by a picture whose name shared phonology with

Russian, despite the fact that there was no connection to the meaning of the target picture and no contextual cues indicating that Russian was related.

The most likely mechanism for understanding the effects of bilingualism on both language and nonlinguistic processing is parallel use of languages or what so called, Joint activation. Joint activation causes an attention hurdle in linguistic processing that does not present in monolinguals. Besides, constraint on register, collocation, and synonymy, the bilingual speaker need to choose the appropriate language from a pool of competing choices.

"Vocal planning," "stages of the action process," and other elements of the production are examples. (Like the differences in written and spoken processing of word order, complicated sentence structures, and so on, the monitoring process for reading and writing requires separate linguistic planning processes.) Prior knowledge is addressed to the perceived (linguistic) forms in an ongoing interpretation of the words said by the speaker during the process of receiving a message. Understanding, establishing a hearer plan, and post-history are all important aspects of reception. Participants must follow the specific processing processes for discourse or text in both production and reception for a cross-section. (For a cross-cultural German-Japanese study employing this conceptual framework, see [10]).

There are changes in how information is processed in verbal communication depending on the language constellation: eralisations that are nearly difficult to get from an abstract comparison of language systems [11]. Recent research into the impact that a dominant language (global English) can have on other languages via translation processes has revealed that changes in the use of particular types of connectives are causing incipient changes in indigenous information dissemination [12]. Interpreters must be able to use language-specific hearer and speaker techniques. A reciprocal accommodation to the variety utilised by the interactant(s) leads to a mental process of accommodation in regard to the language during multilingual conversation (cf. articles in [13]).

A studies by Blumenfeld, and Marian [14] have found a link between inhibition and ability in verbal and nonverbal tasks by demonstrating a link between Stroop task performance and competing word selection.

3. Globalisation as a framework and driving factor for multilingualism

Multilingualism has spread over the world to the point where it now covers the entire planet. Even countries that were formerly assumed to be exclusively monolingual, such as Japan and Iceland, are now seeing an influx of languages and multilingual speakers. Multilingualism is widespread today, and it is a part of practically every human activity. In late postmodern times, multilingualism has steadily evolved into a phenomenon of vital importance in terms of its role in and impact on human civilisation. It is necessary for modern society's progress and survival [15].

What has caused such fundamental shifts in how people use their languages around the world? The term "globalisation" is widely used in this context, and present multilingualism is linked to basic globalisation dynamics including mobility, diversity, and technological innovation. These ideas were hotly debated in the late twentieth century and are frequently referred to as being unique to more modern times.

Many social processes and events that we consider to be fresh have, in reality, experienced transformations over time. The journey of Christopher Columbus to the New World in 1492 is regarded to be the beginning of globalisation. As a result, it's critical to comprehend how today's technology breakthroughs, as well as mobility, diversity, and complexity, play a role in the reality of multilingualism.

Mobility is one of the qualities linked to modern multilingualism's diversity. Scholars, on the other hand, contend that people have always been mobile. Human language existed before our species' globe journeys, according to a new anthropological research. 'When humans first arrived in Australia, people brought language with them, having used it during their migration and following their fortuitous settlement on the continent,' Barnard [16] writes ([16]: 134). Pilgrims, monks, and roving troops, as well as carriages moving families and their goods from villages to towns and back, packed Europe's highways during the Middle Ages. Al Aqad [17], shows how improved language skills in the classrooms allowed students to speak freely, resulting in large improvement gains in some classes. Large-scale exchanges of people, products, and ideas across Europe are also documented in early modern history (see, for example, [18, 19]).

4. Current trends and issues of modern multilingualism

It is commonly acknowledged how important language and communication are in the educational process. It has long been a subject of concern in the English-speaking world. The famous Bullock Report (A Language for Life) from 1975 asserted that language was more than just a school subject, but rather a road to learning across the curriculum. Language is used in every discipline to convey and acquire knowledge and understanding. Bullock put it this way: "Every teacher is a language instructor." The Bullock Report has had a huge impact on educators and policymakers in the English-speaking world. Multilingualism today differs from previous social linguistic arrangements in numerous ways. Ignoring the changes is like to stating that technology has remained constant throughout history since we still use the wheel, which was allegedly invented in the late Neolithic period. In the following sections, we'll look at the elements of postmodernity that are intimately linked to current language practises and the key features of current multilingualism.

In order to cope with multilingualism practically and intellectually, it is important to come to certain conclusions about whether multilingualism existed in the past or if it is a completely new occurrence. Consider the fields of anthropology, ethnology, and history to begin answering this question. Multilingualism, people believe, is a distinctively human trait that dates back thousands of years. Language is a trait that separates our species from others and plays a vital role in human evolution. To be sure, several languages have been spoken since the dawn of human interaction. Barnard [16] claims that with Homo sapiens and possibly Neanderthals, who had larger brains than Homo sapiens, "[m]ultilingualism was the norm, and multilingual peoples were made up of individuals from different linguistic backgrounds, whose groups intermarried and passed on both their genes and their linguistic diversity." Looking further back in time, we can see how the social nature of language and our beliefs about it fundamentally mirror stages of society evolution and organisation, with the latter altering depending on historical conditions (see **Table 1**).

Stage of societal organisation	Language crucial as
Tribal	**A** language
Nation-states	**The** language
Globalisation: centralization and localization	Langua**ges**

Source: After Aronin [20].

Table 1.
Stages of societal organisation and language patterns.

5.4 Increases networking skills

Learning a new language entails much more than just studying the language itself; it also entails learning the culture connected with that language. People begin to respect others' thoughts and acts when one's open up to a new culture. As a result, multilingual people are better able to understand the world from various perspectives, which improves their capacity to communicate in today's global economy, according to Burgaleta et al. [25].

One of the first steps in establishing a long-term, secure international business connection is to communicate directly with new clients and organisations in their native language. When one's speak to somebody in their native language, his/her break down boundaries and make them feel more at ease and confident. In a commercial situation, it is critical to facilitate these types of partnerships. Knowing client's native language will improve bilinguals relationship and help one's achieve better commercial results.

5.5 Enhances memory

It is indisputable that the more one's brain is used, the better it performs. Learning a new language necessitates not only acquaintance with a foreign vocabulary and set of norms, but also the ability to recall this material. Because one's may spend more time learning new material rather than re-teaching him/herself, absorbing and retaining more information can drastically decrease one's learning curve.

But the storey does not end there. People 'll be able to learn other languages faster once learning one. This is because human brain contains crucial language-learning skills stored in it. If one's recently studied Spanish, for example, he/she's automatically entered the realm of Latin-based languages such as Portuguese, Italian, French, and Romanian.

The study is not only talking about the advantages of short-term memory here. According to study conducted in Luxembourg by Bialystok et al. [26], people who speak more than one language had a lower risk of developing cognitive issues such as Alzheimer's and dementia. Indeed, according to study titled, 'Bilingualism and aging: Why research should continue' by Del Maschio et al. [27], multilingualism has a "protective effect on memory in seniors who learn foreign languages over their lives or at the time of the study," according to the research. The advantage appears to be compounding, as individuals who are fluent in four or more languages had the lowest risk.

5.6 Be a better global citizen

Whether one's noticed or not, learning another language has a lot of advantages that will help one's become a better global citizen. It's essentially a superpower.

In an increasingly interconnected society, many would argue that multilingualism is vital. Having the skill and inclination to interact with a diverse range of people can help one's better comprehend and address global issues such as poverty and inequality based on a study conducted in Luxembourg by Bialystok et al. [26].

Didn't have the opportunity to learn a second language as a child? It's never too late to learn something new! Even if one's just learn for 5 minutes a day, with consistent practise, one's can lay a solid foundation for language study. It will be beneficial to his/her brain!.

6. Multilingual and multicultural interaction

Many people believe that in the new world order, multilingualism and multilingual communication will be unnecessary because everyone would be able to speak in a lingua franca, presumably English. In a variety of ways, this argument is flawed. Assume that the resources are available to teach this lingua franca to everyone. There is a naïve belief that joyful homogeneity will result in a return to the pre-Babel condition of affairs. However, the usage of a 'lingua franca' is by definition intercultural communication since people transfer the pragmatic and discourse patterns of their native languaculture4 into their lingua franca [28].

The expanding circle of countries adopting English in a limited number of domains (such as Denmark, Sweden, the Netherlands, Lebanon, and Israel) now outnumber L1 English speakers in the non-traditional English-speaking countries, which Kachru [29, 30] refers to as the outer circle (the nations of the New Englishes, such as India, Singapore, Fiji, Nigeria, and the Philippines). As this disparity grows, it will become ever more critical for L2 users to be given the opportunity to codedetermine the language's usage rules.

Otherwise, their academic work, enterprises, and diplomatic efforts will continue to be discounted due to the diversity of their English [31, 32].

It will be even more critical for English speakers in the inner circle to learn about and accept other people's communication styles. Unless an extraordinarily high level of biculturality can be attained, pushing learners to change their pragmatic and discourse patterns as part of the acquisition and use of a lingua franca is an infringement of human rights. Furthermore, having a thorough understanding of at least a second language and culture allows a person to know what kinds of questions to ask in order to comprehend a different culture's communication patterns, and having a good understanding of several facilitates an understanding of the range of possibilities of such communication patterns. The employment of a lingua franca is insufficient for gaining access to a society's fundamental cultural elements or insider perspectives; without a working grasp of the target language, one must rely on the selective interpretation of the "other." The idea that English will always be the sole language of the web, which is the medium of the future, is one of the arguments in favour of monolingualism. While the internet was formerly thought to be a tool for language unification, the percentage of home sites in English has dropped dramatically since 1998 ([33]: 51; [34]). Those that protect multilingualism (particularly governments) must ensure that there are incentives for electronic multilingual communication.

7. Conclusion

This chapter pinpoints the issue of multilingualism and describes its implication on personal health. With the instant satisfaction and expediency offered by the rising trend for multilingualism due to the social media, YouTube, Facebook, and Twitter. At both the individual and societal levels, multilingualism offers a plethora of benefits and opportunities. Financial services, researchers, translators, interpreters, chemical, IT, and other human involvement (social) services, as well as other worldwide and globalised sectors, largely rely on language skills to operate for commercial activity and service.

Some of the advantages of multilingualism extend to a wide range of sectors of life for both individuals and communities. In a conclusion, the findings of the study presented in this chapter show that multilingual experience are often advantageous to both the individual and the community.

The fact that multilingualism improves cognitive control suggests that lifelong bilingualism may protect against age-related cognitive decline and potentially delay the onset of dementia symptoms. Bilingualism and multilingualism could be one of the ecological factors contributing to cognitive reserve or brain reserve in this scenario [35].

Interestingly, Peal and Lambert [36], concluded in the their study that bilingual children have an advantage in cognitive and linguistic performance: "Intellectually [the bilingual child's] experience with two language systems seems to have left him with a mental flexibility, a superiority in concept formation, a more diversified set of mental abilities" (p. 20).

It should come as no surprise that prolonged and intense experience has an impact on our minds and brains; huge experience obviously changes the functional connections that result from practise, and the anatomical regions that are recruited for specific tasks undoubtedly alter as well [37, 38]. Neuroplasticity refers to these types of responses to experience. However, in the case of bilingualism, it has long been assumed that any such impacts would be disastrous: "This might be considered evidence that the use of a foreign language in the home is one of the primary causes in creating mental retardation based on intelegience tests," one famous educational researcher wrote in 1926.

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Edited by Xiaoming Jiang

This book promotes understanding of multilingualism based on the research efforts at the frontiers with state-of-the-art approaches or novel interdisciplinary perspectives. It addresses issues of the impact of multilingualism on cultural awareness and national identity, gives an overview on how multilingual speakers benefit themselves in learning and communicative competence, and describes the association between multilingualism and media, health, and society.

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