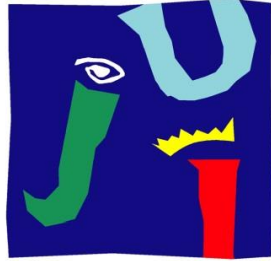


Department of English Studies



**UNIVERSITAT
JAUME I**

**THE EFFECT OF OUT-OF-SCHOOL
MEDIA CONTACT ON LANGUAGE
ATTITUDES IN MULTILINGUAL
ADOLESCENTS: A COMPLEX
PSYCHO-SOCIOLINGUISTIC SYSTEM**

DOCTORAL DISSERTATION

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Dedicated to Isabel and Marvin: for our future together.

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List of Abbreviations

- CLI – Cross-linguistic influence
- CLIN – Cross-linguistic interaction
- DMM – Dynamic Model of Multilingualism
- DST – Dynamic Systems Theory
- EFL – English as a foreign language
- FL – Foreign language
- FLA – Foreign Language Acquisition
- L1 – First language
- L2 – Second language
- L3 – Third language
- LS – Language system
- Lx, Ly, Lz – Other/additional language(s)
- NNS – Non-native speaker(s)
- NS – Native speaker(s)
- SLA – Second Language Acquisition
- TL – Target language
- TLA – Third Language Acquisition
- TV3 – Televisió 3
- RTVV – Radiotelevisió Valencià

INTRODUCTION

The current study will attempt to take a complexity approach to exploring the effects of out-of-school media contact on the language attitudes of multilingual adolescents. In doing so, the study is principally guided by the application of dynamic systems theory in applied linguistics (Larsen-Freeman, 1997; Larsen-Freeman & Cameron, 2008; de Bot & Larsen-Freeman, 2011), the *Dynamic Model of Multilingualism* (Herdna & Jessner, 2002), and the *Focus on Multilingualism* approach (Cenoz & Gorter, 2011a, 2011b, Gorter & Cenoz, 2011; Cenoz, 2013). Systems theory and complexity approaches are effectively studies in holism which take the object of enquiry and treat it as a system which is sensitively dependent on such factors as time, initial conditions, self-organisation, and internal and external relationships with co-existing systems. The current study attempts to respond to influential voices from within multilingualism research that have called for work which takes a more holistic approach (Cenoz & Gorter, 2011a; Cenoz, 2013; Jessner, 2008a, 2013). We believe this approach is necessary to gain an enhanced understanding of multilingual development and to open new avenues for the implementation of multilingual education practices.

Multilingualism is a natural and unremarkable phenomenon for most of the world's population (Edwards, 1994). However, monolingual perspectives in linguistics have been ideologically imposed (Franceschini, 2013) as a result of scientific reductionism and, arguably, an imperialistic world-view. On a global scale, it is clear that monolingualism is the exception rather than the norm, thus Jessner (2006) has astutely dubbed the monolingual perspective 'linguistic myopia'. In the last few decades, multilingualism has come full circle in that it has been recognised by the international research community as a more accurate reflection of the reality of most human beings (Aronin & Singleton, 2012); it has consequently been subject to much broader and more profound investigation. However the approach adopted has, ironically, often been monolingual (Cook, 1997; Herdina & Jessner, 2002; Jessner, 2006, 2008a; Li Wei, 2011; Cenoz, 2013). Moreover, a lot of research in the field seems to have been suffering from a

sort of Chomskian hangover, considering language acquisition to be a static, linear phenomenon which is independent from other factors. To date, the dynamism and complexity of multilingualism has been explored from a psycholinguistic perspective (Cenoz, 2000; Herdina & Jessner, 2002; Jessner, 2006, 2008b, 2013) but sociolinguistic research of the same area is in need of additional development (Cenoz, 2013). Furthermore, language attitudes studies which extend beyond Second Language Acquisition (henceforth: SLA) and bilingualism still tend to treat languages separately and maintain a monolingual perspective; holistic approaches to language attitudes are very scarce (Lasagabaster & Safont-Jordà, 2008; Portolés, 2014).

There are several major factors to consider in the current study: the sociolinguistic situation of the sample, their linguistic repertoires, the social and psychological significance of their age, their linguistic behaviour in terms of autonomous language contact, their attitudes to language, and the complexity approach that attempts to connect all these factors. To begin, the locus of our study is the Valencian Community, which provides a rich linguistic context but has not been fully investigated by existing research on multilingualism (Safont Jordà, 2007). This community is characterised by languages in contact, not only in the educational system where Catalan, Spanish, and English are all used as vehicular languages, but also in everyday life where these languages exist alongside the languages of specific communities, such as Arabic, Chinese, and Rumanian. Aside from linguistic contact, the community is also characterised by linguistic *conflict* as minority, majority, and foreign languages jostle to assert themselves to varying degrees in varying contexts. Moreover, this conflict is exacerbated by the unequal social prestige that exists between, on the one hand, majority (Spanish) and foreign (English) languages, and on the other, minority (Catalan) and specific community languages. For these reasons, multilingualism is a crucial issue at all levels within the community and requires further ongoing research in order to be fully understood. Another central issue to consider is the age of the participants. Research has shown that language attitudes become less favourable between 11 and 14 years of age (Baker, 1992), and that this may be attributable to sociopsychological factors such as peer-pressure and group socialisation (Walqui, 2000).

Furthermore, various studies indicate that attitudes to language and interest in learning languages may decline as age increases or teaching methods change (Nikolov, 1999; Cenoz, 2004; Heining-Boynton & Haitema, 2007; Henry & Apelgren, 2008). Studies involving adolescent language attitudes are not exactly a novel phenomenon (see: Baker, 1992; Fisher & Evans, 2000; Hoare, 2001; Dewaele, 2005; Dörnyei & Cszer, 2005 – in Europe, and: Lasagabaster & Sierra, 2009; Nightingale, 2012 – in Spain). However, to our knowledge, there are no studies which take an emic perspective / qualitative approach to the combination of out-of-school factors and language attitudes in adolescents. In this sense, the current study continues the holistic multilingual work of Portolés (2015) by exploring the same sociolinguistic context but extending the age range to the crucially important period of secondary education.

A main focus of the current study is autonomous language-contact behaviour; that is, the extent to which young people put themselves in contact with popular media in different languages. It is evident that not all learning takes place in classroom contexts. Incidental learning plays an important role in language acquisition (Schmidt, 1990, 1994, 2001; Winitz, 1996; Lightbrown & Spada, 2003; Ellis, 2005, 2008b; Ellis, 2009) and the impact of authentic materials in language lessons has been extensively explored. In this vein, a broad range of earlier research has shown the positive impact of traditional media contact (d'Ydewalle & Van de Poel, 1999; Koolstra & Beentjes, 1999; Medina, 2002; Berns, de Bot & Hasebrink, 2007; Milton, 2008; Sundqvist, 2009; Kuppens, 2010; Lefever, 2010; MacLeod & Larsson, 2011; Muñoz & Lindgren, 2011; Schwarz, 2012; Bunting & Lindström, 2013). Moreover, new media, videogames, and web-based communications and social networking technologies have also been the subject of extensive and wide-ranging research (Gee, 2007; Ranalli, 2008; Thorne, 2008; Harrison & Thomas, 2009; Thorne *et al.*, 2009; Peterson, 2010a, 2010b; Reinders & Wattana, 2010; Lin & Warschauer, 2011; Thorne & Black, 2011; Wang & Vásquez, 2012; Henry, 2013). However, while a great deal of focus has been placed on language acquisition and language learning in traditional learning environments, less attention has been paid to extramural contact with authentic materials and situations, and there is scarce existing work which explicitly

attempts to link media contact with language attitudes (see: Mettewie & Janssens, 2007; Enever, 2011; Cunliffe, Morris & Prys, 2013– in Europe, and: Nightingale, 2012 – in Spain). As Jessner (2013) points out, it is crucial to consider ‘forms of learning’ in multilingual development, the current study extends this notion by exploring forms of *input* and the impact they have on the affective domain.

The other main focus of the current study is the affective domain; specifically, attitudes to languages. Although language attitudes are considered a central affective variable in language acquisition (Dewaele, 2005), there appears to be little research which has examined attitudes from a holistic, multilingual perspective. The Dynamic Model of Multilingualism (Herdina & Jessner, 2002) mentions attitudes and motivation as contributing to the development of multilingual aptitude but does not explicitly include attitudes as an individual factor or go into any detail about them. It is also common in SLA research to conflate attitudes and motivation and present them as a single unified construct (Gardner, 1979, 1985; Spolsky, 1989). While it is true that they exhibit a closely entwined and reciprocal relationship (Baker, 1992; Lasagabaster, 2005), they are two quite distinct factors. In fact, Dörnyei (1994) distinguishes between motivation as the ‘motor’ of individual human behaviour and attitudes as an aspect of the social context. Moreover, Baker (1992) also makes a distinction by proposing that motivation is goal-specific while attitudes are object-specific, and that attitudes create the drive-states for motivation. With this in mind, the present study will explore the language attitudes of our participants towards the three main languages they are in contact with in order to contribute to our knowledge of this area of multilingual development.

Taking all of the above into consideration, the current study focuses on the sociolinguistic context of the Valencian Community by exploring the multilingual development of adolescents in terms of their language attitudes and their multilingual practices. The study takes into account the language background of the participants alongside the established and emergent relationships between the languages in their linguistic repertoires and their interactions with additional, non-linguistic, factors. It has been successfully argued that

multilingual development can only be properly researched from a multilingual perspective (Cook, 1991, 1992, 1997, 2002; Herdina & Jessner, 2002; Jessner, 2006, 2008a, 2008b, 2013) and that given the inherent complexity of multilingualism this approach should be dynamic and holistic (Cenoz & Gorter, 2011a; Cenoz, 2013). Therefore, the present study aims to explore the language attitudes of emergent multilingual adolescents by using a complexity approach to focus on their situated multilingual and multimodal practices, in terms of media contact and engagement, and the ways in which these practices are interrelated with the wider sociolinguistic context. In sum, Jessner (2008a: 27 – my emphasis) explicitly states that ‘the study of multilingualism *has to be placed at the crossroads of socio- and psycholinguistics*, in particular with regard to multilingual planning and education’, which is precisely what the present study intends to contribute towards.

Considering the main issues of the current investigation, the present study addresses the following aims:

1. *Demonstrate* a connection between multilingual language attitudes in adolescents and their language contact through popular media in out-of-school contexts.
2. *Investigate* variation in the effects that language contact through different types of traditional and new media has on language attitudes.
3. *Highlight* the complex nature of the relationships between out-of-school language contact, language attitudes, and language systems as subcomponents of the multilingual psycho-sociolinguistic system.
4. *Explore* the effects of out-of-school language contact through popular media on multilingual practices, the negotiation of multilingual identities, and socialization processes in situations of language contact.
5. *Analyse* data for all of the above using both qualitative and quantitative methodologies.

After this brief introduction to the rationale and motivation underlying the current study, we shall next present its general structure. The study is divided into two parts. The first, consisting of three chapters, outlines the theoretical framework on which our investigation is based. The second, consisting of four chapters, presents the mixed-methods empirical study that was carried out. We will now outline the contents of each chapter:

Chapter 1 uses the theory of complex dynamic systems to validate the multilingual approach to research on multilingualism. First, multilingualism and monolingualism are situated in their historical context in order to explain how the monolingual bias (Cook, 1997) came to exist in applied linguistics research. Then, section 1.1 provides a brief explanation of complex dynamic systems, elaborating their key characteristics, and subsequently focuses on how systems theory may be applied to language development in natural and instructed settings. Following this, section 1.2 focuses on the application of systems theory in third language acquisition, paying special attention to the Dynamic Model of Multilingualism (Herdina & Jessner, 2002). Finally, section 1.3 explains the untenable nature of the monolingual perspective by exploring changing directions in multilingualism research and specifically detailing multilingualism as the ‘new linguistic dispensation’ (Aronin & Singleton, 2008, 2012) and the Focus on Multilingualism approach (Gorter & Cenoz, 2011; Cenoz, 2013). The chapter closes with some concluding remarks which serve to summarise the literature review and tie together the broad range of research presented as a justification of the multilingual perspective. Our interest in out-of-school factors is advanced in the following chapter which narrows the scope of the study by exploring language exposure in out-of-school contexts.

Chapter 2 provides a review of previous research focusing on connections between out-of-school factors and language learning. First, section 2.1 explains what constitutes implicit learning and knowledge and how it differs from explicit learning and knowledge, and frames this in a language development context. Then, section 2.2 examines out-of-school factors in the immediate environment paying special attention to parental socioeconomic and sociocultural status, stay abroad and study abroad periods, and the linguistic landscape. Following this, section 2.3 deals with traditional media as an out-of-school influence on language development; in this regard, specific attention is paid to television, film and music. Subsequently, section 2.4 investigates the impact of new media, focusing specifically on second-generation Internet and computer-mediated communication, social networking platforms, and online multiplayer

videogames. Finally, section 2.5 reports on the research covered in the previous sections from a sociolinguistic perspective and pays specific attention to language socialization and the intersection of language use and self-identity. The chapter closes with some concluding remarks which serve to summarise the literature review and frame out-of-school factors as powerful contributors to language development and use. Our interest in affective factors is advanced in the following chapter which narrows the scope of the study by exploring language attitudes.

Chapter 3 focuses on language attitudes as a fundamental factor in language learning and development. First, section 3.1 provides a brief account of the affective domain which constitutes the wider framework in which language attitudes are located, focusing on both sociocultural and personality factors. Then, section 3.2 reviews previous language attitudes research at a very general level, including issues such as the *Socio-Educational Model* (Gardner, 1985), integrative and instrumental orientations, linear and reciprocal attitude/motivation models, and the ideal L2-self (Dörnyei, 2005, 2009); the section also includes a special focus on young learner language attitudes. Following this, section 3.3 is dedicated to language attitudes in bilingual and multilingual contexts, first covering research in the European context before narrowing the focus to research in the Spanish context. Finally, section 3.4 uses a systems theory framework to synthesise language attitudes research with the out-of-school factors discussed in the preceding chapter. Moreover, the section closes by presenting a provisional model of an integrated psycho-sociolinguistic multilingual system. The chapter closes with some concluding remarks which serve to summarise the literature review and language attitudes as a powerful factor in multilingual development and language use. This chapter concludes the theoretical review and leads to the second part of the current study, that is, our empirical study on the effects of out-of-school factors on the language attitudes of emergent multilingual adolescents.

Chapter 4 provides a brief summary of the motivation for the present study before moving on to explain, in section 4.1, the study rationale by means of a summary which recapitulates the most salient and relevant research covered in the theoretical framework. This

section also serves to explain how each of the first three chapters helps to build our tentative model of an integrated psycho-sociolinguistic multilingual system. The chapter concludes with section 4.2 which outlines four central research questions and then states the four hypotheses which guide the present study.

Chapter 5 explains the method employed in this doctoral thesis. This chapter opens by recognising the central role of the surrounding context in any study which attempts to apply a systems theory analysis. As such, section 5.1 explains the sociolinguistic situation of the Valencian Community, detailing the position of Catalan in social, political, media, and academic spheres as well as the inevitable conflicts which arise when there is contact between Spanish and Catalan, owing to the stark differences in their social prestige. Moreover, in section 5.1.1, special attention is paid to the way in which Catalan and Spanish are integrated in the Valencian educational system. Following this explanation of the sociolinguistic context, section 5.2 introduces the main traits of the participants who make up the sample in this investigation; this includes descriptive statistics relating to their age, gender, L1, language use in the home, and EFL background. Subsequently, section 5.3 details the instruments employed in the study, the questionnaire and interview questions, as well as the data collection procedures and statistical tests used for the quantitative analysis. Finally, section 5.4 highlights additional methodological considerations relating to the application of systems theory and mixed-methods approaches in applied linguistics research.

The main bulk of the study is contained in chapter 6 which presents the results and discussion relating to each of the hypotheses stated in chapter 4. This chapter opens by using descriptive statistics to provide additional detail about the sample's language attitudes and out-of-school language contact. This information serves to contextualise the interpretation of the subsequent results for each hypothesis. The following four sections provide results and a discussion relating to each individual hypothesis. Although all results are explored from a complexity perspective, this is less salient in section 6.1, which takes a more traditional approach to statistical analysis of the data, and more salient in sections 6.2 and 6.3, which take a

more experimental approach to the application of systems theory. Finally, section 6.4 applies a qualitative analysis to the data derived from the oral interviews and attempts to use this data to garner more detail about multilingual and multimodal practices and use this to compliment the quantitative data analysis from the previous three sections.

Chapter 7 concludes the second part of the current study. The chapter opens with section 7.1 which constitutes a recapitulation of the main aims and objectives of the research project and subsequently moves on to summarise the main findings related to each of the four hypotheses and draw conclusions from them. Then, section 7.2 provides a justification of the systems theory approach that has been followed throughout the study, including a focus on how each hypothesis has been explored from a complexity perspective. After this, section 7.3 remarks on some of the implications of the results we have obtained in terms of their potential applications to future research, linguistic planning, and pedagogy. Finally, section 7.4 closes the chapter, and the overall study, by laying out some specific avenues for future research. This final chapter is followed by a list of references as well as two appendices, which provide an example of the questionnaire instrument and unedited transcripts of the interview questions.

PART I: THEORETICAL FRAMEWORK

CHAPTER 1. MULTILINGUALISM: A SYSTEMS-PERSPECTIVE

This chapter will present the basic theoretical framework which supports the core of the current undertaking: Complexity/Dynamic Systems Theory. A systems-perspective has been adopted in this study because we believe that: 1) as multilingualism is an inherently complex and dynamic phenomenon, examining it through a systems-theory lens will provide greater explanatory power and flexibility, and 2) this same perspective allows us to account for the data in a more comprehensible way. The intention of this first chapter is to chart the progress which has led to our current acknowledgement of the multilingual perspective and its validity. In order to do so we will first situate multilingualism and monolingualism in their historical context, then, in section 1.1, explain complex dynamic systems and elaborate some of their key characteristics, before moving on to illustrate some of the ways in which a systems-perspective may be applied to language development in both natural and instructed settings. Following this, in section 1.2, we will focus our enquiry on third language acquisition from a systems-perspective, specifically the Dynamic Model of Multilingualism, its defining features, and its characterization of the multilingual. Finally, in section 1.3, we will explore changing directions in multilingualism research, paying specific attention to multilingualism as the new linguistic dispensation (subsection 1.3.1) and Focus on Multilingualism (subsection 1.3.2). We will look at these new more recent paradigms in terms of their precursors, their key features, and how they expose the untenable nature of the monolingual perspective. However, before reaching this point we shall return to the beginning in order to elaborate the concept of multilingualism.

Aside from the obvious definition of ‘some level of receptive or productive capacity in more than one language’, what is the phenomenon of multilingualism? Edwards (1994: 1) states that it ‘is a powerful fact of life around the world, a circumstance arising, at the simplest level, from the need to communicate across speech communities’. He points out that rather than some kind of ‘aberration’, as many colonial-language monolinguals have a tendency to believe, multilingualism is, in reality, ‘a normal and unremarkable necessity for the majority in the world

today'. We know that the necessity for communication across speech communities has been a pervasive theme throughout human history but it has often been presented as an area exclusive to élite academic and diplomatic interaction; perhaps a result of Bonaparte's alleged affirmation "history is written by the winners". It is true, as Edwards points out, that in high-society 'multilingualism has always been encouraged' (1994: 3) and training in languages has always formed an important component of élite schooling. We can see this importance reflected in the following quotes: *notitia linguarum est prima porta sapientiae* (Roger Bacon, 1214-1294), and *quot linguas calles, tot homines vales* (Charles V, 1519-1556) (cited in: Edwards, 1994: 4). However, this traditional, historical perspective ignores the simple fact that it has always been necessary for ordinary people to bridge intercultural chasms through the use of multiple languages.

In a more recent article on the history of the phenomenon, Franceschini (2013) diverges from the traditional top-down historical perspective by defining multilingualism as 'the use of more than one language socially, or in everyday life by individuals or groups or in institutions', and by referring to it as 'a human potentiality which can be developed when circumstances permit it anywhere and at any time throughout human history' (2013: 2526). Both Edwards (1994) and Franceschini (2013) include in these 'circumstances' situations of direct contact; to name a few - immigration, colonial expansion, international trade, political union spanning diverse language groups, and living close to border areas. Franceschini states that 'how attitudes toward multilingualism have changed over time' is one of the most interesting areas of its history, and specifically how certain ideologies (i.e.: nationalism) have 'forced people toward monolingualism' (2013: 2527). Challenging the typical history of the élite multilingual, Franceschini points out that, due to early trade, the use of multiple languages has been a common and practical activity since medieval times or even earlier if one considers, for example, the practical needs of Sumerian civil servants or Roman soldiers. She states that 'for centuries, multilingual abilities were not highlighted because they were simply normal for doing

a job well' (2013: 2529) and that during this time, on the whole, attitudes to multilingualism were pragmatic and non-ideological.

The practical approach to multilingualism as the societal norm changed dramatically in the period of early modernity with the inception of the nation-state and the rise of its associated nationalisms; this has regrettably led to a monolingual bias which has been ubiquitous in linguistic research up until relatively recently. During the enlightenment, great steps forward in terms of scientific rationality led to attitudes of purism and homogenization which inevitably filtered down to the study of language and resulted in a serious step backward for multilingualism. The 17th and 18th century standardisation of grammars led to a rule-oriented (and ultimately, academic) form of language learning where mastery was seen in terms of attaining perfection; thus giving birth to the myth of the 'ideal' native speaker. Franceschini (2013: 2530) states that 'multilingualism was no longer part of a self-evident practice but was seen as an exceptional competence'; mastery of more than one language, dependant on the languages in question, was either celebrated as an élite achievement or disregarded as the domain of 'socially excluded minorities'. The final nail in the coffin, so to speak, came with the emergence of nation-states in the 19th century and the expansion of colonialism, both of which constituted an outright attack on multilingual communities as the homogenization of culture reached its peak.

Moving on to the modern day, we find that we are still dealing with the results of monolingual bias towards multilingualism at both individual and state levels. Edwards (1994: 35), at the time of writing, noted that only a quarter of the world's states recognised more than one language as official but it was 'perfectly clear that virtually none of the remaining three-quarters are anything like monolingual'. Jessner (2006: 1) puts this pervasive 'linguistic myopia' down to a combination of speaking (and, to my mind, identifying with) a powerful language used for wider communication combined with a narrow cultural awareness reinforced by state policies. The now outdated monolingual paradigm saw not only the multilingual as 'several monolinguals in one person' but also that their language systems were stored as

separate entities which interact in a subtractive sense. We are to be grateful for research from within bilingualism studies and SLA that has challenged these ideas and has been instrumental in the way forward for multilingualism: for example, the bilingual as competent speaker/hearer (Grosjean, 1985), and the theory of ‘multicompetence’ (Cook, 1991, 1992) and the notion of the L2 ‘user’ (Cook, 2002). Very recently we have even started to witness the incorporation of the multilingual perspective into some areas of SLA, recognising the mono-bias and urging an epistemic reorientation of the field through ‘usage-based linguistics’ (Ortega, 2010, 2014; May, 2014). This development, known as the bilingual or multilingual ‘turn’, has been described as ‘revolutionary’ by Kramsch (2012: 109) who explains that ‘it puts into question the whole monolingual foundation of theoretical and applied linguistics’.

Thus, it seems clear that over the last twenty years linguistic research has returned to the unavoidable truth that multilingualism is the global societal norm. An ever increasing number of scholars have theorised and are producing empirical research which eschews the monolingual perspective and embraces the, somewhat self-evident, idea that multilingualism should be studied from a multilingual perspective. In SLA the tendency has been to assimilate and subsume multilingualism research, the acquisition of other languages has been grouped under L2 and the acquisitional mechanisms and processes have been assumed to be the same (i.e.: Sharwood Smith, 1994; Gass, 1996). Conversely, from the current multilingual perspective, second language acquisition is seen as providing both a *process* (the learning) and a *product* (the language) which ‘can potentially exert influence on the acquisition of a third language’ and which ‘involves a quality change in language learning and processing’ (Jessner, 2006: 14). With all this in mind, the main question that will be dealt with over this chapter is: how did we get to where we are now? That is, how did we come to understand multilingualism as complex, dynamic and something quantitatively and qualitatively different to both monolingualism and bilingualism? In order to have a fuller understanding of the current state of multilingualism research we must necessarily explore the concept of complex dynamic systems.

1.1 Dynamic Systems Theory and complexity

‘Science exists to explain the fundamental order underlying nature’ explains Larsen-Freeman (1997: 141), who goes on to point out that ‘[t]he most valued explanations have taken the form of cause and effect linkages’. Cause and effect is the example *par excellence* of classical, linear, reductionist thinking, based on the principal of parsimony - the simplest underlying principles can and should be used to explain complex phenomena. Reductionism has served humanity well by providing the Scientific Method with a great deal of credibility; however, in the 20th century two fundamental theoretical developments necessitated a revision of the reductionist perspective. The first of these developments came from quantum physics in the form of Heisenberg’s (1930) Uncertainty Principal. The second came much later, most commonly known as ‘chaos theory’ but also theorised as *complexity theory*, *catastrophe theory* (Thorn, 1972), *plectics* (Gell-Mann, 1995) and *dynamical systems theory* (Abraham, 1994). Nominal differences aside, the common thread which holds these theories together is that they all attempt to explain complex adaptive systems without resorting to reductionism or determinism. While the Uncertainty Principal presents a micro-perspective, in that it is centred on individual particles, we can think of complexity theory as a macro-perspective, in that its focus is non-linear systems which are much larger and more complex (i.e.: the weather). Larsen-Freeman (1997: 142) assigns ten principal features to complex systems, they are: dynamic, complex, non-linear, chaotic, unpredictable, sensitive to initial conditions, open, self-organising, feedback sensitive, and adaptive. These characteristics were later expounded on by de Bot and Larsen-Freeman (2011: 9) as:

- a. Sensitive dependence on initial conditions
- b. Complete interconnectedness
- c. Nonlinearity in development
- d. Change through internal reorganization and interaction with the environment
- e. Dependence on internal and external resources
- f. Constant change, with chaotic variation sometimes, in which the systems only temporarily settle into “attractor states”
- g. Iteration, which means that the present level of development depends critically on the previous level of development
- h. Change caused by interaction with the environment and internal reorganization
- i. Emergent properties

It is evident *prima facie* that some of these features and characteristics are analogous not only to language *per se* but also to language learning and use, whether that involves an L1, L2, L3 or Lx. For this reason, as the goal of the current study is to analyse and understand the language attitudes of adolescent emergent multilinguals in a situation of language contact and the complexity that involves, we consider the theorisation of complex adaptive systems paramount to understanding the issues of multilingualism, multilinguality and multilingual practices in this context and, as such, complex dynamic systems will form our core theoretical framework.

According to Thelen and Smith (2006), complex dynamic systems can be most rudimentarily and generically understood as ‘systems of elements that change over time’; as such, *Dynamic Systems Theory* (henceforth: DST) is based on two recurring developmental themes:

1. Development can only be understood as the multiple, mutual, and continuous interaction of all levels of the developing system, from the molecular to the cultural.
2. Development can only be understood as nested processes that unfold over many timescales from milliseconds to years. (Thelen & Smith, 2006: 258)

Thelen and Smith (2006) see DST as a ‘metatheory’ which, in their words, is useful for ‘conceptualizing, operationalizing, and formalizing [...] complex interactions of time, substance, and process’ (2006: 258). Generally speaking, DST provides a framework for answering questions relating to the emergence of new behavioural patterns in an organism when no such pattern was present in its precursor, or, more specifically, questions such as where novelty comes from and how developing systems can apparently create something from nothing. Thelen and Smith, in line with Wolff (1987), propose that the answer to these questions can be found in processes of ‘self-organization’; they state:

By self-organization we mean that *pattern and order emerge from the interactions of the components of a complex system without explicit instructions*, either in the organism itself or from the environment. Self-organization – processes that by their own activities change themselves – is a fundamental property of living things. Form is constructed during developmental process. (Thelen & Smith, 2006: 259 – emphasis in original)

As mentioned above, DST is, in essence, antireductionist. In the physical sciences, classic reductionism breaks down a problem or system into its component parts which are analysed in isolation in order to reach the essential ‘stuff’. From a reductionist perspective *the simple is the source of the complex*, whereas from a systems-perspective *the whole is more than the sum of its parts*. A concept which Larsen-Freeman (1997), citing Waldrop (1992), elaborates thus:

The behavior of complex systems is more than a product of the behavior of its individual components. In complex systems, each component or agent ‘finds itself in an environment produced by its interactions with the other agents in the system. It is constantly acting and reacting to what the other agents are doing. And because of that, essentially nothing in its environment is fixed’ (Waldrop, 1992: 145). In other words, the behavior of complex systems emerges from the interactions of its components, it is not built in to any one component. (Larsen-Freeman, 1997: 143)

Essentially, Thelen and Smith (2006) propose that a systems theory approach brings ‘theoretical coherence’ to research areas which have been ‘beset by dialectics’; DST removes the element of duality from reductionist investigation and allows us to focus on ‘how the developing system works’ (2006: 307). DST facilitates a focus on development because it sees that systems interact on multiple levels and are not isolated from their environment; we can picture this as ‘complete connectedness’, which is a ‘default property of any system’ (van Geert, 1994: 50). To centre this in linguistics we can consider the difference between the monolingual, Chomskian perspective of *Universal Grammar* (Chomsky, 1965) and more recent multilingual perspectives (among others: de Bot *et al.*, 2007; Ellis, 2007; Jessner, 2006, 2008; Kramsch, 2002; Kramsch & Whiteside, 2008; Larsen-Freeman & Cameron, 2008; de Bot & Larsen-Freeman, 2011; Cenoz, 2013). Chomsky (1965) conceptualized a systematic and linear path to language acquisition; this generative view saw acquisition as a static and homogeneous process where learning took a chronological and predictable order leading to an ideal competence. Basically, the generative approach sees language as a closed system and analyses linguistic competence in isolation of factors such as cognitive conditions or sociolinguistic environment (Herdina & Jessner, 2002). Generative linguistics also separates competence from performance which we can consider to be the type of ‘either-or’ dialectic described by Thelen and Smith (2006). Conversely, the more up-to-date approaches mentioned above see language and language acquisition as a complex, adaptive, emergent, ecological and dynamic system which

affects and is affected by change in the wider environment and is prone to irregular development (growth as well as attrition) over time. This is the approach facilitated by systems theory.

Now that we have looked at complexity/DST and its relationship to language at a very general level we will explore in more depth how systems theory is an unavoidable approach in both natural and instructed developmental contexts before moving on to its place in third language acquisition and multilingualism research. However, before we move on, it is first necessary to explain some key systems theory characteristics.

1.1.1 Phase space, phase shifts, and attractors

Systems theory derives its explanatory power from certain fundamental components, before we continue it is important to understand some of the key terms used to describe them. First, 'phase space' which is an element of the mathematical map (phase map) on which the trajectory of a given system is plotted. At its most rudimentary, phase space represents *the totality of all possible states of a system*. Phase spaces are described by Briggs & Peat (1989: 33) as being 'composed of as many dimensions (or variables) as the scientist needs to describe a system's movement'. What this means is that the variables describing the system are used as axes to determine coordinates on the phase map. In a simple mechanical system (i.e.: a pendulum) the phase space is usually mapped using variables of position and velocity, whereas in a more complex ecological system, where more variables are necessary, one such variable could be population size or species. Likewise, in a linguistic system phase-space variables could include time, environment, number of languages involved, affective factors, or metalinguistic awareness, among many others. Phase space is used to help identify 'radical' behavioural changes in the otherwise rigid, repetitive movement of natural systems. Another related term is 'phase shift' (bifurcation) which shows that there is room for variability within a stable system and allows for the observation of more global systemic behaviour as systems are influenced by different 'attractor' phenomena. A system can show a certain degree of change while still

remaining 'stable' (continuous change), but it can also reach a certain point where a palpable change occurs, this is a 'phase shift' (discontinuous change). Cameron and Larsen-Freeman (2007: 229) point out that phase shifts are usually caused by external factors, stating that '[t]he states of the system before and after the shift are very different'.

An equally important term is 'attractor state' which is an area of phase space representing relative stability (caused by some sort of change in the system) or a preferred mode of behaviour that a given system shows a tendency to return to over time. An example is the pendulum, the two phase-map axes are velocity and position, moving in a frictionless state the pendulum will exhibit a circular behaviour (limit cycle attractor). The introduction of friction, an environmental change, will modify both velocity and position variables causing a new type of behaviour, we can now observe an inward moving spiral which eventually converges on a single point (spiral point attractor). Although, as Thelen and Smith (2006: 273) state, a pendulum 'has only one fixed point, biological systems commonly have more than one point attractor' which means that a biological system 'may reach one of the several possible equilibrium points, depending on the initial conditions'. Two further types of attractors describe systems with several degrees of freedom, predictable on the local level, but globally uncertain (limit torus attractor) and chaotic systems (strange attractor). Strange attractors best describe complex non-linear systems such as language, they occur when there exists a large fragmentation of point attractors and they show that a system is unstable or turbulent. Strange attractors are fractal in nature, plotted over large timescales, they display complex geometric structures, but show little or no predictability. Larsen-Freeman (1997) illustrates this using the metaphor of a tree (branches, twigs, leaves, and veins) which she explains is 'self-similar at different levels of scale'. While it is impossible to predict where each component will grow from the other, 'the combination of arboreal shape, location, [and] behavior, makes us unquestioningly recognize something as a tree' (1997: 146). This metaphor illustrates variability within a stable system; it means that there is a point at which the tree, through a transgression of its common characteristics (a phase shift) would no longer be recognizable as a tree.

It should be noted that there is an important difference between more stable attractors and their less stable counterparts (repellers); it is the interaction of these two types of attractors which produces the dynamic stability of a given system. A way to visualize this is to think of the hills and valleys of a potential landscape (see: *epigenetic landscape* - Waddington, 1957). If we take a ball which represents the state of the system and place it at the bottom of a valley, the ball will need a boost of energy relative to the depth of the valley in order to climb up its side; gravity ‘attracts’ the ball to the bottom of the valley and the interaction between gravity, the ball, and the valley creates a ‘stable mode of behavior that will be difficult to move out of’. On the contrary, if we place the ball at the top of a hill it will have a great deal of potential energy and the slightest push will send the ball rolling down the hill; the ball interacts with gravity and the hill to create an ‘unstable mode of behavior that will require effort to maintain for any length of time’ (Cameron & Larsen-Freeman, 2007: 229). The potential landscape may have any permutation of hills and valleys depending on its developmental history, Thelen and Smith (2006) posit that over time all ‘balls’ (system states) in the landscape will inevitably end up in the deepest valleys, but Cameron and Larsen-Freeman (2007: 229) suggest that the balls may move along calmly, avoiding hills and valleys, but then suddenly be pulled into an attractor state during a ‘more dramatic phase shift’; they argue that ‘the system is changed by its move into the attractor – new patterns emerge’. As a final comment on attractors, we should be aware that some may be stronger than others, that is, certain attractors may be powerful enough on their own to pull a system into a state of relative stability or order for a certain amount of time. However, other attractors, while not so strong individually, may form part of a larger conglomerate depending on the circumstances of the system; these conglomerates are called ‘attractor basins’ and working together they can exert a very powerful influence (Dörnyei, 2014).

In summary, phase space, phase shifts and attractors afford us the ability to plot the coordinates of a system’s variables over a set amount of time; this produces an image which we

can understand as the ‘trajectory of the system’. In short, the ideas discussed in this section are useful for characterizing a system’s behaviour over the course of its development, and for comparing the behaviour of two or more systems. As this chapter progresses it will become apparent how certain aspects of language development and language systems are related to these key systems theory concepts. In the next section we will begin to illustrate the application of systems theory to the discipline of linguistics by exploring the complexity of language in natural settings.

1.1.2 Systems theory and language in natural settings

When dealing with the development of an organism, a systems theory approach assumes that the organism not only becomes physically bigger but also, and more importantly, it becomes increasingly complex. As mentioned before systems theory aims to understand how developing systems can evidently ‘create something from nothing’; Thelen and Smith (2006) illustrate this concept by describing the development of a child’s perceptual system:

The 3-month-old infant who stops tracking a moving object when it goes out of sight becomes an 8-year-old child who can read a map and understand symbolically represented locations, and, later, an 18-year-old student who can understand and even create formal theories of space and geometry. (2006: 259)

In this example we can clearly see that the child, the organism whose genesis was a single cell, has not only experienced considerable physical growth, but also their conceptual system has become increasingly complex. We can see how Thelen and Smith’s example can be applied to natural language development when we consider systems theory in relation to research by Nippold (2006). In her work, Nippold explains that as a child grows, passes through adolescence and becomes an adult, there is not only an augmentation of vocabulary but also an increasing degree of complexity in lexical, semantic, syntactic and pragmatic development. In terms of lexical development, Nippold illustrates the increasing complexity of the strategies which older children (around 12 years) begin to employ in order to infer the meaning of a word ‘from the broader linguistic context in which it occurs’ (2006: 369). As a young language user grows, so grows their ability to define increasingly difficult words using Aristotelian deductive

reasoning; an older child is able to define concrete nouns (i.e.: *table*), using this method which by adolescence has increased in its complexity sufficiently to allow for the definition of abstract nouns (i.e.: *freedom*). In terms of semantic development, Nippold explains the process of understanding figurative expressions such as proverbs and metaphors. This process starts in early childhood and continually develops over an individual's lifespan; in fact the linguistic strategies involved in understanding figurative expressions (contextual abstraction, metalexical analysis, and world experience) are closely related to systems theory, not only in that they develop over time, but also in that they show how the development of the individual's communicative competence is modified by a convergence of complex dynamic systems (linguistic, lexical, and real-world contexts).

Another natural language example is 'caretaker language', also known as child-directed speech. We know that parents and caretakers modify their speech, above all syntactically, when addressing young children, so how is it possible for a child to gain linguistic command that is more than the sum total of the input they receive? Ninio (2011) uses complexity theory to address the issue of L1 syntactical development in young children, she argues that language is networked and new speakers must be considered 'new nodes in an existing complex network' (2011: 2). Her argument is that in learning to produce syntactic combinations, children neither reinvent nor internalize language, they instead 'link to a network of other speakers producing similar combinations' (2011: 3). She posits that, due to the inherent self-organisation of complex dynamic systems, '[r]ather than being impacted in some passive way by the linguistic input, children are thought to be responsible for the self-organization of their own language system and for causing it to be similar to that of adults in its global features' (2011:4). Child-directed speech is linked to the concept of 'scaffolding' which grew from Vygotsky's (1934/1978) *Zone of Proximal Development*. The zone of proximal development describes the area between what a learner can achieve on their own and what they can achieve with the support of a more knowledgeable peer; within the zone of proximal development, scaffolding refers to support given in the learning process which is tailored to learner needs, that is,

incrementally removed as the learner becomes able to learn in deeper and more autonomous ways. From a developmental psychology perspective, van Geert and Steenbeek (2005) illustrate how scaffolding is a dynamic phenomenon in that it comprises a 'coupled' dynamic system (learner level determines scaffolding level and vice versa) which develops over time. They suggest that the scaffolding provides an attractor which moves the learner's level towards it; however, as the system is dynamic, the learner's level also provides a repeller to the scaffold, progressively pushing it up to a level just beyond the learner's current knowledge. If we relate this idea back to Ninio's (2011) concept of the network we can extrapolate individual scaffolding to a societal level; that is, the network as a kind of 'social scaffolding'. Vygotsky (1978) believed that cognitive skills are not innate but are rather products of established sociocultural practices, he proposed that functions of child development appeared first on the interpsychological level (between people) and then on the intrapsychological level (within the individual); therefore, in language learning, we can assume that authentic environment and participant affinity are essential elements. De Bot *et al.* (2013) point out that Vygotskian and post-Vygotskian perspectives have been 'usefully augmented' by views which characterize language as a complex adaptive system; taking into account that society cannot be understood without considering the agency of its members, they state that 'human mental development is dynamically and non-linearly constructed through engagement with the historical accumulation of culture' (2013: 204).

Complex non-linear systems and language have much in common in terms of their synchronic (fixed point in time) and diachronic (change over time) qualities. The synchronic quality of language is related to process; 'language can be described as an aggregation of static units or products, but their use in actual speech involves an active process' (Larsen-Freeman, 1997: 147). In other words, language is more than the sum of its parts, it is not merely the written or spoken product, but it is to be identified as the living capacity to produce and understand utterances (Robins, 1967). The diachronic quality of language is related to growth and change; that language evolves over time and its periods of growth and decline can occur

independently of its speakers. Larsen-Freeman (1997) points out that as new forms enter and leave languages in a non-uniform, non-incremental fashion, they are not completely predictable and we can only anticipate what new forms will occur. She states, ‘the best we can do is explain the occurrence of change *a posteriori*, not actually look at the language and make exact predictions of what change will transpire next’ (1997: 148). However, she also argues that there is a third similarity between complex non-linear systems and language, one which amalgamates the previous two and makes no distinction between them; she posits that ‘*every time language is used, it changes*’ (my emphasis; similar claims are found in both Ninio, 2006, and Kecskés, 2010). Citing Diller (1995), she states:

As I write this sentence, and as you read it, we are changing English. ‘The act of using the language meaningfully has a way of changing the grammar system in the user’ [Diller, 1995: 116]. Moreover, as the user’s grammar is changed, this sets in motion a process, which may lead to change at the global level. Rather than using rules to shape discourse, the rules themselves are shaped by the discourse. Thus, the behaviour of the system as a whole is the result of the aggregate of local interactions. ‘A language such as English is a collaborative effort of its speakers, and changes in the system of English are “emergent”’ [Diller, 1995: 117]. (Larsen-Freeman, 1997: 148)

Here, Larsen-Freeman agrees with earlier claims that syntactic structures can be learnt from participation in conversation (see: Hatch, 1978). For this reason she argues that competence and performance must be studied in conjunction if we are to be, in her words, ‘faithful to the reality of language’. Cameron & Larsen-Freeman (2007: 230) agree, proposing that a systems perspective ‘dissolves dichotomies that have been axiomatic in linguistics [and have] contributed to static conceptualisations of language’. We can understand that these ‘static conceptualisations’, at least in part, refer to Chomsky’s (1965) competence/performance dichotomy which was later reworded as I-language (internal) and E-language (external) (Chomsky, 1986) although the essential dividing line itself was not readdressed.

As mentioned earlier, Chomsky’s generative grammar separates competence from performance (concentrating on the former) and examines language in isolation from the external sociocultural and internal psychological systems with which it interacts. What is problematic about the Chomskian view is that it treats language as an essentially asocial

phenomenon; a language of the mind ('the grammar in a person's mind/brain is real [...] the language (whatever that may be) is not' – Chomsky, 1982: 5). Universal Grammar argues that due to a 'poverty of the stimulus' (i.e.: the 'primary linguistic data' being too limited and containing only 'positive evidence'), humans must be born in possession of an innate ability to understand linguistic structure, in other words, a *Language Acquisition Device*. This is based on the premise that language users are 'creative' because they can produce extemporaneous utterances that they have never heard before, and that due to shared limitations of structure and form (universal linguistic principles), language acquisition is unconsciously guided by 'natural constraints' which impede the making of hypotheses that cannot be corrected through inference from the primary linguistic data.

Universal Grammar has been challenged by language acquisition theories which, in one way or another, take a more complex and dynamic approach. One prominent example, *Usage-Based Grammar* (Tomasello, 2003), posits that natural language acquisition can be better explained by the general, non-language specific, skills of 'intention-reading' and 'pattern-finding' (and also the more particular skills of cultural learning, schematization, entrenchment, and functionally based distributional analysis). Usage-Based Grammar also supposes that the primary linguistic data are much richer than Chomsky originally envisaged and also include semantic and contextual information. Moreover, corrective feedback between infants and caregivers is often implicit (Bohannon & Stanowicz, 1988) and may actually be dynamic (Vygotsky, 1978; Geert & Steenbeek, 2005). A usage-based perspective argues that language processing comes from language use; the grammar itself is a by-product of this process. According to Tomasello (2003), language acquisition is a cognitive process; he accounts for 'linguistic universals' in this way because all humans use the same cognitive processes.

An earlier example is *Emergent Grammar* (Hopper, 1998) which, in line with Tomasello (2003), moves grammar from centre-stage to the periphery, proposing that it is a by-product of communication rather than its source. Emergent Grammar refutes an 'abstract grammar' in the mind (Chomsky's 'competence'), and instead claims that constructions and

expressions are part of a network and are formed through an *iterative* process, that is, repetition until a condition is met (Evans & Levinson, 2009). Hopper (1998: 156) states ‘The notion of Emergent Grammar is meant to suggest that structure, or regularity, comes out of discourse and is shaped by discourse in an ongoing process. Grammar is, in this view, simply the name for certain categories of observed repetitions in discourse [...] not to be understood as a prerequisite for discourse’. He suggests that grammar emerges from face-to-face interaction, individual past experience of structural forms, and present assessment of the context. This idea of regular patterns resulting from dynamic contact and language use over time is in line with some of the ideas discussed above (Hatch, 1978; Diller, 1995; Larsen-Freeman, 1997; Cameron & Larsen-Freeman, 2007; Ninio, 2011). Emergent Grammar is also in line with systems theory principles in that it assumes that ‘the present level of change depends critically on the previous level of change’ (de Bot *et al.*, 2013: 210).

A systems perspective also challenges the Universal Grammar concepts of user creativity and natural constraints. Viewed as a complex adaptive system, established patterns of language are prone to non-linear change through usage (Larsen-Freeman, 1997; de Bot *et al.*, 2013), this can start as a localised change in one part of the linguistic system and over time can spread to affect other parts of the system. Reflecting Lorenz’s (1963) ‘butterfly effect’, de Bot *et al.* (2013: 210) point out that ‘complex patterns do not have to be innate, because they can also emerge through small iterations’. Furthermore, a systems perspective posits that systems will begin to self-organize as they are influenced by attractors. New linguistic structures and forms may develop in this way, so language creates something from nothing and its limits and constraints are subject to a constant state of flux. In short, while looking at natural language acquisition through a complexity lens does not refute the idea that we may have an innate sensitivity to syntactic structure or propensity to some kind of grammatical knowledge, it does strongly reject the ‘modularity of mind’ concept that this capacity is isolated from other more general cognitive functions. In place of modularity, systems theory sees embedded and

interacting subsystems with fuzzy borders where both internal and external resources converge in synergic union.

As a final word on the rich, complex, and dynamic nature of language, The Five Graces Group (Beckner *et al.*, 2009), in concluding the paper *Language is a Complex Adaptive System*, illustrate how the complex interplay of various elements related to language produce patterns where one would expect to see ‘anarchy and chaos’, they state:

Cognition, consciousness, experience, embodiment, brain, self, human interaction, society, culture, and history are all inextricably intertwined in rich, complex, and dynamic ways in language. Everything is connected. Yet despite this complexity, despite its lack of overt government, instead of anarchy and chaos, there are patterns everywhere. Linguistic patterns are not preordained by God, genes, school curriculum, or other human policy. Instead, they are emergent – synchronic patterns of linguistic organization at numerous levels (phonology, lexis, syntax, semantics, pragmatics, discourse, genre, etc.), dynamic patterns of usage, diachronic patterns of language change (linguistic cycles of grammaticalization, pidginization, creolization, etc.), ontogenetic developmental patterns in child language acquisition, global geopolitical patterns of language growth and decline, dominance and loss, and so forth. *We cannot understand these phenomena unless we understand their interplay.* (2009: 18 – my emphasis)

In summary, a systems perspective provides a powerful tool for moving beyond static conceptualizations of language development. Through systems theory we are able to consider the effects of a range of internal and external factors and their synchronic and diachronic interaction with language itself. We are able to view competence and performance not as dichotomy but as *synergy*. We are able to understand society as a constantly evolving network and the supportive role it plays in language development. Finally, we are able to see how language, as a complex adaptive system, is able to produce something from nothing. Now that we have examined the role of systems theory in language in natural settings, we will move on to see some of the ways in which ways complexity concerns language in instructed settings.

1.1.3 Systems theory and language in instructed settings

Regarding language learning in instructed settings, usually studied as SLA, systems theory has been described as providing a framework which ‘allows us to merge the social and cognitive aspects of SLA and shows how their interaction can lead to development’ (de Bot *et al.*, 2007: 19); rather it has the power to unify L2 development theories which ‘tend to focus on

social, cognitive, or contextual issues in relative isolation' (de Bot *et al.*, 2013: 200). Communicative creativity, from this view, comes from the agency of interlocutors as they negotiate and co-construct meaning, taking their place in a nested system which connects cognitive, social and environmental factors. As with other complex systems, L2 development depends on the initial conditions available (i.e.: cognitive and environmental resources), sub-systems affect each other over time and not all of them develop at an equal rate or require the same maintenance effort. Finally, in contrast to traditional statistical studies, systems theory engages the 'messy little details' of SLA and attempts to explain and quantify issues of variation, development, and attrition without generalising over large groups. The balance of this section will look at some of the ways in which systems-thinking and the principles mentioned above have been applied to language development in instructed settings.

Traditionally SLA has taken its cues from the models developed in the physical sciences, such as Behaviourism, which lead to a cause-effect perspective of L2 learning as something predictable, linear, and restrained by rules and conditions. According to Finch (2004), models such as Audiolingual, Behaviourist, and Information Processing perspectives gave way to more complex and qualitative approaches as dissatisfaction with isolationism became increasingly more apparent. He points out that in the teaching of English as an L2 some noticeable developments have been: 1) the implication of task-based and communicative approaches, 2) the rise of authenticity, autonomy, affect, and environment as 'crucial concepts', 3) the move beyond pure linguistic categories to dichotomies which better reflect the learning context (active/passive, teacher/learner-centred, etc.), and 4) the growth in the importance and explanatory power of disciplines such as sociolinguistics and psycholinguistics. Finch (2004: 29) proposes a systems approach to the L2 classroom, he suggests that all participants (students and teachers) are 'individual systems, [...] subject to their own influences and dependencies'. We can understand classroom participants as systems in that they are 'unique' collections of needs, wants, preferences, experiences, beliefs, skills, emotions, styles, intelligences, perceptions, and attitudes, all of which interact with external systems (such as: family, peers,

media, communications technology, etc.) and are nested within a series of wider institutional systems (classroom, school, educational system, local and national governmental systems, etc.). Furthermore, as Finch (2004: 29) points out, the way these systems interact ‘is probability-based, being non-predictable at the local level, and leading to the emergence of learning structures, which are not simply the sum of their constituent parts’; in other words, interaction and change over time produce emergent, system-specific qualities. In the L2 classroom, systems theory shows that neither the Innatist nor the Behaviourist positions can fully account for language acquisition because, as van Lier (1996: 170) states, ‘learning is the result of complex (and contingent) interactions between individual and environment’.

Shanker & King’s (2002) metaphor of the ‘fax machine’ and ‘the dance’ illustrates how a systems approach diverges from Information Processing (which itself is often associated with Universal Grammar); their research is centred in ape language but can easily be applied to human language instruction contexts. Information Processing sees communication as if it were an exchange of information between two fax machines; interlocutors act as sender and receiver of information which is encoded and decoded using a system common to both. Fundamentally, Information Processing ‘treats communication as a *sequential* process in which partners take turns emitting and processing one another’s messages’ (Shanker & King, 2002: 605). Conversely, systems-thinking sees communication as a delicate dance which is constantly negotiated while in progress. Although the dancers’ individual steps are limited, when coordinated in dyads they can produce increasingly complex patterns based on their ongoing dynamic negotiations. Moreover, contact between different dyads may result in even more complicated and unpredictable patterns over the course of the dance. Thus, in communication, dyad interaction is ‘multimodal’, in that ‘voice, rhythm and facial expressions interact to create mutual understanding and agreement on steps to take’ (de Bot *et al.*, 2007: 9). Like dancers, interlocutors experience moments of synchrony and asynchrony; aiming at successful communication interlocutors engage in constant negotiation and self-adaption in order to repair breakdowns. De Bot *et al.* (2007: 10) conclude that rather than a ‘linear, binary sequence of

events', systems-thinking sees L2 communication in terms of 'engagement and disengagement, synchrony and discord, breakdown and repair in interaction, and the properties that emerge from it'. This kind of co-construction illustrates another example of the divergence between, on the one hand, Information Processing and, on the other, systems theory applied to SLA. Whereas the former supposes that words themselves are the carriers and containers of meaning, the latter sees words as prompts to engage interlocutors in the construction of meaning (Waters & Wilcox, 2002).

Ellis (2008a) takes an Emergentist perspective on cycles of L2 use, change, and acquisition. His 'dynamic cycle' consists of four parts: 1) usage leads to change; 2) change affects perception; 3) perception affects learning; and 4) learning affects usage. He sums up the first three quite succinctly: 1) 'high frequency use of grammatical functors causes their phonological erosion and homonymy'; 2) 'phonologically reduced cues are hard to perceive'; and 3) 'low salience cues are difficult to learn [...] because of the low contingency of their form-function association' (2008a: 233). However, the last part of the cycle is the most interesting from a systems-perspective as it reinforces the claim that as we use language we change it (Larsen-Freeman, 1997), and also provides an illustration of attractors in L2 development. Differentiating between naturalistic and form-focused instructional contexts, Ellis points out that in the former 'grammatical intricacies' can be simplified whereas in the latter this simplification can be avoided by socially recruited 'dialectic forces' which help promote language maintenance. Older and more isolated languages are more complex, subject to a form of 'stasis' which allows them to develop left-over features not required for exchange and expression. A point in case, one which illustrates an L2 attractor, is the English third person -s suffix. English is now spoken by more Non-Native (henceforth: NNS) than Native (henceforth: NS) speakers (Graddol, 2000) and an observed feature in NNS use is the dropping of the third person -s (Seidlhofer, 2004); after all, "she speak well" is perfectly understandable even though it may be jarring to the ears of NS.

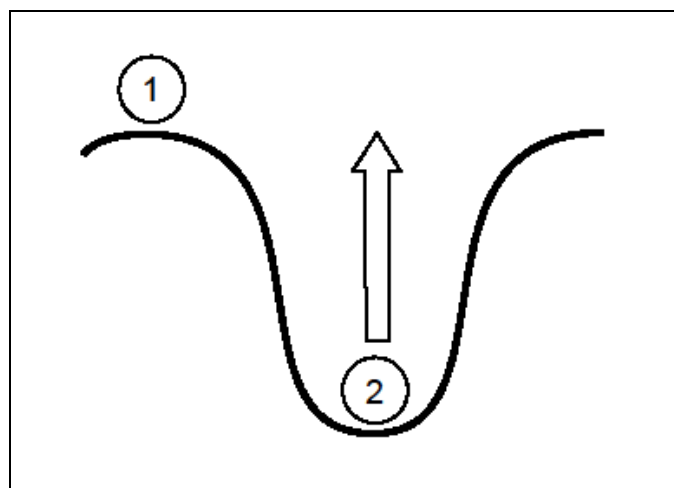


Figure 1: Visualisation of an attractor in L2 development

Relating this to systems theory, imagine a steep curve representing an attractor (see: figure 1), ball 2 at the bottom represents the dropping of the -s, whereas ball 1 at the top represents the maintenance of the -s (more difficult and less logical from the perspective of a NNS). Ball 2 is under the influence of an attractor for NNS learning and using English; that is, abbreviating standard grammar based on the way L2 input data is attended to. The arrow, representing explicit learning or contact with NS, attempts to maintain the ‘stasis’ of the grammatical rule; it indicates socio-interactional or pedagogical reactions (dialectic force) which provides NNS with additional evidence through focus on form. This is a ‘conscious dialectic tension’ between interlanguage production and feedback which allows ‘socially scaffolded development’ (Ellis, 2008a: 340). From a systems-perspective, L2 development is ‘socially constructed [and] honed by social discourse’; by adapting itself to its speakers, adult language learning in instructed settings ‘changes the very nature of language itself’ (Ellis, 2008a: 239).

In a study by Verspoor *et al.* (2008), systems theory makes an important point about variability in L2 development. It shows how a systems-approach can reveal otherwise hidden patterns in data which (due to their variability) could be underrated or simply discarded. As complex dynamic systems are characterized by interacting subsystems which change over time, the observed degree of variability can indicate the overall stability of the system. This means

that data which does not follow the predicted pattern is still useful as ‘a relatively unstable period is often a sign that the system is changing’ (2008: 215), thus looking at variable data from a systems-perspective could reveal otherwise hidden developmental processes. The study presents data from English academic texts written over three years by a Dutch university student; the aim was to measure use of vocabulary, lexical creativity and sentence complexity. The results showed quite a degree of variability but we will focus here on just one variable, average word length, which showed a general increase. The researchers were not fully satisfied with this result as the raw plotted data showed little clear structure which they felt was not an adequate characterization of the student’s development. In order to look for transitional stages the researchers reinterpreted the data by applying a timeframe to see if the variability over time was developmentally meaningful. Three clear stages appeared: first, a stage of relative stability with a low development (word length shortened consistently); second, a highly turbulent stage with daily fluctuations in performance; and finally, a highly stable stage of high development. Verspoor *et al.* (2008: 222) state that this is ‘a “classic” example of a stepwise developmental process, with a period of enlarged variability as a transition phase between the two stages’. Their study showed variability as an ‘intrinsic and central property of a self-organizing, dynamic system’, the amount and type of which ‘can reveal the actual developmental process’ (2008: 229); it also demonstrated that, even in advanced learners, development is non-linear and characterized by stages of progress and regress. Verspoor *et al.* (2008: 229) conclude that, while a systems theory approach should not replace other means of testing L2 variability, ‘it is a crucial and indispensable step toward our understanding of an L2 as a dynamic system and that a close look at variability from a DST perspective may help us discover developmental patterns that otherwise would remain hidden’.

Finally, some voices in SLA are quite critical of systems theory, and it is easy to see how this is a legitimate concern. Because of the lack of linearity and the lack of cause and effect relationships, some scholars believe that taking a systems-approach is a gimmick which may lower the prestige of our discipline through the publication of spurious results, or a convenient

'catch all' used for findings we can't explain; "I don't know how to interpret this result, so it *must* be dynamic". Even as late as 2010 little empirical research has been published. In fact, as Dörnyei, MacIntyre and Henry (2014: 1 – emphasis in original) point out, ‘scholars spent more time *talking* about research in a dynamic systems vein than actually *doing* it’. While these are perfectly valid criticisms we should be careful not to throw the baby out with the bathwater. It seems that one major problem with systems-perspective research is the relative absence of an established theoretical framework for researchers to follow. However, given the evidently complex and dynamic nature of language development, especially in bilingual and multilingual contexts, our perseverance would benefit future researchers, even if that means moving the mountain one stone at a time. In fact, the persistence of systems theory as an intriguing line of enquiry is evidenced by its continuing presence in some of the most state-of-the-art SLA research.

There are currently a number of projects worthy of mention which attempt to provide empirical evidence and establish the tools, frameworks, and paradigms necessary to advance second language development research from a systems perspective; leading the way in this regard are the edited volumes from Verspoor, de Bot and Lowie (2011) and Dörnyei, MacIntyre and Henry (2014). Some stand-out examples of this recent research include: MacIntyre and Legatto’s (2011) ‘idiodynamic’ perspective on willingness to communicate, which highlighted the interconnectedness between linguistic, social, cognitive, and emotional systems, and that harmony or discord between these systems may attract or repel communicative volition; Dörnyei’s (2014) Retrodictive Qualitative Modelling (RQM), which attempts to operationalise SLA research from a dynamic perspective by offering ‘a systematic method of describing how the salient components within a dynamic system interact with each other to create unique development paths [...] that lead to system-specific outcomes as opposed to other possible outcomes’ (2014: 90); Chan, Dörnyei and Henry’s (2014) RQM inspired approach to language learning motivation, which was able to, first, identify learner archetypes and, second, reveal that periodic movement between attractor states was an essential underlying mechanism of the

learner as a dynamic system; Mercer's (2014) application of Social Network Analysis, which attempts to account for cognitive, affective and motivational, aspects of human agency and making system dynamics research more manageable by investigating relational characteristics while maintaining a holistic, interconnected, and situated perspective; and, finally, more general work on methodology by de Bot and Larsen-Freeman (2011) which has been mentioned earlier in this chapter.

In summary, this section has illustrated some instances of systems-thinking in SLA research. We have seen how the L2 classroom is an emergent and interactive system, how L2 communication is a co-constructed, multimodal practice characterized by the interplay between synchrony and asynchrony, how L2 development consists of dynamic cycles and is sensitive to attractors to reach and maintain system stability, and finally how a systems-perspective accounts for change and variability in L2 development thus forcing us to rethink and reinterpret results which may otherwise be discarded as 'bad data'. We have also explained that, although not universally accepted, the application of systems theory still has a lot to offer and, as such, language learning and development research is still far from throwing in the dynamic towel! At the beginning of this chapter we posed the question of how we got to the current understanding of third language acquisition and multilingualism as qualitatively and quantitatively distinct phenomena to their counterparts in both natural and instructed settings. The last two sections have focused on various examples of the application of systems theory to language itself and to language development; without doubt, they are truly complex and dynamic phenomena. The problem up to now is that both traditional linguistics and SLA have taken a monolingual perspective (acquisition is consecutive, linear, and aims at ideal native proficiency), where multilingualism has been dealt with it has been subsumed as a part of SLA (Sharwood-Smith, 1994; Gass, 1996). In an attempt to explain and justify the multilingual perspective, the following section will deal with the application of systems theory to third language acquisition; that is, a dynamic model of multilingualism.

1.2 Systems theory and multilingualism: a dynamic model

Jessner (2008a: 21-26) points out that research into third language acquisition (henceforth: TLA) and multilingualism has been greatly influenced by a number of models which, in one way or another, took a more dynamic perspective. Such models include: *multilingual processing* (de Bot, 1992; Clyne, 2003) which advanced Levelt's (1989) monolingual speech production model with the addition of a monitor and proposed that language choice was influenced by social and motivational factors; *the activation/inhibition model* (Green, 1986, 1998) which showed that a bilingual's languages are active or dormant (rather than switched on or off) and are selected to varying degrees to interact with the speech processor through the supervision of language tags which allow for the suppression of competing lemmas; *the language mode hypothesis* (Grosjean, 1998, 2001) which posits that multilingual speech situations are subject to variation and that, contingent on a variety of factors, multilinguals will activate not only the type but also the amount of languages they require in a given situation and therefore put themselves in mono-, bi-, or multilingual 'mode'; *the factor model* (Hufeisen, 1998; Hufeisen & Marx, 2007) which explains the controlling or influential factors in multiple language acquisition (neuropsychological, external, affective, cognitive, and linguistic) and posits that TLA is qualitatively different to SLA because in the latter prior language learning experience (foreign language specific factors) is not present; *the multilingual processing model* (Meißner, 2004) which proposes that learners rely on previously learned languages to build hypotheses about topologically similar new ones, creating a type of 'spontaneous grammar' which they constantly revise in order to reach the structures and lexis of the TL; and *multilinguality* (Aronin & Ó Laoire, 2004), an ecological model, which, instead of processes and results, focuses on the 'multilingual communicator' and their social and physiological environment. However, in the current section we will focus on perhaps the most comprehensive model relating systems theory to multilingualism and TLA, Herdina and Jessner's (2002) *Dynamic Model of Multilingualism* (henceforth: DMM).

Herdina and Jessner (2002: 2) explain their DMM as ‘a psycholinguistic model which sees language change on an individual level as a function of time [in which] a focus is placed on the variability and dynamics of the individual speaker system’, pointing out that this aspect of multilingualism had previously been widely ignored. They argue that:

DMM takes an innovative approach to the subject matter in at least two ways: firstly, and in accordance with systems-theoretic principals, DMM views a multilingual speaker as a complex psycholinguistic system comprising individual language systems (LS₁, LS₂, LS₃, etc.) and consequently applies insights gained from the observation of the biological development and behavior of living organisms to research on multilingualism. Secondly, DMM tries to create an explicit model of multilingualism specifying dependant and independent variables and making predictions about the development of multilingual systems. (2002: 2-3)

In part, the idea of the DMM is to offer a framework for multilingual competence to be evaluated according to multilingual standards. Herdina and Jessner (2002: 7) justify the need for this approach by pointing out that in child SLA research a great deal of studies (including recent ones) seem to demonstrate the cognitive and linguistic ‘inferiority’ of bilingual children; they go on to state that ‘as long as bilinguals are measured according to monolingual criteria, they appear to be greatly disadvantaged in both linguistic and cognitive terms’. The overall goals of the DMM are laid out in the table below (table 1):

<i>DMM goal:</i>	<i>Herdina & Jessner’s perspective:</i>
1) To serve as a bridge between SLA research and Multilingualism Research.	The distinction between SLA and multilingualism research is ‘superfluous’ because they are ‘assumed to obey the same principles’.
2) To indicate that future language acquisition studies should go beyond studies of the contact between two languages, turning their attention towards trilingualism and other forms of multilingualism.	Multilingual systems display ‘ongoing development’ which is an aspect that ‘traditional contrastive approaches’ have drawn attention away from.
3) To overcome the implicit or explicit monolingual bias of multilingualism research through the development of an autonomous model of multilingualism.	Multilingualism research results and predictions are ‘distorted’ because it has relied too much on FLA and SLA findings which focus on L1 or L2 instead of LS1 and LS2 (language systems) that are ‘interdependent’ and form ‘part of an overall multicomponential psycholinguistic system’.
4) To provide a scientific means of predicting multilingual development on the basis of factors assumed to be involved.	Because ‘developmental aspects’ have not been a prime object of multilingualism research it has been ‘hampered’ by a lack of an underlying concept of multilingual acquisition. The ability to model multilingual development over time is a ‘necessary prerequisite’ to a ‘methodologically adequate approach’ to the phenomenon and its individual factors.

<p>5) To provide a theory of multilingualism with greater explanatory power.</p>	<p>DMM has the following two advantages over other multilingual models:</p> <p>1) it is an <i>explicit</i> model, so it allows predictions to be made and it may be modified to correspond to the data obtained - it provides a theoretical framework to integrate FLA and SLA findings, which can then be extend to cover TLA - it can explain interaction phenomena and positive and negative language growth.</p> <p>2) it is a <i>dynamic</i> model, so it does not stop at the description of how individual factors relate to each other but rather models multilingual system development over time.</p>
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Table 1: Goals of the DMM (Herdina & Jessner, 2002: 86-87)

Jessner (2008) points out that a defining feature of the DMM is that it shifts the focus from individual languages to the ‘development of individual language systems’ (2008b: 273) which, in her view, are ‘open’, ‘autonomous’ and depend on ‘psychological and social factors’ (2008a: 26). So, what constitutes a language *system* (henceforth: LS)? We can understand LS as all the necessary aspects to communicate using a given language. As a psycholinguistic system, this could include the lexis itself, elements of structure (syntax and morphology), elements of production (phonology), elements of meaning (semantics and pragmatics), and elements belonging to the affective domain (for example, attitudes). Cameron & Larsen-Freeman (2007) also include external factors when they propose that LSs comprise of linguistic, cognitive, physical, social, and affective interacting sub-systems. Some of these elements are more ‘stable’ than others and, from a systems-perspective, the whole LS not only interacts internally but also externally with the speaker and the environment and develops over time. Of course, communication requires more than one interlocutor, each having their own distinct relationship between LS, environment and time. Thus, when two (or more) interlocutors come together to communicate we can consider this an environmental change as they coincide and interact (figure 2); as such, when language is used in a dialogue it is ‘a property of the coupled system of the conversation and not a property of the individual speakers’ (Cameron & Larsen-Freeman, 2007: 234). In bilingual and multilingual speakers the relationships are necessarily more complicated due to the presence of two or more interacting and competing LSs which also interact with the variables of interlocutor, environment and time (figure 3).

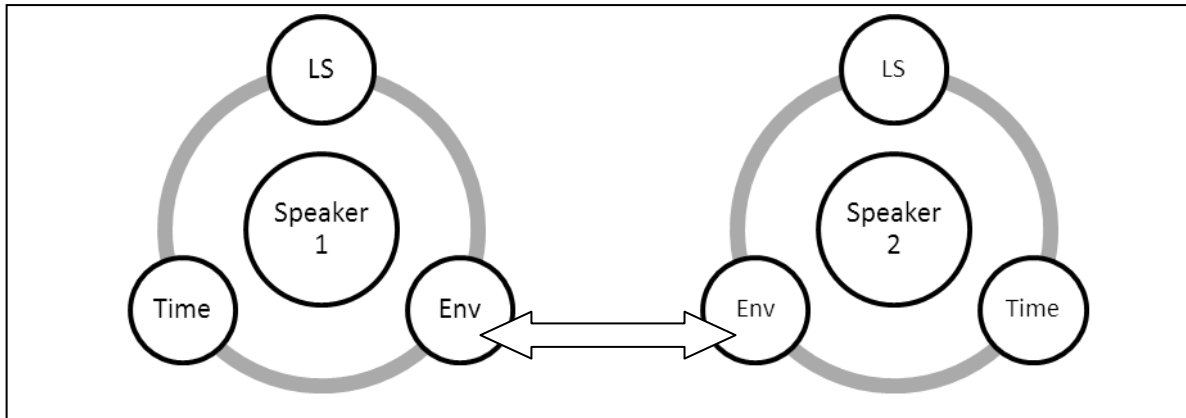


Figure 2: Dialogue as an environmental change in language systems

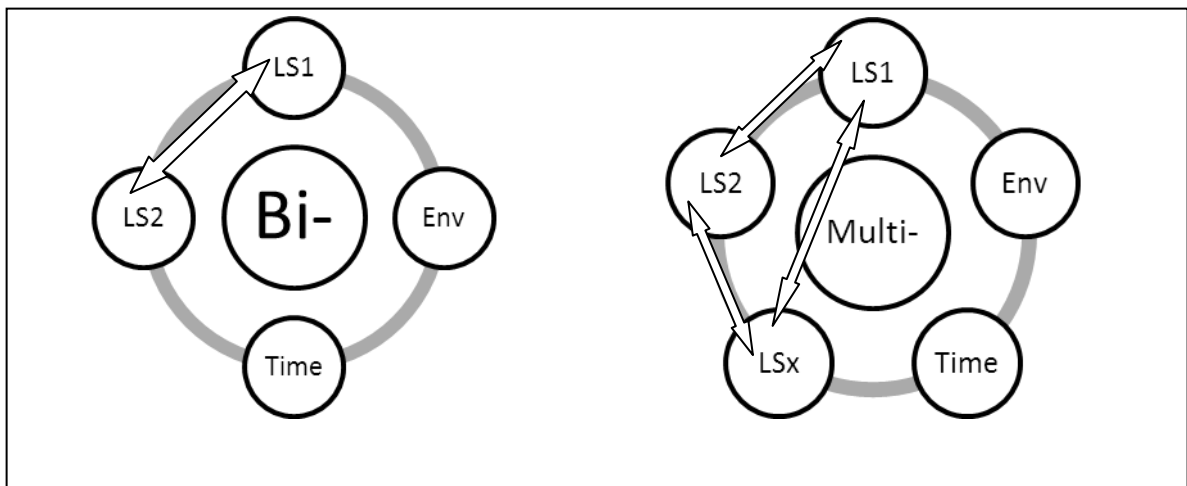


Figure 3: Additional complexity in bilingual and multilingual language systems

The figures above provide a somewhat rudimentary illustration of the complex system of multilingualism *in use*, but we must also consider the complexity of acquisition. Cenoz (2000) and Jessner (2006, 2008b, 2013) show that there are four possible routes of TLA, as opposed to two in SLA: 1) three languages learned consecutively ($L1 \rightarrow L2 \rightarrow L3$), 2) three languages learned simultaneously ($Lx/Ly/Lz$), 3) L1 and L2 learned simultaneously before L3 ($Lx/Ly \rightarrow L3$), and 4) L2 and L3 learned simultaneously after L1 ($L1 \rightarrow Lx/Ly$). This is in comparison to SLA where the two languages can be learned either consecutively or simultaneously. It is also important to note that the DMM proposes that an individual's dominant language 'does not necessarily correspond to chronological order of acquisition and is subject to change' (Jessner, 2008b: 272); in other words, languages being learned may be

interrupted and any of the languages (including the chronological L1) may experience attrition depending on changes in the individual's environment, communicative needs or motivations. Now that we have introduced the dynamic model, its goals, and the complex nature of multilingualism and TLA, we will continue by looking at some key DMM characteristics.

1.2.1 Dynamic model characteristics

Herdina and Jessner (2002: 89) apply systems theory to multilingualism by identifying the following characteristics of multilingual systems: non-linearity, reversibility, stability, interdependence, complexity, and change of quality. They propose that, in contrast to traditional linear theories of language learning (linear progression leading to native-ideal proficiency), DMM is non-linear and its variables observe the same principals as those of living organisms, characterised by feedback-loops and changes in rates of growth. They point out certain constants and variables of multilingual psycholinguistic systems; factors considered to be constants may include cognitive capacity and language aptitude, whereas factors considered to be variables may include perceived language competence, self-esteem, language anxiety and motivation (2002: 88, 138). These individual variables are related to multilanguage aptitude in that they may have a positive or negative effect on the language acquisition progress. The DMM predicts that, due to the interdependence of these factors, a significant change in any one of them may result in unpredictable and complex development patterns over time; moreover, feedback loops between the factors (figure 4) account for how the system self-organises and determines its own growth conditions (2002: 140).

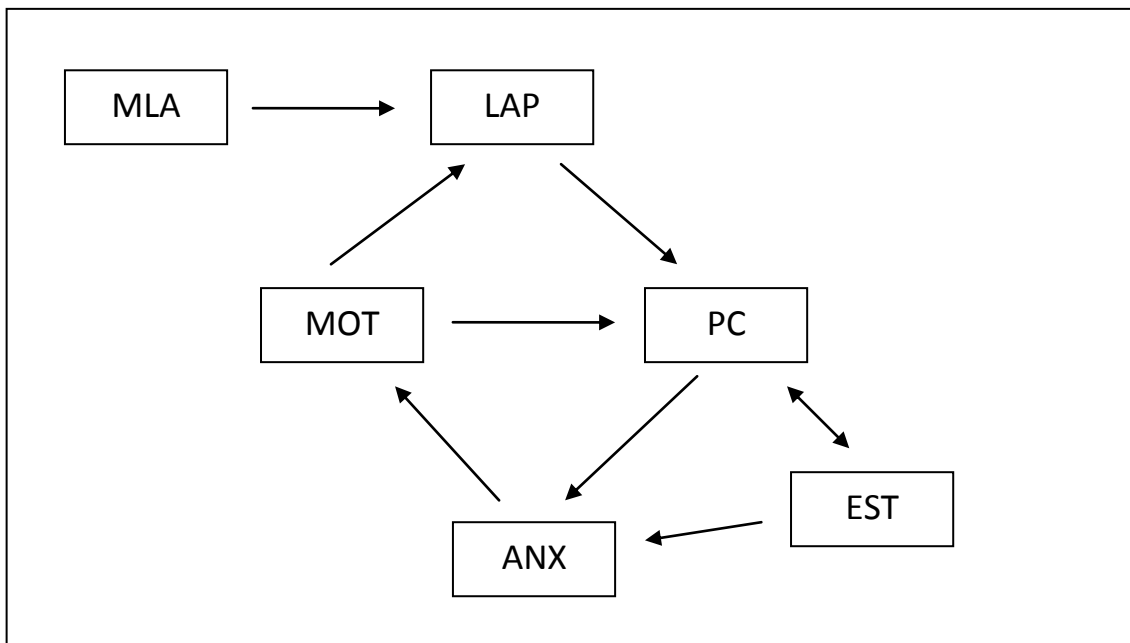


Figure 4: Dynamic nature of individual factors in a multilingual system (Herdina & Jessner, 2002: 138)

The factors are multilanguage aptitude (MLA), language acquisition progress (LAP), motivation (MOT), perceived language competence (PC), language anxiety (ANX), and self-esteem (EST).

According to the DMM, learners have limited resources (time and energy available for learning and maintenance), Herdina and Jessner (2002: 91) argue that, far from being a step by step, linear process, if not enough time and energy is spent on learning and maintenance, ‘positive growth [...] can be counteracted by negative growth’ resulting in language loss or attrition. This negative growth mirrors positive growth, as such not maintaining a language system results in ‘an adaptive process’ where ‘competence is adjusted to meet [...] perceived communicative needs’. In other words, when we see a multilingual system from a dynamic perspective it does not seem unusual that, influenced by initial system conditions (communicative needs), any of the multilingual’s LSs, including the chronological L1, may experience attrition. This assumption runs contrary to the Universal Grammar account which sees acquisition as unidirectional.

According to the DMM, psycholinguistic system stability is dependent on language maintenance effort, which itself can only be understood in relation to language attrition or loss. Based on renewal of the linguistic system, language maintenance effort is composed of

language use (activation) and hypothesis verification (awareness). A lack of renewal coupled with the presence of competing LSs in the psycho-communicative system (requiring a greater degree of effort in terms of maintenance) will result in the attrition of any given LS. The addition of new items to a LS causes an exponential increase in the amount of connections between old and new items which means that the language maintenance effort 'required to guarantee the homeostasis within a linguistic system [...], will increase with the accumulation of linguistic knowledge' and thus place natural limits on acquisition efforts (Herdina & Jessner, 2002: 99). Another significant factor is that LSs are *interdependent*:

A significant element in DMM is that within the psycholinguistic model language systems are seen as interdependent and not as autonomous systems as they are perceived in transfer and [codeswitching] research. This means that the behaviour of each individual language system in a multilingual system largely depends on the behaviour of previous and subsequent systems and it would therefore not make sense to look at the systems in terms of isolated development. If we assume the validity of the underlying systems-specific parameters in the multilingual speaker, then the subject-specific factors determine both the complexity and variability of the system and on the other hand the given systems are influenced both in their development and structure by crosslinguistic effects (Herdina & Jessner, 2002: 92)

This means that it is not just variability within the LS that is the cause of diverse results but also variability within the speaker (subject-specific factors: number of LSs, maturational age, established stability, proficiency, maintenance time). Thus, transfer/interference phenomena which seem to be identical can lead to manifold results in distinct LSs even in the same user. From this we can see that multilingual systems and their variables are dynamic, interdependent, feedback sensitive, and multi-directional, but how does the DMM characterise multilinguals themselves?

1.2.2 Multilingual advantages and disadvantages according to DMM

One of the predictions of the DMM involves various advantages and disadvantages of being multilingual. Early research (i.e.: Jespersen, 1922) tended to put forward the idea that a child familiar with more than one language, due to the 'brain effort' involved, would not be able to control the 'finer points' of any of them and would thus more profitably spend their learning power on other activities. This is a typical monolingual view which sees interference as the

main cause of ‘multilingual underachievement’ (Herdina & Jessner, 2002: 61). While the DMM expects multilinguals to be less proficient in their respective languages than monolinguals with a similar education level and language maintenance effort, it does not share the one-sided, monolingual view expressed above. The DMM predicts this lower proficiency for a number of alternative reasons. First, it is cognitively more difficult to speak more than one language and unless all the languages in a multilingual system have an equally high status to the speaker it is unlikely that they will all receive the same level of maintenance and subsequently develop to the same degree. Second, interaction between LSs can be expected to disrupt performance and retard or delay acquisition of one or more LS, however this should not be seen as ‘too negative an influence’ as this same LS interaction is also responsible for initiating the ‘autocatalytic developments observed in multilingual speakers’. Finally, ‘communicative efficiency [...] is not coextensive with syntactic and semantic well-formedness’; in other words, in certain communicative contexts multilingual speakers are able to get their message across even though their speech is only an ‘approximative system’ of the TL and, as such, the resulting ‘sociopsychological disadvantages’ are not sufficiently important to compel them to remedy deviation from TL norms (Herdina & Jessner, 2002: 107).

While we can summarise the disadvantages as proficiency deficits caused by competing LSs and capacity limitations related to acquisition and maintenance, there are also a number of advantages that multilinguals display when compared to monolinguals, such as enhanced metalinguistic, metapragmatic, and sociocultural awareness, and greater cognitive flexibility. The multilingual shows an ability to ‘draw on a fund of common linguistic experience’ combined with a greater development of ‘certain types of linguistic and cognitive skills’ (Herdina & Jessner, 2002: 108); this can be seen both in terms of language learning experience (i.e.: *Foreign Language Specific Factors* – Hufeisen & Marx, 2007) and the combination and cross-referencing of linguistic and sociocultural conceptual systems (i.e.: *Common Underlying Conceptual Base* – Keszckés & Papp, 2000). Multilingual experience of competing language systems will produce a greater awareness of ‘the nature of a language system’, an enhanced

ability to ‘abstract from the particular linguistic forms’, and a greater understanding of the ‘peculiarities’ of the languages that comprise multilingual LSs (Herdina & Jessner, 2002: 108). As multilingual code-switching procedures are domain specific and governed by a more conscious monitoring process than that found in SLA, the multilingual, as a side effect of managing their languages, shows a greater degree of ‘cognitive flexibility and creativity’. Finally, there is the issue of emergence, or ‘system-specific properties’, which means that ‘the multilingual speaker will develop skills or abilities not found in monolingual speakers’ (Herdina & Jessner, 2002: 108). We have seen that while the DMM expects certain deficits in multilinguals, which are accounted for based on the peculiarities of multilingualism instead of the competence of monolinguals, it also points out the many ways in which multilinguals are advantaged especially in terms of acquiring additional languages and also more generally in terms of metacognitive abilities. Now we will look at what it is exactly which gives multilinguals these advantages; what is designated in the DMM as ‘the M-factor’.

1.2.3 The M-factor

What is described in the DMM as the M[ultilingualism]-factor is a way of summarising the emergent qualities which develop in multilinguals as a result of increased language contact (in turn contingent on perceived communicative needs), such as metalinguistic and metacognitive awareness. Jessner (2008b) points out that interaction between multilingual psycholinguistic systems is ‘cumulative’ as opposed to additive; in this way, multilingualism reflects the systems theory concept *totum maius summa partum*. A key element in multilingual systems is crosslinguistic interaction (henceforth: CLIN) which is seen as more encompassing term than crosslinguistic influence (henceforth: CLI) as described in SLA. Whereas CLI covers the phenomena of transfer and interference, CLIN also includes codeswitching, borrowing and other unpredictable, dynamic, cognitive effects of multilingualism. Therefore, we can understand multilingual proficiency by following the formula: $LS_1, LS_2, LS_3, LS_n + CLIN + M\text{-factor} = \text{Multilingual Proficiency}$ (see: figure 5).

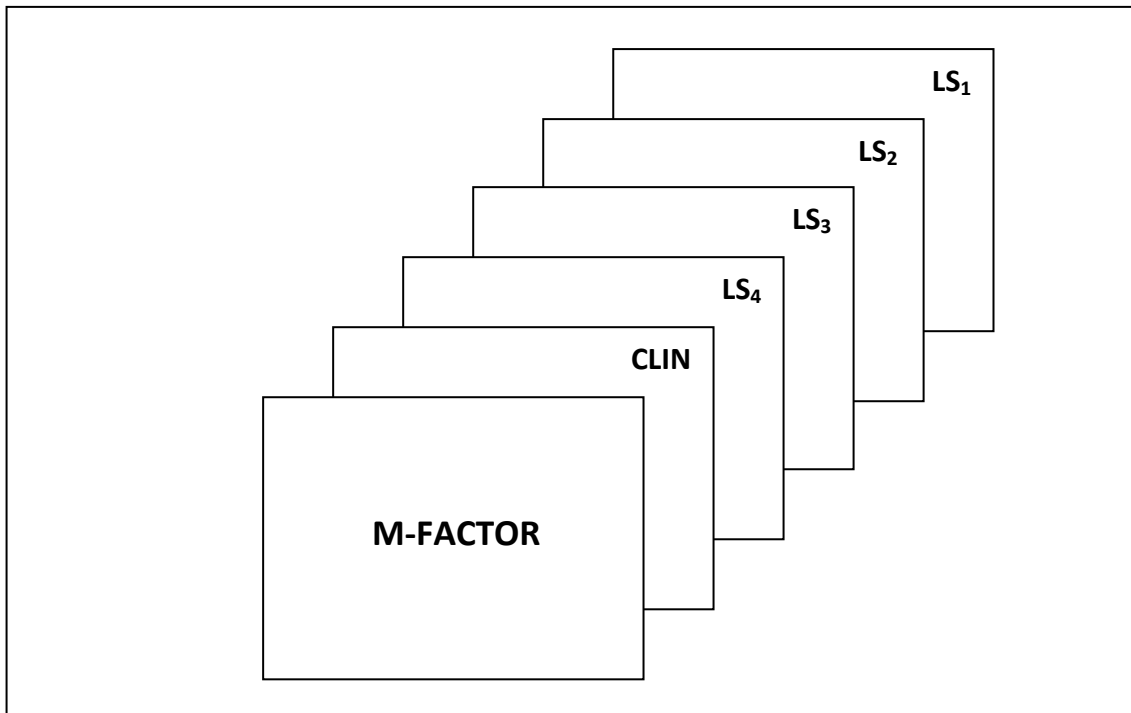


Figure 5: Multilingual proficiency (Jessner, 2008a; 2008b)

According to Herdina and Jessner (2002: 129) the M-factor is what really accounts for the linguistic and cognitive advantages multilinguals have over monolinguals, they state that ‘well developed multilingual language systems will lead to a number of factors distinguishing them from monolingual systems’. Among these factors, Jessner (2008b) proposes that multilinguals develop the ‘language-specific skills’ of *language management* (integration/separation of resources; balancing resources and requirements), and *language maintenance* (use - refreshing/activating function; awareness - conscious manipulation of and reflection on rules) which constitute a metalinguistic awareness not developed in monolinguals. Taking into consideration the prediction of the DMM that learning an L3 or Lx effectively eats into resources already being used to maintain other LSs, the role of the M-factor, as summarised by Ecke (2003:127), is ‘to counteract the decline of resources, use, and competence to keep the system at an equilibrium that balances out environmental (communicative) demands and cognitive resources’.

Informed by Malakoff's (1992) contention of a step back from comprehension and production to consider the underlying form and structure of an utterance, Jessner (2006: 42) describes metalinguistic awareness as 'the ability to focus attention on language as an object in itself or to think abstractly about language and, consequently, to play with or manipulate [it]'; she proposes that this 'linguistic objectivation is the multilingual's most characteristic cognitive ability'. Thus, one particularly salient feature of linguistic awareness is an innate understanding of the arbitrary nature of linguistic signs; this is one very useful measure of the qualitative difference between monolinguals and multilinguals. Put simply, the monolingual (unless specially trained) has no other reference point for the signs they perceive and use in their day-to-day communication; a lexical unit is simply processed as meaning, for example a tree is just *tree*. To the multilingual, on the other hand, a tree could be represented by the sign *tree*, *árbol*, *arbre*, *zuhaitza*, *baum*, *дэрево* or any other with the same semantic property depending on the languages involved. Not only can the concept 'tree' be understood as any of these signs, it can be understood as any number of them at the same time, thus illustrating to the multilingual the arbitrary relationship between signifier and signified.

Another factor related to metalinguistic awareness is language management and multilingual monitoring (Jessner, 2006). This raises the question: how do multilinguals juggle their languages to meet the demands of the communicative situation? The DMM identifies a more sophisticated language monitor in multilinguals, an *enhanced multilingual monitor*, which comes from the need to control CLIN and is 'directly proportional to the number of competing language systems available to the speaker and the frequency of (alternate) use of the systems' (Herdina & Jessner, 2002: 129). The multilingual monitor is a function of a speaker's general cognitive ability and is therefore necessarily restricted by it; Jessner (2008b: 276) explains that because the monitor draws on 'common resources' in a speaker's LSs it goes further than the 'error detection and self-repair' typical of previous monitor conceptualisations (see: Krashen, 1982) and also fulfils 'a separator and cross-checker function'. Furthermore, the multilingual monitor is dynamic in nature, that is, increased demand from the multilingual environment

(more languages to manage) will result in expanded functions of the monitor. The multilingual monitor is also related to sociolinguistic aspects such as language preference which Jessner (2006: 60) points out establishes ‘the relationship between perceived communicative needs and the linguistic environment’. In sum, the essential difference between multilinguals and monolinguals expressed by the M-factor is that multilingual systems contain components which are lacking in monolingual systems and where the same components do exist between the two types of system they have a different significance in a multilingual system. Herdina and Jessner (2002) suggest that the M-factor (specifically its monitor function) advantages bilingual speakers when learning a third language; in fact, Jessner (2006, 2008b) iterates the ‘catalytic’ effect of bilingualism on TLA.

To conclude this section, we can see that a systems-perspective of multilingualism exposes fundamental differences between monolingual and dual/multilingual LSs based on a total linguistic and conceptual reorganization of those systems. Kecskés (2010: 106) summarizes the differences as follows: dual/multi- LSs have ‘one conceptual base that operates over two or more language channels’; multilinguals differ in the conceptually based content of their information processing systems – it’s ‘not what multilinguals do but how they do what they do’; and, the relationship between language development and socialization is necessarily different in multilinguals as they bring together ‘entities [...] which do not naturally belong together’. In short, for these reasons, the multilingual will not use any of the languages in their repertoire in the same way as a monolingual. At the beginning of this chapter we posed the following question: how did we come to understand multilingualism as complex, dynamic and something both quantitatively and qualitatively different to natural and instructed language contexts? The current section on the DMM, grounded in our understanding of systems theory and its application to language development and use, has attempted to answer this question by explaining how multilinguals differ from both second language learners and monolinguals; a fact which has necessitated a new paradigm of exploring and analysing multilingualism in order to do justice to the reality of the global linguistic situation. As we have already explored the

question of how we got here, the following section will focus on where we are now. With this aim in mind we shall now examine multilingualism as the *New Linguistic Dispensation* (Aronin & Singleton, 2008), starting with its precursors in bilingualism (Grosjean, 1985, 1989) and SLA (Cook, 1991, 1992, 1997) before moving on to explain the *Focus on Multilingualism* perspective (Cenoz, 2013).

1.3 Changing directions in multilingualism research

Grosjean (1985) challenged the then prevailing view that bilinguals were somehow less competent than monolinguals, that they suffered from a so-called ‘semilingualism’. He described bilinguals as ‘competent but specific speaker-hearer[s]’ and put forward that the monolingual view had done a great deal of damage to the way we understood bilingualism. Later, Grosjean (1989) warned against the fractional view of the bilingual as two monolinguals in one person. He proposed that the coexistence of languages resulted in a unique speaker-hearer which affected monolingual and bilingual comparisons, the study of language learning and forgetting, and how we examine everyday speech-modes; in the preceding section we saw how this view very easily lends itself to a multilingual perspective (Herdina & Jessner, 2002; Jessner, 2006, 2008a, 2008b; 2013). Grosjean (2008, 2010, 2013) has continued to write prolifically on the subject, debunking common myths about bilingualism and, among other things, pointing out that bilingualism is distributed across disparate areas of language use in which the bilingual actively participates in multilingual settings, and that bilingualism is a dynamic phenomenon in which fluency fluctuates as a function of use and which corresponds to the life-events of bilingual speakers. In a similar mode of thinking from an SLA perspective, Cook (1991, 1992) coined the term ‘multi-competence’ to refer to people with competence in more than one language; this constituted a reaction to what he perceived as a monolingual bias in SLA research (Cook, 1997). He wanted to show that multi-competent people differ from monolinguals in more than just knowledge of a L2, and that their language system is a merged whole rather than two separate, competing systems. Following the argument that one group should not be measured by the norms of another (Labov, 1969), he attacked the idea that L2

learners should be compared to monolingual native speakers, and seen as somehow deficient if, as is often the case, they were not able to reach this particular ‘end state’. In his research, Cook found evidence that multi-competent people have improved metalinguistic awareness and different cognitive processes; in short, they do not simply equate to two monolinguals in one person. We can relate this to systems theory when Cook states: ‘the multi-competence state (L1 + L2) *yields more than the sum of its parts* [...] multi-competent speakers think differently from monolinguals [...] Multi-competence is a different state of mind’ (1991: 565 – my emphasis).

The views above are essentially correct, why should speakers of other languages be compared in their learning to native speakers of the target language? Doing so will always see language learners as somehow deficient and describe them using a ‘vocabulary of failure’ (Cook, 1997: 40). We should ask ourselves how we even measure success or failure, which sounds precisely like the kind of dichotomous thinking apparent in earlier ‘static conceptualizations of language’ (Cameron & Larsen-Freeman, 2007). Cook (1997: 36) posits that ‘the competence of any individual is not more or less complete than that of any other individual: it is whatever it is’; thus, in his opinion, claims of deficiency are only valid when based on peer-comparisons. However, SLA research so far has shown a tendency to compare learner *performance* with native *competence*, which, of course, greatly disadvantages the learner. The effects of perspectives like Grosjean (1985) and Cook (1991), both reconceptualisations of earlier Chomskian notions (the ‘ideal speaker-hearer’ and ‘competence’ as innate linguistic knowledge), have led to reconceptualisations within SLA; one such example is the term ‘development’ replacing the term ‘acquisition’ (de Bot & Larsen-Freeman, 2011; Larsen-Freeman, 2015). Consequently, some researchers have even questioned the very existence of an ‘end state’ (Dewaele & Pavlenko, 2003; Larsen-Freeman, 2005; Cameron & Larsen-Freeman, 2007; de Bot & Larsen-Freeman, 2011). Furthermore, Hoffmann (2000, 2001) examined trilingual competence and concluded that while acquisition, language use, and communicative competence may be roughly the same as in bilinguals, there was evidence of a qualitatively distinct pragmatic competence in terms of linguistic selection, mixing, switching,

and borrowing. So far so good, but problems with multi-competence remain: it does not account for acquisition in a socially embedded way, it assumes that speaker and contextual knowledge is homogenous (Franceschini, 2011), and finally, it still subsumes multilingualism into the field of SLA. For this reason we have begun to see the emergence of ‘new research directions’ in multilingual language acquisition (Canagarajah & Wurr, 2011), multilingual language ‘ecologies’ (Kramsch & Whiteside, 2008), and emic perspectives (Todeva & Cenoz, 2009). However, the remainder of this section will focus on two major holistic contributions to the field of multilingualism research: the ascent of multilingualism as a ‘new linguistic dispensation’ (Aronin & Singleton, 2008, 2012; Aronin & Hufeisen, 2009; Singleton *et al.*, 2013); and the holistic ‘Focus on Multilingualism’ approach (Cenoz & Gorter, 2011a, 2011b; Gorter & Cenoz, 2011; Cenoz, 2013).

1.3.1 A new linguistic dispensation

What do we mean when we refer to multilingualism as a new linguistic dispensation? Aronin and Singleton (2008, 2012) propose that contemporary multilingualism ‘has reached a critical point in terms of scale and significance’ and that due to physical, economic, societal, and technological developments, it is ‘qualitatively different from what went before’ (2008: 1). They justify this with the following three points:

- 1) Multilingualism is ubiquitous, on the rise worldwide, and increasingly deep and broad in its effects.
- 2) Multilingualism is developing within the context of the new reality of globalization.
- 3) Multilingualism is now such an inherent element of human society that it is necessary to the functioning of major components of the social structure. (Aronin & Singleton, 2008: 1-2)

Evidently new sociolinguistic conditions have arisen due to the modifications to human experience engendered by the contemporary social reality of globalization; in this respect, two particularly salient factors are ‘time/space’ and ‘mobility’. We can understand global mobility and the compression of time and space, compounded by technological advances, as a part of the postmodern condition. Our lives are subject to the interaction of various simultaneous temporal

patterns (fast, intermediate, slow, and macro), the dizzying speed of modern communications has affected both our conceptions of time boundaries and our linguistic processes. Aronin and Singleton (2008, 2012) point out that individual language switching is (quasi-)instantaneous while population shifts and technological changes which favour multilingualism at the societal level are notably slower. Current communications technology has resulted in a type of spatio-temporal compression (communicating simultaneously in multiple locations) subsequently creating new linguistic needs and dimensions. Space is significant in terms of the ‘sociolinguistic restructuring associated with emerging multilingual and multicultural societies resulting from the process of migration’ (Aronin & Singleton, 2012: 36). These processes have led to ‘multilingual cities’ such as Paris, London or Berlin where multiple languages can be encountered at virtually any moment of the day; this concept is closely linked to Gorter’s research on linguistic landscape (Gorter, 2006, 2013) which shows how we increasingly find ourselves in multilingual environments. Apart from its evident connection to space, global mobility is also related to flux, fuzziness of borders, and inclusion/exclusion. Aronin and Singleton (2012) explain that, with the aid of technology, modern migrants are able to maintain transnational ties to a greater degree than ever before – this leads to deeper and more intense transborder and transcontinental connections. They also argue that social topology has shifted from classical distinctions (class, race, gender, etc.) to more ‘horizontal groups’ (football fans, academics, vegetarians, etc.), citing Tonkin’s (2003) conclusion that given the current trajectory of the world ‘the creation of a language ecology that allows an individual to move in and out of overlapping linguistic codes with relative freedom, seems the only option’ (Tonkin, 2003: 326 – cited in: Aronin & Singleton, 2008: 6).

Other important features of the new linguistic dispensation are the differences between historical and contemporary multilingualism and the concept of *Dominant Language Constellations*. As mentioned at the beginning of this chapter, throughout human history multilingualism has been a necessity wherever speech communities come into contact; however, there are several essential differences between historical and contemporary

multilingualism. Aronin and Singleton (2012: 46-48) point out differences in seven different areas which we shall paraphrase below:

- 1) *Contiguity of origin*: languages in a multilingual repertoire are of more diverse origins than in previous times.
- 2) *Class*: multilingualism is now spread more widely over the whole social spectrum, and the earlier 'notion of a multilingual educated social elite is constantly being eroded'.
- 3) *Geographical location*: multilingualism is now more geographically ubiquitous than before, spreading beyond traditional locations (border areas, trade routes, administrative centres, etc.).
- 4) *Medium*: it is now rare for multilingualism to be confined to the written medium as in earlier times.
- 5) *Ritual*: similar to medium, it is now rare that multilingualism is confined to ritual purposes.
- 6) *Profession*: multilingualism is now spread across a wider variety of professions than ever before
- 7) *Spatio-temporal aspects*: multilingualism is no longer written or face-to-face, modern technology facilitates instantaneous multilingual communication which 'routinely takes place over large distances'.

In summary, whereas historical multilingualism tended to be supplementary in nature contemporary multilingualism is vitally interwoven with societal processes in all areas and at all levels.

The second specific feature, Dominant Language Constellations, is a further way of separating from monolingual perspectives and illustrating the fuzzy borders of contemporary multilingualism. In short, the concept of dominant language constellations describes an individual's most important languages, not necessarily all the languages present in their repertoire but those which allow them to fulfil their needs in a multilingual environment.

Dominant language constellations comprise a move away from the idea of language or speech communities (Bloomfield, 1933; Gumperz, 1968) which, due to its monolingual perspective, is too narrow to adequately express the realities of multilingual use. While speech communities are an essentially monolingual categorization, dominant language constellations are complex and dynamic in nature and peculiar to multilingualism. Evidently, dominant language constellations require more than one language (whereas a speech community does not), the languages which comprise dominant language constellations are not constant over the same environment, even when they are equally present they may have different ‘weights’ depending on a user’s social-environmental needs and mastery of each language. Dominant language constellations are dynamic in that they may be subject to a change in weight as the use of one or another becomes more pertinent to the user, they also tend to reflect the user’s life trajectory and may fluctuate or shift over the life-span; historical, personal, social, and environmental change may cause languages to enter or leave dominant language constellations or become more or less prominent. According to Aronin and Singleton (2012: 69), dominant language constellations are ‘an evolving, emerging whole which transcends its parts’ and compels us to consider ‘whole sets of languages as units rather than ... the specific languages used by given individuals or groups’.

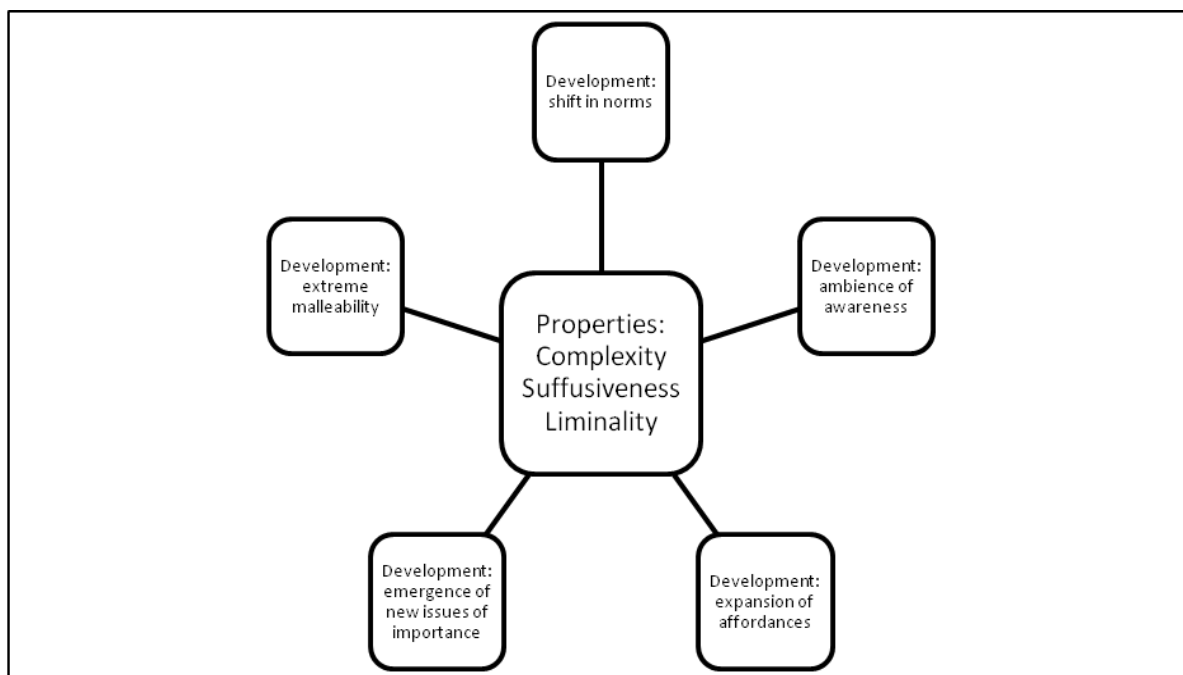


Figure 6: Properties of the new linguistic dispensation (Aronin & Singleton, 2012)

We will sum up this subsection on the new linguistic dispensation by discussing some of its key properties and characteristic developments (see: figure 6). Suffusiveness, complexity, and liminality are three properties specific to the new linguistic dispensation (Aronin & Singleton, 2008, 2012; Aronin & Hufeisen, 2009; Singleton *et al.*, 2013). It is suffusive in the sense that multilingual populations, spaces, and practices are spread throughout the world and that modern life is contingent on multilingual people and social arrangements. It is complex in that the extent to which there is interplay between its various levels and forms makes the outcomes unpredictable and implausible to account for in aggregate terms. Finally, it is liminal in the sense of emergence; many phenomena and processes are now surfacing as multilingualism continues its distribution over spaces and populations. Aronin and Singleton (2012: 54-46) explain how these properties are realized in the following concrete developments:

- a) *Shifts in norms*: multilingualism is no longer an exception, natives are losing special status, multilingual education is more common, native-like competence gives way to goal-oriented and communicative learning, the role

of language knowledge in life paths is recognized, and loosened language correlations have allowed for more dynamism in terms of network and flow.

- b) *New focal issues*: a number of new areas of interest have emerged, *inter alia*, multilingual identity and emotions, impact of multilingual families, ownership of language, minority languages in multilingual environments, and life-long learning.
- c) *Expansion of affordances*: both opportunities to acquire languages of wider communication and regional language medium teaching facilitate education and provide wider career opportunities.
- d) *Ambience of awareness*: a newly developed and powerful sense of awareness of languages and multilingualism in the wider world.
- e) *Malleability*: unpredictable changes in the multilingual dynamic which respond to changes in needs and conditions (proficiency, status, frequency of use, and availability of language instruction).

In conclusion, contemporary multilingualism *per se* has come of age as our understanding of the phenomenon has moved beyond the ‘bilingualism plus’ stage; it has crossed ‘the second threshold’ (Aronin & Hufeisen, 2009). The first threshold was a consensus on the importance of bilingualism, the second is ‘the growth of an understanding that there is a far reaching use in the world [...] of more than two languages, and that repertoires of three or more languages may have their own specificities relative to bilingualism’ (Aronin & Singleton, 2012: 188).

1.3.2 A focus on multilingualism

In addition to the new linguistic dispensation, another major contribution to multilingualism research which takes a holistic approach is *Focus on Multilingualism* (Cenoz & Gorter, 2011a, 2011b, Gorter & Cenoz, 2011; Cenoz, 2013). Although recognising their important contribution, Cenoz (2013) argues that many TLA studies adopt a monolingual

approach and are only *labelled* multilingual by virtue of dealing with situations where more than two languages are involved. Taking into consideration the ‘monolingual bias’ mentioned above (Cook, 1997; Grosjean, 1985), it seems that TLA studies still tend to measure L3 proficiency against the yardstick of native monolinguals. On the other hand, drawing on related research, Focus on Multilingualism promotes the view that bilingual and multilingual language knowledge is not the same as, and not comparable to, monolingual knowledge (Herdina & Jessner, 2002), that subcomponents of multilingual systems dynamically interact (Jessner, 2008), and focusing on a ‘one language only’ (Li Wei, 2011a) view of L3 competence does not give a full account of multilingual practices.

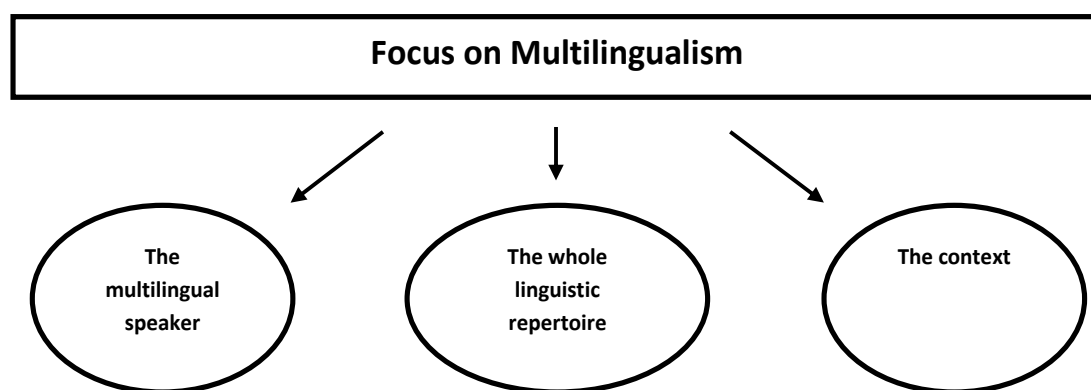


Figure 7: Focus on Multilingualism

Thus, the Focus on Multilingualism approach is characterised by its focus on three elements (figure 7): 1) the multilingual speaker; 2) the whole linguistic repertoire; and 3) the context. Firstly, regarding the multilingual speaker, Focus on Multilingualism takes the multi-competence view (Cook, 1992), that a multilingual speaker ‘cannot be compared to several monolingual speakers of different languages’ (Cenoz, 2013: 80), and also the view that there are qualitative differences between monolinguals and multilinguals in addition to the more obvious quantitative differences (Hufeisen & Marx, 2007; Kecskés, 2010). Focus on Multilingualism, as Cenoz (2013: 81) explains, ‘looks at multilingual speakers and proposes looking at the different types of L3 learners, attending to how bilingual speakers integrate a third language into their

linguistic repertoire and the fluidity between their three languages'. Secondly, regarding the whole linguistic repertoire, Focus on Multilingualism considers multilingualism in all its complexity; the interconnections between language systems, how they change over time, and how different language systems support each other. Cenoz (2013: 81) points out that by 'looking at the whole linguistic repertoire we see not just one part of the picture – as in studies focusing only on the third language – but the whole picture of the interaction among the languages'. Finally, regarding the context, Focus on Multilingualism looks at how multilingual practices and social interaction intersect. In this regard, Cenoz (2013: 82) states that multilinguals 'use languages as a resource for communicating successfully and developing their own identities through multilingual practices', she goes on to explain that this linguistic knowledge goes beyond mental representation and, citing Li Wei (2008: 144), that multilingualism can be examined in terms of 'ideology, communicative practice and social process'.

Regarding multilingual practices, Cenoz and Gorter (2011a) explain that a Focus on Multilingualism places special attention on the ways multilingual speakers use their languages in interactions. They state:

Multilingual speakers acquire and use their languages while engaging in language practices. By doing this, they use their resources in a social context and shape this context in communicative interaction. (Cenoz & Gorter, 2011a: 340)

In other words, multilingual practices and the social contexts in which they are situated are mutually contingent, each affecting and shaping the other. Thus, even a seemingly minor change in either one could lead to unpredictable long-term effects in their symbiosis. This appears to be in line with a systems-influenced perspective on language development (Larsen-Freeman, 1997; Ninio, 2006; Kecskés, 2010) which proposes that as we use language it changes. Of course, the difference here is that the social context affects language choice and other multilingual practices which then feeds back into defining the social context. Moreover, through Focus on Multilingualism, Cenoz and Gorter (2011a) explain that multilingualism and multimodality are inseparable. They state:

The development of multimedia technology, communication channels, and media has given way to a multimodal literacy, which is based on the affordances provided by gesture, sound, visuals, and other semiotic symbols, including, but not limited to, language. (Cenoz & Gorter, 2011a: 340)

To put this in the context of multilingual practices, the authors cite Shohamy's (2006) view that one aspect of multilingual competence derives from the use of multiple codes; that is, textual, visual, and symbolic codes. This idea of the interwoven relationship between multilingualism and multimodality facilitated by technological developments is also expressed in the work of Aronin and Singleton (2012). Finally, Focus on Multilingualism also considers codeswitching, codemixing, codemeshing, and translanguaging as important multilingual practices which are fundamentally involved in the transmission of knowledge, information, and values, as well as the negotiation of identity and relationships in multilingual contexts. Cenoz and Gorter (2011a: 341) explain that these practices are more complex in multilinguals than in bilinguals because 'they show different strategies and directions that are not evident when only two languages are involved'.

Focus on Multilingualism provides a *real* multilingual approach, the benefits of which, according to Gorter and Cenoz (2011) are as follows: the approach focuses on multilingual speakers and is not restricted to individual languages; the approach analyses the intersection and relationships between the languages which comprise the multilingual repertoire; and, in line with Todeva and Cenoz (2009), the approach takes an emic perspective by focusing on multilingual speakers' own reports. Gorter and Cenoz (2011: 443-444) summarise the advantages Focus on Multilingualism has over traditional approaches in the following way:

- 1) Language practices are examined in context, especially contexts which involve minority or immigrant languages. Multilingual speakers often find themselves engaging in practices where they are simultaneously using majority and minority languages, for example watching and commenting on a TV programme. Focusing on contexts and practices creates an approach which is 'closer to the reality of the speakers' and 'provides more authentic data than the focus on languages in isolation'.

- 2) Insights are provided into the acquisition and use of multiple languages. Multilingual speakers have experience with a number of different languages, one of the major effects this has on acquisition and use is related to multidirectionality. In other words, only examining the effect of the L1 on the TL omits other acquisition possibilities such as influence and transfer from languages other than the L1 and even 'backward influence from the target language to the other languages' and results in 'a partial and often inaccurate account of the interaction between languages'.
- 3) The way multilingualism is understood is more equitable. Due to the monolingual bias in traditional research, multilingual learners are expected to be native-like in all their languages, when this inevitably does not happen they are 'associated with deficit or incompleteness'. This traditional perspective also has a marked effect on speakers of minority or immigrant languages because it makes the erroneous assumption that all language speakers start on an equal footing, this clearly does not reflect reality for millions of people and may cause tensions and conflict.
- 4) Diverse fields are brought together. In a similar vein to Herdina and Jessner's (2002) DMM, a multilingual approach unifies research on SLA, additional language acquisition, bilingualism, and multilingualism. It is hoped that Focus on Multilingualism will be able to take a wide range of diverse conceptualisations and define them in a more focused, coherent, and accurate way.

Finally, and of great relevance to the current study, Gorter and Cenoz (2011) point out that, as most research in this vein has been carried out in postcolonial or immigrant contexts, there needs to be more studies 'not only in other geographical contexts but also involving other languages and situations' (2011: 444), in which they include minority and foreign languages,

and, furthermore, that ‘the study of out-of-school multilingual and multimodal practices needs urgent attention’ (2011: 445).

1.4 Concluding remarks

This chapter has shown that by taking a systems theory perspective we can account for the changes to our understanding of multilingualism. We started by asking how we came to accept the multilingual perspective as a self-evident reality; the author hopes that this chapter has dealt with that question adequately. We have left behind monolingual perspectives of linguistic and cognitive deficiency and have shown that interaction between language systems is far from subtractive; it is in fact cumulative, emergent and a defining feature of the multilingual. Over this chapter we have used evidence from previous research to show how systems theory has been used to move from the genesis of the monolingual mind-set right up to the most recent directions in multilingualism research, along the way we have highlighted the complexity and dynamism of language development in natural settings, some key examples of the application of systems-thinking to diverse areas of instructed language learning, a dynamic reconceptualization of TLA and multilingualism in terms of psycholinguistic systems, and an extrapolation of this on a global scale resituating multilingualism according to postmodern spatio-temporal and technological paradigms, as well as fully incorporating contextual factors and the shifting life-experiences of multilingual speakers.

In summary, we can state that systems theory exists to explain the development of complex non-linear systems over time, language *per se* is a complex system with many composite parts interacting and affecting one another, by this same reasoning multilingualism is to be understood as a combination of complex, nested interacting systems which, over time, produces outcomes that cannot be predicted *a priori* from initial conditions. Multilingualism is of an undeniably complex and dynamic nature. As such, the multilingual is considered to be palpably different to the monolingual, the main differences being 1) enhanced linguistic, pragmatic, and sociocultural awareness and greater cognitive flexibility, and 2) the ability

(embodied in the M-factor) to balance communicative demands with cognitive resources across languages and communicative contexts. However, the multilingual perspective does not only describe the individual, it also explains the ubiquitous nature of multilingualism throughout the world and how it plays a vital role at all levels of the organization of human society. The pioneering work of the scholars mentioned in this chapter provides the most comprehensive justification that, faced with the reality of current global linguistic paradigms, multilingualism must be explored and explained in multilingual terms, *it simply cannot be analysed adequately in any other way*. Fortunately, with such a strong start behind us, new generations of researchers are able to stand on the shoulders of these giants as we continue to face up to the emergent challenges of our multilingual world. In this respect, we have a great deal to be thankful for.

As we have seen in this chapter the conceptualization of multilingualism as a dynamic phenomenon has been principally investigated from a psycholinguistic perspective; this is certainly the case with the Dynamic Model of Multilingualism. However, as Herdina and Jessner (2002: 74) themselves point out, living languages ‘adapt to the social context in which they are used’; this is a major factor which causes diachronic change. The focus of the DMM is on *individual* diachronic change but we know that language in general and multilingualism in particular cannot be fully understood if divorced from their social context; language is not only individual, it is inter-individual and societal. Systems theory looks at complexity as intricately nested interacting sub-systems; it stands to reason that the sociolinguistic context is one of these sub-systems. On that account, it is necessary to explore multilingualism as a complex, dynamic phenomenon from a sociolinguistic perspective. Therefore, in an attempt to build on the pioneering work of the DMM and continue in the vein of the new multilingualism research directions, the focus of the current study will be sociolinguistic as opposed to acquisitional. As the study deals with adolescent emergent multilinguals, the next chapter will examine the sociolinguistic context which will be operationalised in terms of ‘out-of-school factors’, namely, exposure to languages in contexts which stretch beyond formal learning environments.

CHAPTER 2. LANGUAGE EXPOSURE IN 'OUT-OF-SCHOOL' CONTEXTS

Out-of-school factors comprise influential elements which fall outside the scope of traditional learning environments, they can be considered as *natural*, *external* or *contextual* factors and, in terms of language learning, the type of linguistic exposure they offer is incidental or implicit rather than explicitly structured and focused. Out-of-school factors are not just an issue in language development; more generally speaking, the term encapsulates a wide range of diverse factors and is particularly useful in studies of academic achievement.

In a report on out-of-school factors and school success, Berliner (2009) investigated the negative academic impact of certain factors which primarily affect poor families. He included: 1) low birth-weight and non-genetic prenatal influences; 2) inadequate medical care; 3) food insecurity; 4) environmental pollutants; 5) family relations and family stress; and 6) neighbourhood characteristics (2009: 1). However, he also discussed extended learning opportunities, such as summer, pre-school and after-school programs, suggesting that they have a very positive influence. Two particular interrelated out-of-school factors which were identified as having a negative impact on language development are socioeconomic status and family relations/family stress. By the age of three years, children from professional families had, on average, acquired more than double the amount of words than children from families which were dependent on State benefits. Not only was there a notable quantitative difference between higher and lower socioeconomic status, but the quality of the language contact differed greatly as well. Children from families with higher socioeconomic status received more consistent, more extensive and richer verbal interactions with peers who were more linguistically developed. Furthermore, children from families with high socioeconomic status received, on average, six times more encouragements than discouragements (2009: 28).

Specifically related to language learning, there have been many studies which have taken into consideration out-of-school factors, not only focusing on the family and the

immediate social environment, but also considering variables such as: stay-abroad periods, extra-curricular activities, linguistic landscape, traditional media, and digital, interactive media. This chapter will review previous research in order to focus on connections between out-of-school factors and language learning. To this end, section 2.2 will examine some factors in the immediate environment: subsection 2.2.1 will focus on parental socioeconomic and sociocultural status, subsection 2.2.2 will focus on a stay abroad period, and subsection 2.2.3 will explore the linguistic landscape. Following this, section 2.3 will deal with the out-of-school influence of traditional media, with a focus on television and film in subsection 2.3.1, and a focus on music in subsection 2.3.2. Section 2.4 will investigate new media: subsection 2.4.1 will deal with second-generation Internet and computer-mediated communication, subsection 2.4.2 will focus on social networking platforms, and subsection 2.4.3 will look at online multiplayer videogames. Section 2.5 will report on previous research from a sociolinguistic perspective, paying specific attention to language socialization and issues surrounding self-identity. However, taking into consideration that out-of-school factors are external to traditional educational contexts and not manipulated for language learning, section 2.1 will begin the literature review with an explanation of what constitutes implicit learning and knowledge and how it differs from explicit learning and knowledge.

2.1 Explicit vs. implicit learning and knowledge

It is evident that not all learning takes place in classroom settings and we know that not all routes to knowledge follow the same path and not all intelligences are the same (see: Gardner, 1983); for this reason, the world outside the classroom can exert a great influence over learning and knowledge. Before we explore out-of-school factors from the perspective of language learning and multilingualism it is useful to contextualize them in terms of explicit and implicit learning and knowledge. While *explicit* learning takes place consciously, typically involves memorizing facts and results in explicitly represented knowledge, *implicit* learning takes place unconsciously, typically involves incidental input from the environment and results in subsymbolic knowledge. We could consider this related to Vygotsky's conceptualisation of

procedural and declarative knowledge. As Ellis (2009: 3) points out, in implicit learning, although ‘learners cannot verbalize what they have learned’, the fact that learning has taken place ‘is evident in the behavioural choices they make’.

In SLA, Krashen (1981) made the controversial distinction between learning (explicit/conscious) and acquisition (implicit/subconscious). He argued that the ‘learnt’ system and the ‘acquired’ system were separate and rejected the idea of an interface between the two; this became known as the ‘non-interface’ position. From this perspective learnt knowledge cannot move over to the acquired system, it merely acts as a monitor (like an editor) to the output of the acquired system; for him, the subconscious dominates second language acquisition. This prompted Schmidt (1990), who described implicit learning as the ‘learning of one thing (e.g, grammar) when the learner’s primary objective is to do something else (e.g., communicate)’ (Schmidt, 1994: 16), to build on Krashen’s learning-acquisition hypothesis by showing the usefulness of consciousness (defined as: intentionality, attention, awareness, and control) in L2 learning. He proposed that subjective noticing was a necessary condition for the conversion of input to intake; this became known as the ‘noticing hypothesis’. Ellis (2009) highlights the connection between implicit/explicit *learning* and implicit/explicit *knowledge*, stating that they are, at once, related but distinct. He explains that it is possible that ‘learners will reflect on knowledge that they have acquired implicitly ... and thus, subsequently develop an explicit representation of it’ (Ellis, 2009: 6). Whether or not it is possible for language learning to take place without either intentionality or awareness is a controversial issue, both Ellis (2009: 7) and Schmidt (1994, 2001) point out that there may be no such thing as totally implicit learning and that learning without metalinguistic awareness may be a better working definition. In fact, arguing that the interface question itself is somewhat naïve, Ellis and Larsen-Freeman (2006: 569) state ‘[t]here is no pineal gland for the interface [...] [c]onsciousness *is* the interface’.

According to Ellis (2009), perspectives on linguistic knowledge are characterized by two opposing positions. On the one hand, there is the *innatist* position which draws on the

Chomskian tradition of Universal Grammar and relies on the so-called Language Acquisition Device. This perspective proposes that linguistic knowledge is knowledge of the features of a particular language derived from ‘positive evidence’ (observing the speech of others). On the other hand, there is the *connectionist* position, derived from cognitive psychology, which sees linguistic knowledge as a network and proposes that input is the driving force behind learning. From this point of view learners are able to respond to a combination of positive evidence (input) and negative evidence (corrective feedback) and the cognitive mechanism for doing so need not be as complex as the Language Acquisition Device. From this, Ellis (2009: 15) concludes that ‘where representation ... is concerned we would do better to view the two types of knowledge as dichotomous’ but, in line with Bialystok (1982), as language use ‘typically involves learners drawing on *both* systems to construct messages [...] they will never be entirely distinct in performance’.

Although decontextualised drills have been almost universally rejected as a means of instruction, there is a history of disagreement about whether the best method for language learning involves implicit or explicit processes. Seliger (1983: 187) argued that language learning takes place at the ‘unconscious level’. According to Schmidt (1990: 129), while subliminal language learning is impossible, implicit learning is ‘both possible and effective when the demands of a task focus attention on what is to be learned’. Winitz (1996) proposed that implicit input and learning processes resulted in superior acquisition. He put this down to the fact that while the materials used in explicit learning processes may effectively impart morphological and syntactical rules, ‘semantics and pragmatics can be acquired through experience’ with the language in question, usually ‘in the context of communicative situations’ (1996: 33). On the other hand, Norris and Ortega (2000) produced a meta-analysis of almost twenty years of research on L2 instruction and, after comparing 49 sample studies, found that focused instruction resulted in greater target-oriented gains and that implicit strategies were not as effective as explicit ones. While, Hulstijn (2003) notes that implicit learning ‘has often been rather loosely interpreted’ (2003: 357) in SLA, he concedes that it ‘can still be fruitfully used as

a convenient, informal, non-theoretical term referring to the more or less “unintentional”, “incidental” acquisition (or “picking up”) of language [...] during the performance of communicative tasks’ (2003: 373). Finally, Ellis (2005) argues that implicit and explicit language knowledge dynamically interact, but in adult L2 learning, as opposed to child L1 acquisition, ‘what can be acquired implicitly from communicative contexts is typically quite limited’, thus adult L2 accuracy ‘usually requires additional resources of explicit learning’ (Ellis, 2008b: 1).

It seems then that a great deal of the implicit/explicit debate is centred on the existence or non-existence of an interface, and on which instructional approach results in superior learning outcomes. Much of the research in this respect has been carried out in the laboratory or classroom and focuses on the way in which language is processed and the acquisition of grammar in instructed settings. However, as Lightbrown and Spada (2003: 178) point out, language learning can take place ‘‘on the job’ or ‘in the streets’, through informal conversations and interaction with native speakers of the language being learned’; these contexts are typically external to traditional instructed settings where language ‘is not taught, but rather, is learned naturally’. While the term ‘naturally’ is probably quite problematic, we understand that implicit language learning is either: 1) a by-product of another activity, 2) unintentional, or 3) unplanned. The problem with incidental learning as a by-product is that it implies language learning is effortless like L1 acquisition, whereas the difference between unintentional and unplanned is well summed up by, implicit learning critic, Milton (2008):

Unplanned learning may involve the deliberate intention to learn even if the activity involved is not part of a formal syllabus or curriculum; listening to a song and trying to memorise the words, for example. Unintentional learning implies that something can be learned without really trying and without effort. ... I would expect learning that is unintentional or incidental to be less successful than learning that is intentional but unplanned. (Milton, 2008: 228-229)

Bearing in mind that incidental exposure may provide learners with more than just grammar and vocabulary (Winitz, 1996) and that language learning loci reach further than the laboratory or classroom into more everyday arenas (Lightbrown & Spada, 2003), the current chapter aims to review a wide range of studies which explore the incidental input offered by

various factors which stretch beyond instructional contexts and how they might implicitly affect not only the development and acquisition of structural aspects of language, but also more social aspects such as, *inter alia*, pragmatic development, motivation, attitudes, and cultural awareness and integration. Finally, chapter 1 stated the overall goal of the current study was an analysis and understanding of the language attitudes of adolescent emergent multilinguals. At the end of the chapter we proposed that the sociolinguistic context comprises one of the intricately nested interacting sub-systems which are a characteristic feature of complex, dynamic systems such as multilingualism. Taking into consideration that the current study moves beyond a psycholinguistic approach to encompass contact with languages and the effect it may have on the affective domain, the balance of this chapter will operationalise the sociolinguistic context as out-of-school language exposure in the immediate environment and in terms of traditional and new media.

2.2 Out-of-school factors in the immediate environment

The immediate environment is replete with what we could consider out-of-school factors, which include such things as: the family, especially parents' socioeconomic/sociocultural status and the effect this may have on language use, the way they value languages and the way they encourage their children; peer-group relationships; extra-curricular or (quasi-)informal didactic activities such as private tuition, private academies, and language 'camps'; study-abroad periods in foreign countries and the subsequent contact with native speakers they engender; and the linguistic landscape. In this section we will focus on three specific factors: the socioeconomic and sociocultural status of parents; contact with native speakers through stays in TL countries; and the linguistic landscape.

2.2.1 Parental socioeconomic and sociocultural status

The family in general and specifically parents may be a highly influential out-of-school factor in the sense of socioeconomic and sociocultural status; both of which are common variables in psychological and educational research contexts. Socioeconomic status ranks

individuals (such as parents) or groups (such as families) in a hierarchy according to access to or control over 'some combination of valued commodities such as wealth, power, and social status' (McLoyd, 1998: 188). Gonzalez (2001: 1) points out that parental characteristics, 'such as occupation, educational level, prestige, power, and lifestyle, denote numerous mediating factors associated with [socioeconomic status], which significantly affect children's development and academic achievement'. Sociocultural status, on the other hand, involves factors related to 'belief and value systems, attitudes, acculturation levels, socialization goals and practices for modelling behaviours, communication styles, language use at home, interpersonal relations and experiences, and problem-solving and stress-coping strategies'. In the family unit, the influence of sociocultural status can be seen in the way in which 'parents mediate their children's behaviours for their adaptation to the wider social system' (Gonzalez, 2001: 15).

Assigning these terms to a language learning context, Muñoz (2008: 589) notes that socioeconomic status can determine 'initial age of foreign language learning', 'choice of schools' (private or State), and 'amount of extracurricular exposure' (extracurricular lessons, technological devices, studies abroad, etc.). However, sociocultural status (measured in terms of parental level of education and/or literacy) may have a 'significant influence on children's foreign language learning success', which is probably due to greater encouragement and an enhanced interest in learning as well as more frequent exposure to foreign languages and even FL use at home. The relationship between higher educational/literacy levels in parents and higher socioeconomic status is perhaps obvious in that a greater degree of education supposes more opportunities in the job market. Perhaps a more subtle relationship is between higher educational/literacy levels in parents and a greater degree of exposure to cultural forms and, subsequently, a greater degree of cultural appreciation and sensibility in their children. Young (1994), for example, found that foreign language learning motivation in children, and the importance they assigned to it, was greatly affected by the way in which the sociocultural context was communicated through the socializing practices of the family and the mass media.

Parents (and their educational/literacy levels) play a crucial role in the extent to which they encourage participation (i.e.: exchange programmes, excursions, etc.), help with homework, or organize family holidays around language learning (i.e.: destination is a TL speaking country) (Muñoz & Lindgren, 2011). Parents' educational level and their use of a foreign language at work are also important out-of-school factors in terms of children's reading and listening skills, however, domestic foreign language use shows less effect (Lindgren & Muñoz, 2013). Parental participation such as helping with homework (Hewitt, 2009) or positive role model behaviours such as FL competence and use (Chambers, 1999) have also been noted as out-of-school factors which are influential in motivating language learning. Bertram (2006) points out that apart from positive/negative role-model behaviours, two other factors which exert a significant influence were the communication of 'educational regrets', and the way in which parents help their children to construct an understanding of the utility of languages. Furthermore, Lamb (2004a) admits that positive parental attitudes affect children's language motivation and progress.

Recently, a Greek study on parental influence in language learning (Griva & Chouvarda, 2012) found that parents strongly believe 'that multilingual awareness and ability as well as early language learning has a beneficial effect' in their children and therefore encourage them 'to learn foreign languages by answering questions and helping [them] to learn English'. The study also indicated that younger parents, between 25 and 35 years old, 'strongly regarded learning foreign languages as a useful tool to broaden children's horizons as well as to develop positive attitudes to other languages and cultural awareness' (2012: 11). The families that took part in this study were not noted as having a particularly high socioeconomic status but one of the reasons given for supporting their children's multilingual development was heightening their cultural sensibilities.

Furnham and Heaven (1998) call attention to the role of parental social class and economic status in child learning and academic performance, proposing that 'parents with high socio-economic status have certain values and beliefs that increase the likelihood that their

children will be academically successful' (1998: 77). They also suggest that the effects of parental nurture and/or punitiveness will affect academic performance, mediated by levels self-esteem or hostility in the child (this is echoed by Berliner, 2009, above). Thus, we can see a kind of reciprocity between socio-economic and sociocultural status: certain beliefs and values, which are sociocultural, beget a higher socio-economic status which in turn will reinforce those same beliefs and values. While, socioeconomic factors are salient in many studies related to language achievement, Baker (2001: 298) points out that comparing socioeconomic class does not sufficiently account for all the differences in a subject's environmental background and that other social and cultural out-of-school factors such as 'attitudes to education, literacy environments, [and] material and emotional home conditions' may be more efficient predictors. In language learning studies which have considered sociocultural status as a separate variable to socioeconomic status (Laurén, 1994; Lasagabaster, 1998), sociocultural status has demonstrated a greater effect. In fact, in Lasagabaster (1998), after statistical analysis, higher sociocultural status showed a positive correlation with higher L2 and L3 test scores, as a result Lasagabaster asserts that the 'sociocultural status of the family exercises a clearly significant effect' (1998: 75).

In conclusion, the parental influence on young learners' language development cannot be underestimated. In this context out-of-school factors may be access to materials, language exposure, and mediation of social behaviour. Parents may greatly influence their children through assistance, participation, and provision of positive role models and stable home conditions, as well as their own attitudes to language and education. In this subsection we have also seen that while both socioeconomic status and sociocultural status are important factors in language development, the latter appears to better account for environmental background. Now that we have looked at the role of parents, our focus will move to another very important contextual factor, a study abroad period, and the subsequent contact with TL speakers it provides.

2.2.2 Study and stay abroad periods

It is clear that contact affects social and cultural beliefs and attitudes (Gardner, 1985; Spolsky, 1989). After a somewhat sporadic start in the 1960s, study abroad research began to increase and become more focused in the late 1980s and throughout the 1990s. This development provided empirical support to what had previously just been a long-standing popular belief. In general, a study abroad period tends to affect learning motivation, linguistic confidence and attitudes towards the TL and its speakers. The effect of a study abroad period (also referred to as a 'stay abroad') is usually positive but some studies have shown that it can reinforce negative stereotypes (Coleman, 1996) or result in disenchantment through a reluctance to 'invest in temporary bonds' (Papatsiba, 2006: 125). A comprehensive overview of earlier study abroad research and the issues arising from it was produced by Freed (1998), after thoroughly reviewing the literature available at the time she concluded that there was evidence of a difference in language proficiency between those students who had studied abroad and those who had not. Freed (1998) states that language learners who have experienced a study abroad period 'appear to speak with greater ease and confidence, expressed in part by a greater abundance of speech, spoken at a faster rate and characterized by fewer dysfluent-sounding pauses'. Furthermore, they show a tendency to 'reformulate their speech to express more complicated and abstract thoughts, display a wider range of communicative strategies and a broader repertoire of styles' and, moreover, 'their linguistic identities extend beyond the expected acquisition of oral skills to new self-realization in the social world of literacy' (1998: 50). In terms of sociolinguistic competences, it appears that a study abroad period promotes the development of meta-cognitive awareness and sensitivity to sociolinguistic difference as language learners negotiate new and potentially conflicting cultural and pragmatic territory. This section will now conclude by looking at findings from selected study abroad studies.

Yager (1998) studied 30 college students studying abroad in Mexico to explore which types of contact, motivational orientations, and attitudes were most effective in terms of language outcomes. His results indicated that linguistic attitudes, cultural attitudes, and

integrative motivations all contributed in some way to gains in oral proficiency. More importantly, the study revealed that the type of contact between students and native speakers was significant; the more informal and interactive the contact the greater the gains in 'nativeness' for all students, especially beginners (1998: 908). Conversely, students who reported more non-interactive contact did not develop their oral proficiency to the same extent.

Fisher and Evans (2000) studied British secondary school students' experiences of learning French on a study abroad programme. The results showed that an improved understanding of cultural practices resulted in a notable shift in positive attitudes toward TL speakers and also demonstrated proficiency gains, most notably in listening and writing. Owing to their experience the students showed greater command over verbs, more frequent use of auxiliaries, and an increased accuracy in using the past tense of the verb *être*. The study also showed that the frequency of oral production correlated with improved writing, and the frequency of error correction correlated with improved performance. Post-stay interviews with the students revealed a greater 'communicative awareness', which was evident in their comments relating to 'language register, treating the dictionary with caution, and the significance of pronunciation' (2000: 16).

Tanaka and Ellis (2003) looked for relationships between changes in Japanese students' beliefs about language learning and changes in their language proficiency over a 15 week study abroad programme in the United States. They found that there was an interactive, dynamic relationship between the students' beliefs, behaviours and learning outcomes which lead to a significant improvement in their self-efficacy and confidence. The students were more confident, more satisfied with their progress, and less concerned about making mistakes, there was also a weakening of beliefs concerning analytical learning. Illustrating the bidirectional nature of the relationship, a significant correlation between beliefs and proficiency was also found; it was reported that '[s]trong beliefs about the importance of analytic learning were found to be inversely related to TOEFL scores' (2003: 81). However, there were no reported gains or losses in language proficiency resulting from changes in learner beliefs.

Williams (2006) showed that even a short-term stay may have an effect on attitudes toward learning and use of the TL. However in his study of 155 Japanese undergraduates the effect was actually negative. The Japanese students felt that they had more problems with English than other students in the study abroad program and they had a lower self-perception of their communicative ability, their desire to attend English class and to study more English did not seem to be affected by the study abroad period. In contrast, Llanes and Muñoz (2009), in their study of 24 Catalan/Spanish speaking EFL students who had partaken in a short-term stay in an English speaking country, showed that the students had improved in several measures of proficiency after a short-term stay in a TL speaking country; they conclude that ‘even a stay abroad of 3–4 weeks produces significant gains in [...] listening comprehension, oral fluency and accuracy’ (2009: 362). From this research, the effects of a short-term stay remains debatable, perhaps a number of psychological and sociocultural differences between Asian and European students could account for the disparity of the results; moreover, this relationship between psychological and sociocultural factors would be predictable from a dynamic perspective.

Juan-Garau and Pérez-Vidal (2007) looked at the oral proficiency gains (fluency, accuracy, complexity, and use of formulas) of multilingual undergraduate students who took part in a three month study abroad programme. They also investigated the impact of contact on oral gains by testing from both inside and outside the classroom environment. Although their results showed significant gains in fluency and use of formulas, these gains were not always maintained after the study period. Concerning the type of contact, their results indicated that factors such as ‘working in an international setting with native speakers, involving oneself in independent study, and listening to the media’ provided the greatest ‘opportunities to further oral performance’ (2007: 130). However, contact variables such as living with Catalan or Spanish speaking friends appeared to be detrimental. In short, gains in oral proficiency during a study abroad period may be contingent on the types of contact available, and attitudes may be

affected by contact with real-world TL users and the ‘socioinstitutional forces’ which influence TL use.

Finally, in a critical review of the literature, López (2010) compares study abroad periods with ‘at home’ learning programmes. She concludes that studying abroad ‘favours the development of oral skills’ but that grammatical abilities [...] do not seem to be better acquired’ (2010: 158). On the perceived importance of studying abroad, aside from reported proficiency gains, she states that ‘periods abroad are also considered to foster students’ motivation to learn the L2, modify their approaches to language learning, and positively influence learners’ lives in diverse ways by challenging their cultural perceptions and beliefs and broadening their minds’ (2010: 150).

In conclusion, stays in TL countries and the direct linguistic and cultural contact they offer can also constitute a powerful out-of-school factor. For language learners, studying abroad may not only affect oral proficiency and the acquisition of structural elements of a language, but also have a wide-ranging impact on their lives in terms of: communicative strategies, linguistic identities, awareness and negotiation of pragmatic conflict, cultural awareness and perceptions, confidence and self-efficacy, self-perception of communicative ability, language attitudes, motivation, and approaches to language learning. After looking at the effects a study abroad period can have on language learners, the next subsection will focus on out-of-school contact with languages in our everyday surroundings in terms of the linguistic landscape.

2.2.3 Linguistic landscape

The ‘linguistic landscape’ (Landry & Bourhis, 1997; Gorter, 2006; Cenoz & Gorter, 2008; Shohamy & Gorter; 2009) is another environmental out-of-school factor which is receiving increasing recognition. It may refer to the language situation of specific countries, the presence and use of multiple languages in a given geographical area, or the language texts present in public spaces (Gorter, 2006). Linguistic landscape studies have been carried out in a diverse range of language contact situations (detailed in: Backhaus, 2007). In recent years it has

become more prevalent to see multiple languages in the urban environment mainly due to issues such as immigration and migration, the political, economic and demographic changes engendered by globalization, and the continuing growth and development of nations. However, wherever languages are in contact, as is the case in many European countries for example, bilingual or multilingual signage has resulted more from national linguistic policy than from issues of globalization, although the latter has undoubtedly given English a greater presence.

Regarding what can be learnt from the linguistic landscape, Goodman (1980) proposed that the visibility of textual forms supplies a 'natural' environment for the (unintentional or implicit) development of language and literacy. Bloch (1999) goes further, arguing that the 'texts' relating to the environments explored by young children are a 'critical factor' in their linguistic development. Shohamy and Waksman (2009: 326) suggest that multilingual and multimodal texts in the linguistic landscape constitute 'an appropriate learning context' and Moll *et al.* (2001) propose that interaction with texts in the environment as a type of readymade resource could contribute to language acquisition. Moreover, Aronin and O'Laoire's (2003) concept of *multilinguality* highlights the decisive role played by the social and cultural environment, which, necessarily, includes the linguistic landscape. Hult (2009) points out that linguistic landscape analysis may help us understand the construction of individual language choices in multilingual societies. Finally, Bever (2012: 324) states that the 'texts in [the linguistic landscape] reflect multi-faceted social practices and processes, the state of literacy and language awareness in individuals and communities, and represent local, national and global ideologies and discourses', and that such contextual factors are linked to out-of-school factors and 'informal' language experiences which 'mediate learners' experience with the social world' (2012: 322).

Cenoz and Gorter (2008) describe the linguistic landscape as 'authentic, contextualized input which is part of the social context' (2008: 274), pointing out its multilingual and multimodal characteristics and explaining its pedagogical benefits by highlighting five distinct language learning areas which it may help develop. They are: 1) incidental learning; 2)

pragmatic competence; 3) multimodal literacy; 4) multicompetence; and 5) the symbolic and emotional power of language. A number of studies have explored some or all of these areas in terms of praxis; we will continue by highlighting four of the more recent ones:

Sayer (2010) used public signs in Mexico in order to analyse the social meanings of English, stating that the linguistic landscape can serve as a template to engage students in ‘investigating and talking about how language is used in social and cultural settings’ (2010: 144). He found that the use of English fell into both cross-cultural and intracultural categories, focusing on the latter, several overlapping social meanings of English were discovered: being advanced and sophisticated; being fashionable; being ‘cool’; being sexy; expressing love; and expressing subversive, counter-culture identities and transgressive messages. Proposing that language learners should emulate this kind of meaningful engagement with the linguistic landscape, Sayer suggests they take on the role of ‘language detectives’ in order to ‘explore the meanings of authentic texts’. Presenting findings in language classes encourages learners to combine ‘technological savvy’ with ‘critical thinking skills’ and promotes oral proficiency as they ‘explain and defend their ideas’ (2010: 153).

Rowland (2012), looking to corroborate the claims of Cenoz and Gorter (2008) and Sayer (2010), studied the engagement of Japanese university students with the linguistic landscape. In a similar vein to the study by Sayer (2010), the students acted as ‘language detectives’ and had to collect photos and analyse them to say how and why English was used in signs in Japan. As a result of the project, the students realised that languages other than Japanese and English were notably absent in their linguistic environment. They also explored the different functions (persuasive, regulatory, and informational) of English in the linguistic landscape. This allowed them to consolidate existing linguistic competences, acquire the skills necessary to process multimodal texts, develop multicompetence, and become more aware of the symbolic connotations of language. From his results, Rowland (2012) concluded that when learners investigate the linguistic landscape they can potentially develop in the ways highlighted

by Cenoz and Gorter (2008), stating that learners ‘can benefit in various, important ways from pedagogical interaction with their local [linguistic landscape]’ (2012: 504).

Chesnut *et al.* (2013) took a more ethnographic approach to their linguistic landscape study by using a narrative research methodology. Their project engaged Korean undergraduate students in linguistic landscape research; the students reported their experiences as they went along. The subsequent study focused on student experiences, difficulties, conceptual development, and self-reported learning as their research unfolded (2013: 106). In terms of pedagogical implications, Chesnut *et al.* propose that the linguistic landscape ‘may be a powerful tool’ which encourages students to ‘consider how people use language within local settings and [...] develop meaningful understandings of language use in particular places’ (2013: 114), they conclude that researching the linguistic landscape offered ‘multiple benefits’ to the participants in their study, who ‘reported greater understanding of language and communication, specifically when considering how culture and language shape language perception, and increased awareness of how different people view different aspects of language’ (2013: 118).

Chern and Dooley (2014) propose ‘literacy walks in multilingual, multimodal linguistic landscapes’ (2014: 113), which may ‘encourage the emergent literacy of children [...] before entry into school and formal literacy instruction’ (2014: 114). The aim of this activity is to ‘increase language learning from linguistic landscapes by encouraging students to approach unfamiliar print as a fascinating puzzle and to practise reading familiar print in the course of their everyday activities’ (2014: 114). Due to the status of English as a *lingua franca*, much of the linguistic landscape is dedicated to making ‘English-friendly’ spaces which in many cases supplement or even usurp local languages, Chern and Dooley readily admit that this is ‘politically complex’ but nevertheless provides a rich and easily available resource ‘in contexts where language teachers once lamented the paucity of English input outside the classroom’ (2014: 122).

While the recent studies examined above all indicate the pedagogical benefits of using the linguistic landscape as a didactic resource and, in this way, attempt to situate in practical situations Cenoz and Gorter's (2008) contention that the linguistic landscape comprises an 'additional source of input', they all take an EFL or ELT perspective. Sociolinguistic research which makes connections between the linguistic landscape as a contextual factor and language attitudes is virtually non-existent. One study which attempts to do this, albeit secondarily, is Dailey *et al.* (2005) who conducted research which included the effect of the linguistic landscape on Anglo and Hispanic adolescents attitudes towards accented speech. In this study the linguistic landscape comprised, among others, shop signs, posters, advertisements, newspapers, magazines, television, films, music, and after-school clubs/activities. In their results the linguistic landscape seemed to have no impact on the attitudes of Anglo adolescents, however a significant impact was observed in Hispanic adolescents because 'the more Hispanics considered their linguistic landscape to be in Spanish, the lower they rated Anglos' traits, whereas the less Hispanics perceived their linguistic landscape to be in Spanish, the higher they rated Anglos' traits' (2005: 35). From this Dailey *et al.* conclude that 'the perceived linguistic landscape is an important variable in language attitudes research' (2005: 36).

In conclusion, incidental input from the linguistic landscape can benefit implicit learning in a number of ways. Aside from effortlessly providing a rich and ready-made linguistic resource, engagement with the linguistic landscape may help learners to understand language choice and how it mediates experiences with the social world, to become aware of how cultural and linguistic behaviours may influence language perception, and to take into consideration how the linguistic environment can affect our attitudes to our own and other languages.

Although the current study does not deal explicitly with the above out-of-school factors as variables, it is important to include them owing to the fact that parental influence and stays in TL speaking countries may have either a direct or an indirect effect on access and exposure to some of the more specific authentic materials that will be explored over the following two

sections. Furthermore, it could be argued that out-of-school factors such as traditional and new media in fact form part of the linguistic landscape and, as we have seen above, some studies do not seem to distinguish one from the other.

2.3 Out-of-school factors and traditional media

Moving away from factors in the immediate environment, another out-of-school factor relevant to language development is engagement with *authentic texts* (Cortazzi & Jin, 1994; Guariento & Morley, 2001; McCoy, 2009). This type of ‘authentic’ material may take the form of books, magazines, comics, newspapers, television, films, and/or music. We may also refer to these texts as traditional media, or, to a certain extent, mass-media. This section explores existing research which frames authentic materials as an out-of-school factor in the context of language learning and development. We will pay special attention to television, films, and music as these types of traditional media are the most ubiquitous and readily accessible for young people.

Mass-media, especially audio-visual technologies, ‘have increasingly found their way into foreign language classrooms, and several studies have testified to their value as language learning materials’, however, in many countries didactic use of foreign language media is not restricted to the classroom, mainly due to the fact that ‘English language television programmes, movies and music constitute a considerable part of the youth-directed media supply’ (Kuppens, 2010: 65-66). According to Baltova (1994: 510-511), ‘It is now commonplace to say that audio-visual material, with its rich context, is a powerful instructional tool known to have a motivational, attentional, and affective impact on viewers, which in turn facilitates auditory processing’. Boggs (1996: xii-xiv) points out that engagement with authentic texts (such as films) is beneficial because it allows language learners to ‘participate actively in an exciting quest rather than respond passively to the surface details’. Another motivating factor is that learners feel they are in contact with language as a living entity the way that it is used by the

speech community in question (Guariento & Morley, 2001), as opposed to some static, simulated representation from an educational textbook.

An early research project which assessed out-of-school English input among European adolescents was Berns, de Bot and Hasebrink (2007), which used empirical data from Germany, the Netherlands, Belgium, and France. Over 2200 participants (average age 15) responded to a questionnaire about family background, English contact and proficiency, and language attitudes. The researchers chose adolescents because they constitute ‘a key player in the process of globalization’ (2007: 43) and media use because media ‘create culture and play a role in cultural change’ (2007: 11). The study highlighted differences between countries in terms of English media exposure, especially television; for example, while dubbing is common in Germany, France, and South-West Belgium, subtitling is more common on Dutch and Flemish TV channels. Results showed that the main contact with English came from music (radio, cassettes, and CDs), television, and school; computers and travelling abroad also figured but to a lesser extent (2007: 58). The most frequent source of input was music with participants reporting to spend on average two hours a day listening to music, and attaching importance to English song lyrics. TV played a lesser role, on average English language programmes were watched once a week, and radio, cinema, books, magazines and holidays abroad provided even less frequent contact. The study indicated that youth ‘selectively choose the media which then build their media environments’ (2007: 109), and that, in terms of music, attitudes toward song lyrics is an important factor in language proficiency. The researchers concluded that there has been a ‘qualitative change’ in English language input through mass-media which, in itself, constitutes a ‘multi-dimensional means of expression and communication’ in both private and professional spheres (2007: 114).

By means of qualitative data obtained through interviewing parents, Lefever (2010) was able to show that use of English-language media in the home environment effects the language competence of Icelandic children. He wanted to understand the level of English competence that children brought with them at the beginning of their formal instruction period and discovered

that out-of-school exposure played a significant role. His data indicated that the strongest competence was in understanding spoken English, which he feels is not surprising given that most exposure is through listening. In this study gender was not significant with regards to listening skills, but age made a difference as older children, due to greater length of exposure, got better results. Gender was significant in terms of oral production with boys showing considerably more proficiency than girls, but in general all children performed well having the ability to communicate to around level A1-A2 (according to the Common European Framework of Reference for Languages – Verhelst *et al.*, 2009). Reading competence was also affected, Lefever (2010: 15) notes that exposure to media as an out-of-school factor allows children to ‘develop early literacy skills in English without formal instruction’; that is through exposure to ‘raw’ input in the home environment with no metalinguistic explanations.

In a longitudinal study of the effect of exposure to English-language media on the ability to translate between English and Dutch, Kuppens (2010) found that certain types of media were more or less popular. Predictably, English-language music was very popular with ‘more than 90% of the sample listening to English music at least three times a week’ (2010: 73), films and television were also very popular but considerably less so without subtitles, finally, English-language computer games and use of the Internet were also very frequent. Frequency of exposure to various types of media had a significant effect on translation competence, which was most affected by subtitled television and films and least affected by computer games. Gender also played a significant role as girls showed considerably more competence than boys after long-term exposure to subtitled television and films.

Sundqvist (2009) examined, what she called, *extramural* English and the impact it has on oral proficiency and vocabulary in Swedish ninth-graders. The term ‘extramural’ means to exist outside the walls of an organized unit (like, for example, a school); in terms of extramural exposure to English the researcher refers to books, newspapers, magazines, TV, films, the Internet, videogames, and music. She found that the amount of time spent on extramural English significantly affected both oral production and vocabulary but the causal relationship was more

salient in the latter. Results also showed that more productive activities (videogames, the Internet, reading) had a greater impact than more passive activities (music, TV, films) on oral production and vocabulary. Finally, while there were gender differences, with boys spending more time on productive activities and thus receiving greater benefits, socioeconomic status seemed not to make any real difference.

Finally, Bunting and Lindström (2013) asked 11-year-old Swedish students where they learnt English and what they learnt English from. Their results highlighted the strength of the out-of-school context. Although students reported learning from in-school teaching materials, television/film and digital games also exerted great influence. Looking at the response totals, the most influential factor in learning English was television/films followed by teaching materials, digital games, and being abroad. The results showed the greatest gender difference in television/film, mentioned by almost twice as many girls as boys, and digital games, reported by just over 3% of girls but 26% of boys (in fact, the percentage of boys reporting the influence of digital games was higher than the total influence of teaching materials). The researchers put this down to differences in ‘consumer patterns’. The second part of their study, as its title suggests, focused on ‘the intersection of school and out-of-school practices’. It revealed that students clearly distinguish between acceptable and non-acceptable learning environments and recognise that most of the more enjoyable contact with English would not be acceptable in school. The students’ comments focused on the ‘intent to educate or entertain’ which the researchers claim is ‘an articulation of the differences between formal and informal learning’ (2013: 212). It seems that many of the things the students actually use English for (Youtube, Facebook, watching Southpark, etc.) would be off-limits in school, possibly because they ‘could challenge school routines and order’, and that the types of media which are used in school are hardly satisfactory; in fact, such media was described pejoratively as being ‘lame’ (2013: 213). The researchers concluded that there is a boundary between learning in school and learning outside, the students seem clearly restrained by this even though they learn more English as a ‘side-effect’ through consistent exposure in their spare-time activities.

In conclusion, traditional media constitutes a potent out-of-school factor as engagement with these types of authentic materials, and the individual agency that engagement supposes, allows learners to actively participate with language which they perceive as a dynamic, living entity instead of a static representation. We have seen that young people selectively choose media that will serve as a means of expression and communication, again supposing greater agency and engagement. Moreover, traditional media as an out-of-school factor, especially when used productively, can affect oral production and vocabulary, as well as translation competence and early literacy skills. However, it seems that young learners are aware of a dividing line between their in-school and out-of-school contact with media, expressing that the latter would not be seen as appropriate in an educational context and the former is often less than satisfactory. As can be seen from the studies above, television, film, and music are prevalent and easily accessible forms of traditional media, the balance of this section will now focus on these out-of-school factors in more detail.

2.3.1 Television and film

Exposure to television and films has been shown to affect L1 vocabulary acquisition in very young children (Rice & Woodsmall, 1988) and this type of visual media has been widely documented as playing an important role in language teaching, especially in ELT due to the ubiquitous nature of English-language mass-media (Allan, 1985; Tomalin, 1986; Geddes & Sturtridge, 1988; Rivers, 1994; Baddock, 1996). Eken (2003) describes how films can be used as didactic material both inside and outside the classroom. He states that films can, first, 'be a valuable tool for promoting critical thinking skills, enhancing students' speaking, listening, writing, and reading skills, and increasing their appreciation of arts and artists', and second, 'can help students to think along various dimensions, and thus gain control over media texts instead of simply accepting them superficially' (2003: 58). With this in mind, we will now expand on the studies already mentioned which include television and film as out-of-school factors (Lefever, 2010; Kuppens, 2010; Sundqvist, 2009; Bunting & Lindström, 2013) by highlighting

selected research which explores the benefits these same out-of-school factors from such diverse perspectives as language acquisition, multilingual pragmatics, and acculturation.

d'Ydewalle and Van de Poel (1999) measured the effect of watching subtitled television programs on the foreign language acquisition of young children (8-12 years old) which they compared to the acquisition of adults contingent on the same variable. They point out that subtitling is 'particularly informative' because it provides three simultaneous channels of information: pictorial, aural, and textual. They also note that subtitles are 'processed in detail and remembered quite well', remarking that viewers are 'able to recognize surprisingly well the precise formation of subtitles' (1999: 228). Their results show that while adults can acquire more vocabulary in 'reversed subtitling mode' (L1 audio, FL text), children acquire more in 'normal subtitling mode' (FL audio, L1 text); d'Ydewalle and Van de Poel (1999: 241) state that, in general, 'younger children perform better in the auditory presentation mode, whereas adults seem to perform better with visual presentation of the foreign language'. Their study demonstrates that watching subtitled television allows 'real but limited foreign-language acquisition' in children even when the exposure time is fairly short (1999: 242).

Koolstra & Beentjes (1999) also found that young learners could 'acquire elements of a foreign language through watching subtitled television programs'. However, their study of Dutch children also showed that, although learning was 'stronger' with subtitles, 'vocabulary acquisition was also found in the condition in which children watched the nonsubtitled English-spoken television program' (1999: 58). This means that learning can take place from watching authentic television broadcasts as they were intended for the TL speech community (i.e.: BBC, NBC, Fox, etc.). In response to previous research which linked child vocabulary acquisition through context to level of language competence (Neuman & Koskinen, 1992), the researchers tested two distinct age groups on the premise that the older group would have a higher proficiency, they reported that although the older group achieved higher test scores, 'no interaction effect between condition and age was found' (1999: 58).

From a multilingual pragmatics perspective, Nightingale (2014) proposes that child entertainment media, specifically watching animated cartoons, as an out-of-school factor may facilitate the pragmatic development of young emergent multilinguals. He suggests that through formulaic language, particularly Situation-Bound Utterances (Kecskés, 2002), cartoons are able to raise sociopragmatic awareness and provide pragmalinguistic resources simultaneously. Moreover, as cartoons are easily manageable in out-of-school contexts and highly appealing to young children, they may provide ‘an effective format for young learners which can reinforce positive attitudes to a L3 and language learning in general’ (2014: 216). The study also highlights the importance of not dubbing original version audio-visual media as to do so has the effect of removing the provision of pragmalinguistic resources and obstructing multilingual development.

Moving the out-of-school factor perspective from language acquisition to issues surrounding acculturation, Elias and Lemish (2010) examine the role of the media amongst immigrant adolescents. They look at ‘inward’ and ‘outward’ oriented integration and propose that the media constitutes ‘a means of linguistic and cultural orientation’ (2010: 9). Integration inwards is understood in terms of ‘cultural continuity’ and ‘family consolidation’. Here, media, especially television, play a central role in transmitting and maintaining the immigrant language and culture (although not without a certain degree of inter-generational conflict), and in helping to fill cultural gaps between younger and older generations. Integration outwards is understood in terms of ‘cultural adaptation’ and ‘fitting in’, here again the television plays a crucial role in transmitting and teaching the host language and culture through exposure, and in providing conversational topics and common interests between immigrants and natives which facilitate the process of acculturation. In some cases the television may even substitute real-world interaction offering a safe social space for immigrant adolescents who find themselves in a kind of cultural purgatory, not being culturally ‘authentic’ enough for either their parents (their heritage) or for the local youths (their hosts).

In conclusion, television and film are easily accessible and highly influential out-of-school factors. Their potential for language learning may include promoting critical thinking skills, facilitating pragmatic development through formulaic language, and reinforcing positive language attitudes. Subtitles may also develop language skills in that they provide pictorial, aural, and textual information simultaneously and even short exposure periods can positively affect language acquisition. Moreover, exposure to film and television without subtitles, as they were intended for TL speech communities, has also been shown to facilitate vocabulary acquisition. Finally, in terms of acculturation, television and films may constitute a means of linguistic and cultural orientation, fill intergenerational cultural gaps, supply conversational topics and common interests (the building blocks of affinity), and provide a ‘safe social space’ for immigrants. The following subsection will examine another potential out-of-school factor which is perhaps even more culturally pervasive than television and film; we will now turn our focus to music, especially popular music.

2.3.2 Music

The influence of music and musical ability in language and literacy development has long since been demonstrated (e.g.: Douglas & Willatts, 1994; Lamb & Gregory, 1993) and classroom-based use of music in early second language development has also been explored (Fisher, 2001). Listening to or using music has been linked to foreign language vocabulary acquisition (Medina, 1993, 2002; Benko, 2002; Milton, 2008; Legg, 2009; Li & Brand, 2009; Schwarz, 2012); even the use of background music has proven to be a significant variable in this sense (de Groot, 2006; Yilmaz, 2011). There is an existing body of research which explores the similarities (e.g.: Patel, 2012) and differences (e.g.: Jackendoff, 2009; Peretz, 2006) between music and language, but a detailed analysis falls outside the scope of this study. Suffice to say, Stansell (2005: 3) points out that ‘[m]elodic recognition, contour processing, timbre discrimination, rhythm, tonality, prediction, and perception of the sight, sound, and form of symbols in context are required in both music and language’, thus music and language, although distinct intelligences in the Gardnerian sense, are ‘complimentary systems of structured

communication' where language is responsible for content and music for emotion (Jourdain, 1998: 292); when these two systems work in conjunction language learners may benefit from the result. Indeed, neuroscience research has discovered that practicing music as an extracurricular activity has a positive correlation with the L1 reading fluency of American elementary students (Wandell *et al.* 2008), and that that high-school students who practice music as an out-of-school activity show significant increases in L2 ability and improvements in expressive creativity and linguistic competence (Petitto, 2008). The remainder of this section will highlight some individual studies which have explored music as an implicit language development variable both inside and outside the classroom.

Medina (1993, 2002) proposed a number of ways to use music as an instructional tool in SLA. Building on Krashen's (1982) *Monitor Model*, she proposes that music creates a type of narrative and, ergo, provides additional input for learners. Her research showed that young learners acquired more vocabulary items when the stories they were learning were both sung and illustrated, she puts this down to enhanced rote memorization facilitated by the fact that the input was put to rhythm; she states '[t]he positive effects of music on rote memorization are well documented [...] there is good reason to believe that music could similarly benefit second language acquisition' (2002: n.p).

Milton (2008) carried out a study of a single subject who, over the course of eight weeks, listened to a music CD once a week. Vocabulary uptake was measured each week and then three months later in a delayed post-test. The participant acquired 77% of the target words, 41% of which were retained in long-term memory (Milton, 2008: 231). The study highlighted a relationship between repetition and the learnability of a word; the more often a word was repeated the greater the chance of it being learnt. Repetition also seemed to negatively correlate with attrition; words that were repeated four times or more were retained 100% at the time of the delayed post-test. From this, Milton (2008: 232) concludes that there is a 'striking' and 'almost straight-line relationship' between repetition and long-term vocabulary retention.

However, critical of incidental learning, he posits that the learner was focused on the task and that a purely incidental approach would have yielded lower retention rates.

Schwarz (2012) examined the effect of pop songs on incidental EFL vocabulary acquisition. The participants were 76 Austrian students from 13 to 15 years old. Her results showed that adolescent EFL learners in Austria ‘spend a substantial amount of their leisure time’ listening to English pop songs in out-of-school contexts (2012: 134) and, as a result, are able to ‘translate English words which they have not been taught but which occur in English pop songs into German or provide a synonym for them’ (2102: 135). In other words, incidental vocabulary knowledge can be acquired from song lyrics. In terms of factors which affected these results, she found no effect from the amount of time spent listening or from reading transcripts of the lyrics but the effort to understand correlated positively with vocabulary test scores (2012: 136). In other words, active engagement with the song lyrics is what made the greatest difference. Other variables which had an effect in her study were the school educational model, the participant language background, previous stays in English speaking countries, and previous knowledge of vocabulary. Specifically related to music, influential variables included the ‘catchiness’ of the pop songs, the frequency of repetition of certain lyrics, occurrence of words in the song title, phonological and orthographical similarity to German, and contextual clues within the lyrics (2012: 136). She concludes that a wider implication of her study is that teachers should be more aware of how to exploit out-of-school factors in class, she states ‘only if teachers are conscious of such learning effects, can they encourage their learners to use these great resources and teach them appropriate strategies to enhance incidental learning from out-of-school input’ (2012: 137).

Further research in this area comes from MacLeod and Larsson (2011), who built on Krashen and Terrell’s (1984) *Natural Approach* but moved the focus of ‘natural’ acquisition from the classroom to the out-of-school context. Music was one of the out-of-school factors they considered which they describe as being ‘easily the most influential source of English exposure outside the classroom’ (2011: 22). They point out that while ‘films and television offer

language alternatives', music is a more powerful out-of-school factor in this sense because 'people don't actively seek translations to music'; as such, '[s]ongs in their original form are warmly accepted' (2011: 33). Another study by Muñoz and Lindgren (2011) gave a particularly illustrative example of music as an out-of-school factor affecting classroom language lessons. During the research for the *Early Language Learning in Europe* (ELLiE) project, a classroom of Swedish children spontaneously 'started singing the song 'Umbrella' (by the pop singer Rihanna) when the teacher talked about the weather and umbrellas' (Muñoz & Lindgren, 2011: 105). In a continuation to this study, Lindgren and Muñoz (2013) included listening to music as one factor in their 'exposure' variable; their study showed that exposure was one of the strongest predictors in both listening and reading skills. Finally, Nightingale (2012) showed the powerful effect listening to music in English had on the language attitudes of emergent multilingual adolescents. His study included some comments that participants had been invited to write. One participant commented 'Listening to songs in English makes me feel good because I realise that I have managed to understand the idea of the song and what it's about, what's more it encourages me to continue learning English so that in the future I will know all the words they say, not just the essence', while another participant remarked 'Listening to music in English helps me to know many expressions and to learn more vocabulary with every song. It's a fun way to learn English because I relate something fun like music with learning that language' (Nightingale, 2012: 176-177). These comments suggest that music not only facilitates but also encourages the learning of vocabulary.

In conclusion, music is the most ubiquitous form of traditional media and is directly linked to language not only in terms of lyrics but also in a number of its key components (Stansell, 2005). We have seen how music can create narratives and provide additional input for language learners, especially when they actively engage with the lyrics. As music is linked to emotion it can have a powerful affective impact and encourage continued language learning by connecting it with an enjoyable activity. Finally, while film/television and music are equally as predisposed to the creation of affinity through providing common interests, a fundamental

difference we have seen between the two is that people ‘warmly’ accept music in its original form without seeking translations.

As can be seen from the studies in this section, authentic input from traditional media seems to be of paramount importance in foreign language development. The reader will have noted that some of the studies mentioned above do not differentiate between traditional and new media. The current study maintains that there is a great difference between traditional and new media both in accessibility and the quality of exposure. The latter not only being richer but also more ‘democratic’ in the sense that, through the potential for dynamic interaction, the consumer of new media texts is empowered and, in some cases, emancipated from the bias of the conventional author and able to engage as an author themselves (a concept which is expounded in *La mort de l'auteur* – Barthes, 1977); or, as Henry (2013: 142), in reference to digital gamers, points out, ‘[p]layers inhabit and interact in worlds they themselves help to create’. This type of agency is no doubt motivating. With this in mind, the next section will examine exposure to new media as an out-of-school factor.

2.4 Out-of-school factors and new media

What is meant by the term ‘new media’? According to *Wikipedia* (http://en.wikipedia.org/wiki/New_media), itself an example, some of the main characteristics of new media are: access to content on-demand, interactive user feedback, creative participation, and unregulated content which is generated in real-time. Standing in stark contrast to traditional media, new media is dependent on computers and the Internet. In linguistics research, the study of Computer Assisted Language Learning (henceforth: CALL) is nothing new. Spawned from 1950s prototypes, CALL has evolved in accordance with developments in both linguistics and technology (Chappelle, 2001); its trajectory has passed through *behaviouristic*, *communicative*, and *integrative* phases (Fotos & Browne, 2004). Computers moved from being a kind of ‘tutor’ (Levy, 1997) to being a cognitive ‘stimulus’ (Warschauer, 1996), and currently, owing to technological developments (powerful processors, local-area

networks, high-speed internet, multimedia, and hypermedia), interaction, and the negotiation and co-construction of meaning are now essential factors. In fact, the Internet and mobile devices allow for the emergence of new computer literacies (data retrieval, online discourse participation, and critical interpretation), facilitate learner autonomy (Healey, 1999), and mark a shift away from computer-specific software to web-based applications and activities. From this starting point, the balance of this section will explore computer-mediated communication empowered by new Internet developments, social networking sites, and online multiplayer videogames in terms of their potential applications to language learning both inside and outside the classroom.

2.4.1 Web 2.0 and computer-mediated communication

As mentioned above, the evolution of communications technology has produced a parallel social, cultural and pedagogical evolution of CALL. As devices have become increasingly networked, portable and interactive computer-mediated communication has become increasingly present in our daily lives. Related to CALL but a separate area of research in its own right, Georgakopoulou (2006) points out that ‘emblematic’ characteristics of computer-mediated communication include:

[...] the de-localization of interactions, the formation of communities across time and space, the performativity, transience and ephemerality of identities, the networking and interdependence of communities, the mobility and transportation of peoples, languages and micro-cultures, [and] the unprecedented flow of information and exchange among different groups that transcend the local and the national. (Georgakopoulou, 2006: 548)

In this sense, one of the 21st century’s most important developments in computer-mediated communication has been the inception of second-generation Internet, or *Web 2.0* (O’Reilly, 2005), which has had a massive impact on the way we interact with internet enabled devices and the way in which we use them to mediate interpersonal and group communications.

The interactivity of Web 2.0 is what really facilitates and drives new media. It marks a move away from traditional transmission of information and instead centres ‘around developing online communities based on greater degrees of interactivity, inclusion, collaboration, authentic

materials' and, of particular interest to linguistics, 'digital literacy skills'; in terms of pedagogical contexts, while the first-generation Internet would correspond to a behaviourist model, Web 2.0 would correspond to a social-constructivist model (Harrison & Thomas, 2009: 112). Warschauer (2009: xix) comments on the social significance of Web 2.0 compared to its predecessor: 'Whereas the first generation of the Web linked information, this next generation links people, and does so in ways never before possible'.

A major feature of Web 2.0, which has important implications for multilingual practices, is the move away from linear spatiotemporal relationships; the fact that Web 2.0 facilitates quasi-instantaneous communication over immense distances obviates the contingency between physical and social proximity. As it seems that the evolution of communications technology is exponential, this spatial/social proximity mismatch is now compounded by the proliferation of internet-enabled mobile phones, which situate the potential power of international communication literally in the pockets of the user.

According to a meta-study by Wang and Vásquez (2012), linguistic research concerning Web 2.0 has been mainly centred on blogs and wikis whereas other areas, such as online social networks and virtual worlds (like those offered in online gaming), have been less thoroughly explored from this perspective. They show how the affordances in terms of language learning offered by Web 2.0 applications have significantly changed the focus of CALL and computer-mediated communication research from more traditional topics, such as the four skills, to more contemporary issues like learning communities, online collaboration, and learner identity. In their conclusion, Wang and Vásquez (2012: 424) point out that most studies 'had been conducted in post-secondary settings' and suggest that 'future research should also explore how learners in primary and secondary educational settings as well as in more informal learning contexts are using Web 2.0'.

Indeed, from a sociolinguistic perspective, Androutsopoulos (2006) points out that the most pervasive themes of current, internet-empowered computer-mediated communication are

community and *identity*. On the one hand, community is understood in terms of ‘webs of personal relationships in cyberspace’ (Rheingold, 1993: 5), although these virtual ‘communities of practice’ (Lave & Wenger, 1991) do not share the same kind of interaction and communication patterns as real-world communities, they are none-the-less very real to their participants (Castells, 2000). Androutsopoulos (2006: 422) explains that, apart from inclusive definitions of groups of people, virtual communities of practice may be defined by such factors as: ‘regular interaction around a shared interest or purpose; the development of social roles, hierarchies and shared norms; a sense of common history; and an awareness of difference from other groups’. Virtual communities of practice also share some of the concepts related to speech communities (Gumperz, 1968; Labov, 1972) and imagined communities (Anderson, 1983); an opposing, but equally relevant, view to virtual communities of practice is the concept of ‘affinity spaces’ (Gee, 2005) which focuses on affiliation with activities taking place within a particular ‘space’ instead of with members of a community.

On the other hand, identity in virtual communities and computer-mediated communication is theorized mainly from a social-psychological perspective where users may mask their real-world identity or assume multiple online identities – such identity creation is decidedly fragmented and post-modern. Another angle on identity in computer-mediated communication, which has received less attention, concerns the assumption of specific roles and the use of in-group language in order to establish membership to or affinity with particular online communities. Also of great importance in computer-mediated communication research are: 1) *online ethnography*, which may be used to explore the cultures associated with online communities from an emic perspective – shifting from the medium to the users and *their* internet; 2) *language variation*, the use of non-standard forms, emoticons, visual representations of oral speech conventions, regional/dialectal variation, taboos/obscenity, and translanguaging practices (Paolillo, 2011); 3) *social interaction*, the management of personal relationships and presentation of the self – interactional coherence, politeness, language play and performance, dialect stylization, and style-shifting/code-switching (particularly how language choice and

translanguaging facilitate the ‘negotiation of diasporic identities’); and, finally, 4) *internet multilingualism*, the primacy of English as a *lingua franca* and the representation and maintenance of online linguistic diversity (Androutsopoulos, 2006: 424-429).

A common multilingual practice in computer-mediated communication is translanguaging (see: Li Wei, 2011b), which is a communicative option available to multilinguals who may change languages on the same basis as monolinguals change registers, styles, or dialects (Gumperz, 1982). One reason for switching languages in computer-mediated communication is to establish cultural authenticity by demonstrating ‘familiarity with either high or popular culture in the other language’ (Paolillo, 2011: 11). In this sense, translanguaging can be understood as a form of symbolic social capital (Bourdieu, 1977, 1986). Using short words and phrases may provide a safe way for users to switch without the risk of ‘creating novel expressions in a language in which they may not be fully fluent’ (Paolillo, 2011: 12). As a ‘shared context’ is required language switches to be interpreted (Gumperz, 1982: 95), internet forums, online networking and especially instant messaging lend themselves to the practice as they presuppose belonging to a group or affiliation to an interest or activity. Seemingly pervasive across digital media, Androutsopoulos (2012: n.p) lists the most frequently documented functions of translanguaging in computer-mediated communication: 1) formulaic discourse, 2) culturally specific genres, 3) reported speech, 4) emphatic repetition, 5) selecting a particular addressee or responding to/challenging the language choice of others, 6) contextualizing topic or perspective shift, distinguishing between fact/opinion, information/affect, etc., 7) marking a move as jocular or serious, mitigating face-threatening acts, and 8) indexing consent/dissent, alignment/distancing, etc.

Now turning to some specific studies, both Thorne *et al.* (2009) and Thorne and Black (2011) examine the way language is used to negotiate identity in Web 2.0 environments. Thorne *et al.* examine Lam’s (2000) earlier study of a Chinese boy’s interactions in an online fan community, they point out that although the boy was positioned academically as a ‘low-achieving and ineffective English user’, the use of ‘hybrid linguistic resources’ to construct a

fan website for a Japanese pop artist allowed him to ‘present himself as a competent interlocutor’ online (Thorne *et al.*, 2009: 805). In other words, translanguaging practices plus the group marking or anonymity offered by computer-mediated communication may allow for the construction of more satisfactory identities outside traditional academic and literary ‘spaces’. In Thorne and Black (2011) a similar transformation was observed on *Fanfiction.net*. A Chinese girl who began writing in English overcame worries about her texts and insecurities about her ability as a writer; through feedback with other community members she came to see her heritage and knowledge of Asian languages as a form of capital (2011: 274). Due to a type of feedback only available in Web 2.0 environments, this girl was able to reposition herself, transforming from an insecure novice to a respected expert within the community.

Lin and Warschauer (2011) produced an international study (involving English, Spanish, Portuguese, Chinese participants) which links Web 2.0, online language learning, virtual communities of practice, affective factors, and motivational orientations. The study suggests that online language learning mediated by virtual communities of practice increases *situational* and *task* motivations both integratively and instrumentally and is thought to lower anxiety, to promote participation, and to be more egalitarian among participants. The study concludes that, contrarily to Lamb (2004b) and Dörnyei (2003), who play down the explanatory power of the integrative orientation, the connectivity provided by Web 2.0 online language learning actually strengthens integrative orientations by empowering learners to participate in online virtual communities of practice.

Finally, from an acculturation perspective, Elias and Lemish (2010: 12) explain how the Internet, especially the possibilities offered by Web 2.0, is an empowering tool for many immigrant youths looking to assimilate to the culture of their host country and become more proficient in the language(s) spoken there. In their research, the Internet appeared to be a ‘central medium’ in the lives of adolescents who used it as an ‘accessible and credible source of information’ about their host country. The youths also reported filling their linguistic ‘knowledge gaps’ by simultaneously surfing the net in both host and heritage languages; a novel

application which would not be possible with traditional media. In terms of the potential for anonymity and social distance inherent in new media platforms such as blogs, wikis, social networks, and forums, the Internet provides young immigrants (and, indeed, language learners in other contexts) with ‘a safe arena for experimenting with social interactions’ as a means to overcome ‘social and language barriers’. Finally, for the same inherent characteristics plus the quasi-synchronous interaction it offers, the Internet also plays an important role in the construction of immigrant or learner identity. The psychological turbulence of adolescence compounded with the affective impact of the need to assimilate to a host culture or express oneself with eloquence in another language may leave youths with a perceived need to reconstruct their self-image; new media communication provides the perfect opportunity for them to do this.

In conclusion, when relating Web 2.0 computer-mediated communication and language learning it seems that a recurring theme is empowerment (Lin & Warschauer, 2011; Elias & Lemish, 2012). We have seen that learning interactions in virtual communities can increase motivation, lower anxiety, and promote participation. Web 2.0 computer-mediated communication also opens the doors to new literacies such as bilingual web surfing to fill knowledge gaps and the hybridization of linguistic resources to negotiate identity. The development of Web 2.0 and the interactivity it offers has directed the focus of computer-mediated communication research to issues surrounding community, identity, and language use as a social practice; it seems that it is now necessary to expand this line of research in terms of younger learners and their extramural online practices (Wang & Vásquez, 2012). The next subsection of this chapter will move on to explore one of the most evident ways in which interactive, participatory web and computer-mediated communication has affected our daily lives, namely, social networking.

2.4.2 Social networking platforms

In today's world, communications technology and new media are evolving so quickly it is certain that by the time these words have been read new applications will have been developed and older ones will have gone out of fashion; a point in case being the emergence, growth and, in some cases, decline of social networking platforms. Social networking websites moved out of niche markets into the mainstream with highly accessible and interactive platforms like *MySpace* and *Facebook* (Harrison & Thomas, 2009). Nowadays, in recognition of the multilingual nature of the World Wide Web, the Facebook operating system has been translated into multiple languages (including some national dialects) and even offers an inline translation option for individual user posts. Although various quasi-imitation platforms have emerged such as *Tuenti* (in Spanish), *Linked In* (professional networking), or *Research Gate* (for academic special interests), Facebook remains the *sine qua non* of online social networking. Facebook's continuing supremacy could be put down to the fact that, as Pérez-Sabater (2012) points out:

[...] the original platform designed to keep in touch effectively with former classmates has evolved into a more diversified online tool [which] is used as a platform for online communities that share interests in many fields: these being political, sportive, educational, scientific, commercial, or entertainment, among others. (Pérez-Sabater, 2012: 83)

Social networking sites, such as Facebook, have been the focus of a growing body of research in the social sciences (Wilson *et al.*, 2012), they have also been examined from a pedagogical perspective, with two fairly recent examples being: distance learning (Lee & McLoughlin, 2010), and higher-education (Schroeder *et al.*, 2010). In linguistics social networking sites have received attention in terms of conversational register (McGinnis *et al.*, 2007), bilingual codeswitching (Lee, 2006; Lam, 2009), pragmatic patterns (Blattner *et al.*, 2009), language learning site usability (Stevenson & Liu, 2010), academic writing conventions (Pérez-Sabater, 2012), and study abroad learner interaction (Black, 2013). However, there is still scarce sociolinguistic research which examines online social networking platforms from multilingual perspectives. In this subsection we will explore a selection of the research that exists in this area.

Harrison and Thomas (2009) deal with the way identity is constructed among language learners using social networking sites. Their study examines how social networking sites facilitate the building of ‘multimedia collaborative learning environments’ and the promotion of ‘active and creative language learning’ among Japanese postgraduate students (2009: 110). The study points out that social networking applications have the power to promote a social constructivist pedagogic model based on integrating literacy skills with the negotiation of cognitive and social processes. The study concludes that online language learners actively seek out new connections on social networking sites, not just maintain existing connections. Moreover, using social networking sites in this way promotes autonomy because users mediate their language learning through mutual negotiation of identity. This allows learners to have more control over their learning environments, which become more dynamic, and in turn, give them more control over their personal development.

Mitchell (2012) examined the way that ESOL students in the United States used Facebook. She points out that membership to social networking sites like Facebook may help students to acclimate to college life, build friendships, and experiment with English (2012: 471). Her study aimed to explore why ESOL students became members of Facebook and how they used this social networking platform; she ascertained this by using open-ended interviews and limited monitoring of the public profiles of her participants. Her results showed that most participants had become members of Facebook in order to maintain contact with old friends; however, they also improved their ability to use English and their cultural competency by using the site. Mitchell states that the students ‘are using Facebook in positive ways that both reduce homesickness by providing an affordable medium to keep in contact with home and increase their social life in the US’ (2012: 485). She suggests that when using social networking sites like Facebook as a didactic tool a focus on its social aspects and motivational potential would be more beneficial than focusing on the mechanics of language.

Cunliffe, Morris and Prys (2013) examined, from an L2 perspective, the social networking language behaviour of young Welsh bilinguals using Facebook. The study showed that use of social networking sites among Welsh youths was ‘pervasive’ and may play a role in the formation of their language attitudes as well as provide them opportunities for language use. The results show that English is still widely seen as the language of social networking sites and information technology in general but Welsh is also used, often with special purposes or language socialization intentions. The researchers conclude that while social networking sites provide a platform for the use of minority languages, online social networks should be considered in the context of their offline counterparts, where linguistic behaviour is maintained in similar ways but through a different medium.

A study of the use of Irish in social media (Caulfield, 2013) examined a blog, a Facebook group, and a Twitter group. Although wide-ranging data were obtained, for the purpose of this chapter we will focus on results related to translanguaging and how the researcher explains them. Caulfield (2013: 210) noticed that switching languages was common in four contexts: acronyms, interjections, specialist vocabulary, and common words. To my mind, acronym switches (BBC, lol, etc.) may be simply explained in that they only exist or make sense in their original form, and interjections (oops, hmmm, etc.) are supra-linguistic so perhaps a translation seems superfluous to Irish/English bilinguals. According to the study, specialist vocabulary switches, especially neologisms, brands, program names, and web-culture terms in English, show a possibility that Irish language equivalents did not come naturally to the users; although there were attempts to gaelicise some terms (*túit* = tweet, *trendáil* = trending, etc.). Furthermore, common word switches show that users are ‘comfortable communicating between the two languages in a casual manner’ and switching was ‘driven by style and choice’ not a need for comprehension. Short adverbs (so, just, really, etc.) were common and their use was ‘perhaps mimicking the way [they] are dropped naturally and casually into speech’ (2013: 213). The study also showed that in blogs, which adhered to a strict use of Irish, non-Irish words were often graphically or orthographically marked in an attempt to mitigate transgression of the

group norms. Finally, and a type of ‘literacy’ peculiar to computer-mediated communication, when using some loanwords/phrases ‘bloggers frequently created hypertext links [...] to external websites’ such as dictionaries, encyclopaedias, and translations ‘to help with the interpretation of the blog content itself’ (2013: 218).

In conclusion, social networking sites appear to promote autonomy and give language learners more control over their learning environments. They may help learners to build friendships and thus acclimate to new situations, experiment with new languages and improve their cultural competency. Aside from promoting English as a *lingua franca*, social networking sites provide platforms for minority languages and may thus affect language attitudes. Translanguaging is a common feature of multilingual social networking sites and there is evidence of switching, adapting language resources and maintaining or transgressing group sociolinguistic norms. We are now ready to move on to the final out-of-school factor that will be explored in this chapter, namely, online videogames.

2.4.3 Online multiplayer videogames

Digital based language learning can be broadly divided into two types of program: ‘synthetic immersive environments’ which are designed specifically to support language teaching and learning, and ‘commercial off-the-shelf’ games – including *Massively Multiplayer Online Games* and *Massively Multiplayer Online Role-playing Games*– which are not designed for this purpose but may still fulfil the role in a more incidental manner (Cornillie *et al.*, 2012). While there have been various studies highlighting the language learning merits of digital based language learning there has been relatively little empirical evidence of learning outcomes (for an overview see: Cornillie *et al.*, 2012). However, as the current study takes a sociolinguistic perspective on out-of-school factors, research centred on the affordances and motivational properties of online multiplayer videogames is more appropriate than studies of discrete language outcomes and as such will be the focus of the current section.

Gee (2007) proposes that online multiplayer videogames create good learning environments because they fuse pleasure and learning and engage players in goal-directed activity, he points out that video games enhance human experience in terms of ‘control, agency, and meaningfulness’ (Gee, 2007: 10). It is also important to note that as online multiplayer videogames have evolved they have become ‘game worlds that are populated by individuals representing increasingly diverse social strata, ages, and linguistic backgrounds’ (Cornillie *et al.*, 2012: 245); in other words, their reach and influence is far more pervasive than one might think. Thorne *et al.* (2009: 810) point out that in goal-orientated online multiplayer videogames it is inevitable that that assistance from other players will be needed, this leads to ‘the formation of casual dyadic partnerships and short-term *ad hoc* groups as well as long-term social organizations’; these opportunities for novice players to develop their game skills through contact and co-play with more experienced players in the virtual community echo the Vygotskian concept of ‘social scaffolding’.

One of the main ways that online multiplayer videogames affect language learning is through the online talk, or *text-chat*, associated with the gaming communities. In most cases multiplayer videogame online talk is synchronous and text based but new technology is increasingly facilitating vocal interaction. A study by Peña and Hancock (2006) found that, despite the goal-oriented nature of multiplayer videogames, online talk was significantly more socioemotional than task-associated and that players produced notably more positive messages than negative ones. From this Thorne *et al.* (2009: 810) conclude that language plays an important role in online multiplayer videogame communities in terms of ‘interpersonal communication and relationship maintenance’ even though many of the games are ‘ostensibly orientated toward battle and competition’.

Other research in this area has found that while L2 synthetic immersive environments are in short supply it is possible to enhance commercial off-the-shelf games with supporting materials in order to exploit them for language learning (Ranalli, 2008). In Ranalli (2008),

popular simulation game *The Sims* was adapted with additional material so as to function in a CALL context. Results showed that incorporation of the modified game contributed to vocabulary acquisition, that students had a generally positive attitude towards including this type of modified material in their language learning program, and that these types of simulation games are potentially appealing to students from a wide range of backgrounds. Furthermore, Reinders and Wattana (2010) examined what happened to the interaction patterns and willingness to communicate of Thai undergraduate students exposed to English through a modified commercial off-the-shelf massively multiplayer online role-playing game called *Ragnarok Online*. The participants reported that gameplay contributed to comprehension development, vocabulary acquisition and understanding of language functions, enhanced the development of language fluency, helped to develop confidence and motivation to use English for communication, increased language practice opportunities, and provided opportunities for second language communication outside the classroom (2010: 22). From this, Reinders and Wattana (2010: 25) conclude that online multiplayer videogames ‘are able to increase student enthusiasm, lower anxiety, and improve willingness to communicate’. The use of games in this context is a case of ‘authentic engagement’, which van Lier (1996) defines as intrinsically motivated activity. Thorne and Black (2011) point out that, for this reason, FL communicative confidence and willingness to communicate may require a ‘threshold moment’ (Wegerif, 1998) the catalyst for which may be as simple as a change in communication tools so that a language learning task becomes meaningful language use. An example is Thorne (2003) where the tool change was from researcher-imposed email to participant-chosen instant messaging, which reportedly had a massive effect on the quantity and quality of interactions. In the future, taking into consideration current digital communication trends, we may see a tool change from social networking sites like *Facebook* to more personalized applications like *Whatsapp* or *Instagram*.

Thorne (2008) examined intercultural communication within the massively multiplayer online role-playing game *World of Warcraft*. The interaction between an American (Meme) and a Ukrainian (Zomm) starts out as a case of mistaken linguistic identity (Zomm asks Meme *ti*

russkij slychajno? [are you Russian by any chance?]) and becomes an opportunity for each gamer to enact an ‘intercultural stance’ (Kramsch, 1999). Assisted by a Ukrainian friend he was simultaneously chatting to using instant messaging, Meme asks *Zomm kak dela?* [how are you?]. This interaction subsequently sparked a mutual interest to find out more about cultures and languages, the gamers talk about shared interests, and there are even exchanges in which linguistic features are explicitly clarified. After the interaction Meme expressed an interest in taking Russian classes and mentioned another friend who was already studying Chinese in order to participate in Chinese-mediated gameplay. Thorne (2008: 322) sums up by stating that, for gamers participating in massively multiplayer online role-playing game environments, ‘the international, multilingual, and task-based qualities of these social spaces, where language use is literally a social action, may one day make them *de rigueur* sites for language learning’.

Peterson (2010a, 2010b) investigated massively multiplayer online role-playing games in terms of learner interaction and as ‘arenas’ for L2 learning. In Peterson (2010a) a qualitative analysis revealed that intermediate EFL learners were able to use the text-chat in massively multiplayer online role-playing games to develop sociocultural competence and engage in collaborative social interactions, learners were also able to use appropriate TL politeness strategies in order to support their interpersonal relationships. Reported language learning benefits from this type of interaction were ‘opportunities for risk-taking, enhanced fluency practice, and exposure to vocabulary not normally found in regular language classes’ (2010a: 361). In Peterson (2010b), massively multiplayer online role-playing games, conceptualized as L2 learning ‘arenas’, were reported to provide a ‘motivating context that elicits engagement in beneficial forms of [TL] interaction’ as well as ‘valuable opportunities for vocabulary acquisition and the development of communicative competence’ (2010b: 429). The beneficial language learning features of online gaming interactions seem to be ‘collaborative dialogue, negotiation, and self-repair’ and feedback from the gamers themselves indicates reduced inhibition and enhanced motivation and enjoyment from interacting in these virtual environments (2010b: 436).

A further assertion of the motivational impact of digital games (including massively multiplayer online role-playing games) comes from Henry (2013) who asserts that digital games motivate because playing them is a self-affirming activity. However, he also points out that the discrepancy between linguistic exposure from such games and classroom activities potentially results in a 'credibility problem' in terms of an 'authenticity gap' (2013: 144) as students try, unsuccessfully, to seek 'similar types of self-congruent aesthetic experiences' (2013: 153) in their language classes. Referring to Swedish EFL students, he explains that while the quantity of contact with English language environments has not changed greatly, the quality of that contact has. Current interaction with English through digital games provides very intense experiences and encompasses a sense of ownership and control, neither of which form part of traditional classroom practices. Henry (2013) states:

A decade ago many of the most highly proficient students probably owed their ability to hard work in the classroom. Now this may not necessarily be the case. For students who spend hours in digitally-mediated English-language environments outside of school and, moreover, are aware that this is where they gain most of their skills, the English of today's classrooms may by comparison seem less meaningful. (Henry, 2013: 144)

In conclusion, online videogames as an out-of-school factor in language learning can be highly motivating because they combine pleasure, agency, and meaningfulness with a learning environment that may be controlled by the user. The type of text chat that forms an integral part of these games appears to be socioemotional in nature and aimed at maintaining interpersonal relationships. We have seen that when commercial off-the-shelf games are used for language learning they can develop confidence and motivation, lower anxiety, increase enthusiasm and willingness to communicate, and provide language practice outside the classroom. Furthermore, language use in these online 'spaces' constitutes a 'social action' and may awaken linguistic and intercultural curiosity between the game players (Thorne, 2008). As 'arenas' of language learning, online games may help develop sociocultural, pragmatic, and communicative competences, as well as provide opportunities for risk-taking, collaborative dialogue, and linguistic negotiation and self-repair (Peterson, 2010b). In this context, the motivational impact

of videogames comes from the fact that playing them is ‘self-affirming’ activity which provides intense experiences and a sense of ownership and control (Henry, 2013).

So far this chapter has illustrated that out-of-school factors are essentially extramural, contextual, and environmental factors which are capable of promoting incidental language development in a number of ways that move beyond the mere acquisition of grammar and vocabulary. However, dynamic connections between these external factors, internal factors such as the affective domain and psychological realization of the self, and the languages used to express these relationships may be explained by using theories such as language socialization and concepts of self-identity. For this reason, the final section of this chapter will attempt to situate out-of-school factor in these terms, returning, where necessary, to digital media examined from a sociolinguistic perspective.

2.5 Out-of-school factors, language socialization, and sociolinguistics

Traditional language acquisition research typically tends to focus on the progress of the less experienced acquirer contingent on the input of the more experienced interlocutor. In contrast, language socialization research focuses on ‘socially and culturally organized interactions that conjoin less and more experienced persons in the structuring of knowledge, emotion and social action’ (Ochs, 2000: 230). In this way we can see a connection to Vygotskian social constructivist theory in general and more specifically embodied in the language practices of the online communities which were explored above.

Duff and Talmy (2011: 95-96) point out that language socialization research goes beyond pure linguistic development to examine ‘other forms of knowledge’, such as: culture, social knowledge (including stratification, hierarchy and status marking), ideologies, epistemologies, identities and subjectivities, and affect (expressions of positive and negative emotion). They state that in contrast to ‘a restricted and decontextualized view of language as a neutral transmitter of information [...] language socialization conceives of language as one of a multitude of in-flux, contested, and ever-changing *social practices* that in part constitute

particular dynamic communities of practice' (2011: 96 – emphasis in original). This combined with the fact that socializing interactions tend to repeat and endure over the life-span at different time-scales (a thought or speech act, a single encounter, an individual's life, or a whole generation) means we can see language socialization from a perspective in line with the dynamic systems discussed in chapter 1.

Language socialization research started with a focus on early L1 acquisition (i.e.: Schieffelin & Ochs, 1986) and primary school achievement (i.e.: Heath, 1983; Philips, 1983) and later work centred on how various age-groups were able to acquire knowledge of culturally specific interpretive frameworks (i.e.: Eckert, 2000). Some scholars (Bayley & Schecter, 2003; Duff, 2003; Schecter & Bayley, 2004) have shown concern about the homogenous, monolingual contexts in which these studies are situated and the inevitably static and unidirectional concepts of language this leads to. Duff and Talmy (2011: 101) explain that alternative research concerns involve 'the comparative neglect of the socialization of older youths and adults, socialization in more heterogeneous, multilingual, and transnational contexts, and the multiple modalities through which language socialization can occur, including computer-mediated communication, academic discourses, and popular media'. Taking this into account, Bayley and Schecter (2003: 1) point out that what they consider to be the more important work in this tradition has 'focused on the dynamics of language socialization in bilingual and multilingual settings' and 'attends closely to patterns of meaning suggested by the use of different linguistic codes in speech and literacy performances, as well as ideologies concerning the symbolic importance of different languages'. They also propose that a focus on older youths and adults in bilingual and multilingual contexts is of great importance because language socialization is not 'simply a process in which experts in a particular community pass on ways of understanding and acting in the world to novices'; these 'novices' also show a considerable amount of agency in, and draw distinct conclusions from, socialization activities, and through them they may define themselves 'at least partially [if not totally!] in opposition to older identities' (2003: 6).

Bearing in mind that language socialization involves, *inter alia*, the construction of social roles and behavioural practices, and the negotiation of identities among members of a given community it is interesting to consider Gee's (1996) concept of *Discourses* (capital 'D'). Somewhat like sub-cultures within society, Discourses are:

[...] distinctive ways of speaking/listening [...] writing/reading *coupled* with distinctive ways of acting, interacting, valuing, feeling, dressing, thinking, believing, with other people and with various objects, tools, and technologies, so as to enact specific socially recognizable identities engaged in specific socially recognizable activities.

Discourses [...] communicate who I am [...] what socially situated identity I am taking on [...] and what I am doing in terms of what socially situated activity I am carrying out. (Gee, 1996: 115)

In short, Discourses encapsulate 'social languages' through which language users may be marked as 'in' or 'out' of particular language communities and/or affinity groups. Again, compared to sub-cultures, an individual may identify themselves using more than one Discourse, and initiation into a new Discourse will require the 'scaffolding' of more experienced members of that group as it is through agreement that the group invests meaning into the Discourse. Thus, a new Discourse is not something that can be learnt, they are instead acquired through socialization and engagement with meaningful practice. However this engagement may come with a price to pay, especially pertinent to multilingual and intercultural situations, as there is often some kind of conflict between an individual's existing Discourse and the values entrenched in the new one being acquired. Lam (2004: 46) points out that from this perspective it is crucial to understand that language socialization constitutes 'a site of struggle where language practices are governed by and used to produce configurations of power that determine the norms of conduct', as far as the language learner is concerned, their affiliations and experiences (including the degree to which they acquire new Discourses) interact to situate them, for better or for worse, within the specific context of their learning.

Gee's (1996) 'Discourses' is also connected to the concept of 'new literacies', which we touched upon earlier in the study by Harrison and Thomas (2009). This has been expounded on by research from a 'social languages' perspective (Lankshear & Knobel, 2014; Knobel &

Lankshear, 2015) which points out that ‘through our social engagement with Discourses we each become identifiable as a particular kind of person [...] and learn to be a particular kind of person’ (2015: n.p.). Knobel and Lankshear (2015) point out that social languages are the ‘language component’ of Discourses and they not only transfer information but also communicate the *identity* of the speaker/author and *what they are doing* within a particular context; what they call the ‘whos-doing-whats’. These researchers propose that new literacy practices provide a way of using social languages competence to communicate ‘whos-doing-whats’ as we enact identities within specific Discourses. Contrary to traditional literacies, Knobel and Lankshear (2015) highlight that new literacies are ‘seamlessly multimodal’, have a vastly extended reach and real-time immediacy, and are characterised by *participation*, *collaboration*, and *distribution*. They state that ‘[p]articipants in new literacy practices actively seek out memberships and peers in areas of affinity and interest, and pursue different kinds of relationships between “authors” and “audiences” from those characterizing many conventional literacy practices’ (2015: n.p.). Concluding their paper, the authors point out that social language competence and new literacy practices offer a ‘range of affordances and resources to communicate “whos-doing-whats” within specific situated contexts and to meet particular purposes’, and that, furthermore, ‘all kinds of learning will increasingly be mediated by peer-to-peer interactivity online *and* offline’. Finally, in reaction to the increased occurrence of ‘acquaintanceship and collaborative activity’ across languages and the evident language socialization practices this involves, they call for further research on the significance of engagement ‘in social practices mediated by languages other than those [the users] have already acquired’ (2015: n.p.).

Thus, central to theories of language socialization is the issue of identity. Duff and Talmy (2011: 108) explain that ‘participation in socializing interactions fundamentally implicates identity, as individuals accommodate, resist, subvert, and/or transform the acts, stances, and activities that constitute particular social identities/identity categories’. In relation to adolescents, Harklau (2007: 649) shares this perspective when she explains the fundamental

role language plays in identifying and structuring adolescent social groupings, and that language *per se* is ‘one of an array of symbolic resources through which identities are forged, tried on, accommodated, imposed, resisted and changed’. Norton (2013) establishes the theoretical relevance of identity research in terms of language learning in a number of ways; here I have chosen to highlight only the arguments relevant to the current study. First, identity research ‘integrates the language learner and the larger social world’ and explains that situated within this interaction affective factors are often ‘socially constructed in inequitable relations of power, changing across time and space’. Second, identity research provides a framework to distinguish between motivation and investment, ‘a learner may be highly motivated to learn a language, but not necessarily invested in a given set of language practices’. Finally, theoretically underpinned by Anderson (1983), identity research allows researchers to position language users not only in terms of their relationship to speech communities but also in terms of their affiliation to imagined communities, ‘a desired community that offers possibilities for an enhanced range of identity options in the future’ (Norton, 2013: 2-3).

In earlier research, Norton (1995) points out that traditional SLA has been content with ‘dichotomous distinctions’ between learner and context and has often described the learner’s personality ‘unidimensionally’ (in terms of inhibition, extroversion, or field-dependency). She criticizes so-called ‘good language learner’ theories (Naiman *et al.*, 1978) proposing that they have been ‘developed on the premise that language learners can choose under what conditions they will interact with members of the target language community and that the language learner’s access to the target language community is a function of the learner’s motivation’ (Norton, 1995: 12). She concludes that through language ‘a person negotiates a sense of self within and across different sites at different points in time, and [...] gains access to – or is denied access to – powerful social networks that give learners the opportunity to speak’ (Norton, 1995: 13).

While there is virtually no existing research which directly examines out-of-school factors from a language socialization perspective, looking back over this chapter we can see

various examples of where these two theoretical concepts come together. Perhaps the most obvious intersection of out-of-school factors and language socialization involves parental sociocultural status and the direct effect this has on preparing children for interactions in the wider society (Gonzalez, 2001), and child language learning motivation contingent on family/mass-media socialization practices (Young, 1994). In terms of traditional media, we could include the way identity is constructed in a globalized world through what Lam (2004: 45) calls ‘the trans-border circulation of cultural and discursive materials’, and the mass-media’s role in Elias and Lemish’s (2010) concept of inwards and outwards cultural integration. However, it is easier to relate out-of-school factors and language socialization in terms of new media, especially internet-enabled computer-mediated communication, because this is where people connect, negotiate identities, roles and norms, enact cultural stances, and create and participate in affinity spaces and communities of practice.

As Thorne and Black (2011) point out, communication in this context constitutes the ‘everyday construction of identities [...] mediated by textual and multimodal tools involving [...] new literacies and communicative genres’ (2011: 258); in other words, contributing to online communities in terms of the types of sharing, commenting and co-construction of meaning usually involved, implies a continuous negotiation of identity. The current chapter has shown some examples of an intersection between language socialization and out-of-school factors in terms of social networking (Harrison & Thomas, 2009; Mitchell, 2012; Cunliffe, Morris & Prys, 2013), and online games (Thorne, 2008). We can suggest a nexus then in that immediate environmental out-of-school factors socialize by inculcating beliefs, values and behaviours that are in line with the surrounding society, traditional media out-of-school factors provide the raw ‘trans-border’ materials for the creation of affinity spaces and the projection into imagined communities, finally, new media out-of-school factors actually *are* the loci (the affinity spaces and virtual communities) where the processes of socialization (i.e.: how linguistic forms, Discourses, genres, and styles contribute to the construction of identities, beliefs, and representations) are played out and developed. As a final word on language socialization, Duff

and Talmy (2011: 111) propose that future research directions could include ‘a wider range of target languages and language practices’, ‘greater attention to [...] bilingual and multilingual settings’, and more research on the multiple modalities through which socialization may take place, such as: social networking sites, instant messaging, online gaming, and virtual environments. It is to this end that the current study wishes to contribute.

To conclude this section we will revisit some specific out-of-school factors to explore how they may be of use to sociolinguistics. One example is the popular social networking platform, *Twitter*, which has been used to highlight the degree of multilingualism in major UK cities, provide evidence of translanguaging, and explore online relationships between bilinguals and monolinguals. In London, Manley (2012) uncovered 66 different languages used in *tweets* (Twitter posts) but found an extreme bias toward the use of English. Contrastingly, in Manchester, Baily *et al.* (2013) observed tweets in 43 different languages other than English, including languages of wider communication like Arabic and French, and lesser spoken languages like Basque and Icelandic. Moreover, Mainguy *et al.*, (2013) found evidence of translanguaging in tweets and discovered that their study’s mapping of multilingualism, in terms of most used languages, did not match that of the local census; thus, indicating that certain modes of communication may be more or less popular within particular speech communities. Kim *et al.* (2014) suggest that platforms like Twitter have ‘the fascinating component of also containing a network’ which allows researchers ‘to investigate the interaction between a user’s language and their social surroundings’ (n.p). They examined patterns of connection between monolinguals and bilinguals in multilingual societies, finding that: 1) monolinguals cluster together whereas bilinguals do not; 2) local languages have greater influence in regional networks in spite of numerous English speaking monolinguals present in the same networks; 3) bilinguals act as a bridge for monolingual groups, using English as a ‘hub’ language, while monolinguals tend to only follow each other; and 4) bilinguals’ language mixing choices mimic the language mix of their followers and the content of their tweets is different congruent on the audience being local or non-local.

Another mainstay of online social interaction are Instant Messaging applications, which Baron (2004: 13) describes as ‘a one-to-one synchronous form of computer-mediated communication’ (although group messaging is increasingly supported). Sociolinguistic analysis of instant messaging communication highlights the dynamic relationship between technological evolution, linguistic creativity, and digital literacies. A striking way in which this can be observed is the proliferation of abbreviations used and understood by instant messaging communities: i.e. BRB (be right back), LOL (laughing out loud), and OMG (oh my God!). These abbreviations, the fusion of written and spoken conventions, and other textualised ‘speech acts’ are what Crystal (2001) calls ‘netspeak’. Many abbreviations originated from telephonic text-messaging as a workaround to the character limit of each message, Crystal (2008: 82) sees this kind of text-language as a ‘manifestation of the human ability [...] to be linguistically creative and to adapt language to suit the demands of diverse settings’ and also points out that ‘text-messaging dialects are already evolving’(2008: 81). Netspeak has also migrated across technological platforms and applications with many abbreviations, emoticons, and textual representations of actions being used on computer-based and mobile instant messaging applications, and specialist forums. However, this is now more likely an affinity strategy than the result of a character limit. Furthermore, Cameron and Larsen-Freeman (2007: 235) point out the interesting dynamic phenomenon that technical developments such as *XT9* predictive text on mobile instant messaging applications have affected a move away from abbreviation towards the full spellings of words and can even clarify orthographic doubts. From personal experience, predictive text has undoubtedly affected this author’s understanding of Catalan and Spanish accent placement.

Other sociolinguistic research which focuses on instant messaging includes issues such as: gender differences (Baron, 2004; Squires, 2012), text-making practices and technological affordances (Lee, 2007a), language register and linguistic change (Tagliamonte & Denis, 2008), youth social identity and digital literacies (Lewis & Fabos, 2011), supervernacular literacy

(Velghe, 2011), and cross-cultural interactions (Marksbury & Zhang, 2013). However, many such studies tend to focus on the users' L1 and there is extremely little research which explores multilingual practices on instant messaging applications; one notable exception being work by Carmen Lee (Lee, 2007a, 2007b; 2007c; Barton & Lee, 2013) which looks at 'text-making' practices in the light of the perceived affordances of instant messaging technology and the available linguistic resources in multilingual contexts. It seems clear that there has been little work done in terms of multilingual sociolinguistic research on instant messaging and there is a specific gap when it comes to a focus on the affective domain. Needless to say, research from this perspective which explores instant messaging on mobile devices is practically non-existent.

A final example of the interface between out-of-school factors and sociolinguistics is one of the only known studies to focus on massively multiplayer online role-playing game chat exchanges from a language attitudes perspective. Iorio (2007) explored the effects of non-standard linguistic forms on language attitudes and peer evaluation within an online role-playing game which he operationalised as a virtual community of practice. The study showed that use of non-standard forms caused negative affective and intellectual evaluation from peers. It was noted that most members of the virtual community of practice used some non-standard forms, but only certain linguistic transgressions were seen as problematic, such as: capitalisation, hyperbolicism, and alphanumeric renditions. The study suggests that offline sociolinguistic norms may be reflected in virtual communities of practice. These results show similarity to Caulfield (2013) in that there are clear sociolinguistic norms which govern communication in these types of online environments. Such norms are decided by the community members through a kind of online language socialization. Although the rules may seem informal and arbitrary to an outsider, they are a serious marker of status and identity to those inside the community of practice. Transgression of the sociolinguistic norms is permitted up to a certain point after which it must be mitigated or avoided or members may face repercussions. While exceedingly interesting, Iorio's (2007) study focused solely on the users' L1 (English) and thus failed to mine the rich informational vein that would be offered by a multilingual approach. So far there

are no known studies which apply a similar perspective to bilingual and multilingual gaming; this is a clear gap which should be addressed by future research.

2.6 Concluding remarks

This chapter attempts to frame out-of-school factors as powerful contributors to incidental language input, not only in terms of grammar and vocabulary acquisition, but also in more personal and social aspects of language use. Taking into consideration Jessner's (2013: 803) contention that 'forms of learning are considered to play a crucial role in multilingual development' we can see how both formal and informal learning in both natural and instructed settings add to the fundamental complexity of multilingualism. The out-of-school factors considered in this chapter have been: 1) the participation, attitudes, and sociocultural status of parents, the linguistic and cultural contact afforded by a stay abroad, and the ready-made resource of the linguistic landscape; 2) the discrete linguistic gains caused by exposure to traditional media sources, specifically film, television, and music, and the kinds of affinities that may be developed through them; and 3) the enabling nature of contact with Web 2.0 new media, the participation in virtual communities engendered by online social networking, and the intense and self-affirming experiences of online videogames. One of the main ways in which these concepts, especially media texts, connect to the affective domain is in terms of identity, autonomy, engagement, and agency. Out-of-school factors afford learners greater choice in the ways in which they interact with language and more control over, not only the arenas and loci in which they interact, but also their personal learning outcomes. Adolescent language learners, who are especially *au fait* with mass-media, choose who and what to engage with and how and when to do so; this is clearly empowering. Furthermore, young people are aware of dissonance between their engagement with language learning inside and outside the classroom. The structured environment of the classroom generally imposes language learning, out-of-school media exposure may appear dangerous as it could undermine institutional routines and order. Apart from many materials being created (or modified) for the classroom, thus ceasing to retain authenticity, students may well be engaged in a more detrimental negotiation of their identity in

these contexts. In short, out-of-school factors constitute ‘bottom-up’ learning as opposed to the type of ‘top-down’ learning commonly imposed in formal contexts. The previous section commented on the internal aspect of identity, the following chapter will examine the importance of affective factors in language learning before focusing on the other core variable of the current study, namely, language attitudes.

CHAPTER 3. LANGUAGE ATTITUDES

The main goal of this study is to examine the attitudes held by emergent adolescent multilinguals toward the languages in their repertoires and daily experiences. For this reason the current chapter aims to explore the phenomenon of language attitudes. It can be taken as an axiom that we cannot reach a fully comprehensive understanding of language (and language acquisition) without taking into consideration the sociocultural conditions surrounding language use. Similarly, with reference to the DMM, explored in chapter 1, multilingual language acquisition results from the dynamic interactions of external and internal factors as an individual adjusts language systems to meet communicative needs over time. As Herdina and Jessner (2002: 74) point out, living languages are inherently dynamic and ‘adapt to the social contexts in which they are used’. The DMM does not explicitly include attitudes as an individual factor involved in the development of multilingual systems but it does include motivation; as the reader will see over the current chapter, attitudes and motivation exhibit a closely entwined and reciprocal relationship. With this in mind, the current study views language attitudes as an individual, yet interdependent, factor which plays a fundamental role in multilingual development.

Approaches to language attitudes have traditionally come from social psychology (e.g.: Lambert, 1963) before being picked up by sociolinguistics. The legacy of poststructuralism has enabled us to conceptualise the dynamic nature of language attitudes in multilingual settings. For example, Pavlenko and Blackledge (2004) see attitudes as embedded in larger social, political, economic, and historical structures, Cenoz (2009) posits that attitudes develop in specific political, ideological, and cultural contexts, and Lasagabaster and Huguët (2007: 246) state that it is ‘important to understand that language attitudes are deeply influenced by the context’. Furthermore, Mihaljević Djigunović (2009: 199 – my emphasis) includes attitudes as one of the individual differences which affect foreign language learning; she contends that the role of individual differences in language learning ‘needs to be considered not only through

interactions with the learning context but also through their *internal interactions* [...] and *interactions with each other*'. Baker (1992: 97) points out that, far from being static, attitudes change over time; such change may come about due to historical, social or political influence. In fact, Burns *et al.* (2001: 209) suggests that 'a change in attitude can be influenced by the official recognition of a language by government, a nation's independence, increased autonomy, civil rights movements or institutions, such as parents, peers, community groups and the mass media'; they point out that '[h]istorical, sociolinguistic, political and geolinguistic factors all may need to be considered'. All this is in line with a systems-thinking approach which views language development as intricately nested, interacting, feedback-sensitive systems which are dependent on initial conditions and evolve over time.

Language attitudes provide a means of measuring the 'health' of a language, especially minority languages (Baker 1992). In multilingual societies, language attitudes may determine the growth or decay of a language, and are equally instrumental in societal phenomena such as language shifts as they are in individual behaviours such as language choice and use. In many European multilingual contexts, in an attempt to arrest language decay and in accordance with the European Union's *Framework Strategy for Multilingualism*, minority languages have received increased recognition and support, and early foreign language learning programmes have become increasingly commonplace. Some research advocates an 'earlier the better' perspective (e.g.: Ellis, 2008), and, as Nikolov and Curtain (2000: 7) have pointed out, one goal of early language learning programmes is to help overcome the 'attitudinal and learning difficulties older learners face'. However, Dewaele (2014) points out that the starting age is just one independent variable in the 'complex question' of language learning and that, in line with Muñoz (2011), frequency, quality and context of input, including authentic use in and out of school, may better account for language outcomes. In any case, an early start is not a guarantee of long-term success (Nikolov & Curtain, 2000), early gains should be capitalized on through methodological continuity and this necessarily includes the continual maintenance of positive attitudes (Huguet, 2007). Even though this seems quite self-evident, research on young learner

language attitudes is relatively scarce, and it is unusual to see a multilingual or holistic perspective in research which further distinguishes adolescent language attitudes as a category *per se*.

The motivation of the current study, exploring the language attitudes of emergent multilingual adolescents, necessitates a review of previous language attitudes research, which is the purpose of section 3.2. Included in this section are issues surrounding young learner language attitudes, which are explored in subsection 3.2.1. Following this, section 3.3 is dedicated to language attitudes in bilingual and multilingual contexts; the section is divided into two literature reviews: subsection 3.3.1 covers research in the European context, whereas subsection 3.3.2 narrows down the focus to research in the Spanish context. Finally, section 3.4 attempts to synthesise language attitudes research with the out-of-school factors discussed in chapter 2 using the systems theory framework that was explored in chapter 1. Following this some concluding remarks will serve to summarise the chapter and act as a link to the main study. However, before embarking on any of the above, in order to ground language attitudes as an internal factor, section 3.1 will provide a brief account of the wider framework in which they are located, namely, the affective domain.

3.1 Affective factors in language development

Stemming from *Bloom's Taxonomy*, the best known taxonomy of the affective domain is Krathwhol *et al.* (1964) who outlined five levels of affectivity: 1) *receiving*, awareness of ideas, material, or phenomena in the environment, and willingness to tolerate them; 2) *responding*, some level of commitment to the environmental stimuli mentioned above; 3) *valuing*, internalizing and placing, or being perceived to place, worth in the stimuli mentioned above (beliefs or attitudes); 4) *organization*, relating new values to those already held, determining relationships between systems of beliefs and placing values in a hierarchy; and 5) *characterization* by a value system, integrating beliefs, ideas, and attitudes into an overall world view and acting in accordance with internalized values. While the taxonomy was intended for

more general educational purposes, it is easy to see how it relates to human behaviour in general, and language and language use (a type of human behaviour) in particular.

However, perhaps a more concise way to sum up the affective domain is by using the word *emotional*; the affective domain is essentially ‘the emotional side of human behaviour’ (Brown, 1987: 100). The use of complex language to communicate is a uniquely human trait, and, as humans are inherently emotional beings, emotional aspects of language use are inevitable (see: *Emotions in Multiple Languages* – Dewaele, 2010); whether we are expressing or repressing our own emotions, or encouraging or discouraging the emotions of others. It is for this reason that language is so much more than the static and decontextualized vision of structuralist linguistics, and it is partly for this reason that disciplines like sociolinguistics have developed. In this vein, because social and cultural conditions are inherent in human communication, Mesthrie (2001: 1) points out that it is ‘impossible to study language comprehensively without due regards to the social contexts of speech’ – this necessarily includes the psychological and emotional aspects which constitute the affective domain. Finally, it is for the above reasons that it is important to explore various facets of the affective domain before narrowing down the focus on the core dependent variable of the current study, specifically, language attitudes.

The affective domain is influenced both by personality factors, which are considered *intrinsic*, and by sociocultural (contextual) factors, which are considered *extrinsic*. According to Yokochi (2003: 6), ‘it is difficult to separate the elements of the affective domain, because they inevitably overlap’; again, from a DMM perspective, we would see these elements as interacting subsystems. As this section continues the reader will notice the extent to which the above statement is true, affective elements are interrelated and interdependent on multiple levels. Some major personality factors which can be included in the affective domain are: self-esteem, anxiety, risk-taking, willingness to communicate, and attitudes. Moreover, other personality factors, such as empathy, extroversion, and inhibition also seem to overlap with sociocultural factors in that while they have a strong intrinsic connection they all involve a relationship with

others (Brown, 1973: 235). This section will continue by exploring some of these personality factors starting with the notion of ‘the self’ (what better place to begin?).

Humans are essentially egocentric. The burgeoning self-awareness of early childhood, gives way to an acute awareness of individuality in preadolescence and the insecurity that often comes with it. After weathering the radical physical, cognitive, and emotional turbulence of adolescence, the majority of us emerge as emotionally stable adults with relatively robust ego identities. Language accompanies us on this journey and is our principal tool for reaching out and relating socially with others, for expressing and comprehending what is happening around us, and for putting things in order and understanding our place in the world. Against this backdrop we may consider the ‘language ego’ (Guiora, 1972) which accounts for the relationship between our personal identity and the languages in our repertoire. To paraphrase Brown (1987: 50) on the language ego, he points out that language and self-identity are ‘inextricably bound’, he goes on to explain that until puberty children’s egos are ‘dynamic and growing and flexible’ so learning a new language poses a minimal threat. Changes during puberty produce a kind of defence mechanism ‘in which the language ego becomes protective’; the ego of the young adult is too ‘fragile’ to withstand ‘the trial-and-error struggle of speaking and understanding a foreign language’, this is a problem which, in many cases, evidently persists into full adulthood. It is important to understand that ego-identity is a base concept that other affective factors are contingent on.

We can relate language ego to the concept of ‘language shock’ (Schuman, 1986) and the ‘narcissistic injury’ (Clyne, 2001) it causes to the fundamental affective factor, self-esteem. Self-esteem is a highly pervasive aspect of human behaviour; grounded in the concept of ‘phatic communion’ (Malinowski, 1923), self-esteem is defined as a subjective self-evaluation of worthiness made and maintained by the individual and conveyed to others in verbal and other expressive behaviour (Coopersmith, 1967). Self-esteem may be: *global*, a stable trait, resistant to change; *situational*, individual appraisals based on discrete situations or traits; or *task specific* (Brown, 1987: 102). It would be a reasonable assumption that the relationship between self-

esteem and language success is bidirectional rather than unidirectional, with each element building on the other. Language shock (Schuman, 1986) is basically the fear that using a language which one does not fully control will result in criticism and even ridicule from others. In a foreign language, adults may worry about an inability to match ideas with the lexical resources necessary to express them, it is also more difficult to attract attention and praise which results in a loss of the 'narcissistic gratification' an L1 affords (1986: 382). Needless to say, all the above causes a kind of imbalance between self and affect and may have a negative impact on self-esteem (see: *Self-Discrepancy theory* – Higgins, 1987). Connecting language shock and the language-ego is the notion of 'ego-permeability' (Guiora, 1972) which relates to the extent to which we create rigid (or soft) boundaries to protect the ego. Associated with inhibition, ego boundaries are usually softer in children than they are in adults. Finally, narcissistic injury is originally a Freudian term referring to a perceived threat to one's sense of self-esteem. Clyne (2001) uses the term in relation to ESL learners positing that a desire to avoid narcissistic injury may result in decreased motivation and diminished mastery of content in an FL.

The affective factors mentioned above are related to risk-taking and willingness to communicate. Risk-taking is also related to inhibition and self-esteem; a learner must be willing to gamble with their language hunches and assume the risk of getting it wrong (Brown, 1987: 105). Beebe (1983: 40) points out that in instructed settings the ramifications of risk-taking may include a bad grade, failing an exam, a teacher's reproach, a smirk from peers, or even a kind of self-rebuke. However, in natural settings the ramifications may be more serious, including things like looking ridiculous, frustration, alienation, demonstrating failure, and even a loss of identity. Related to risk-taking, Willingness to communicate (henceforth: WTC), although originally conceptualized in L1 development (McCroskey & Baer, 1985), was applied to SLA by MacIntyre *et al.* (1998). Foreign language WTC strongly implies behavioural intention and is defined as 'a readiness to enter into discourse at a particular time with a specific person or persons using a L2' (1998: 547). This communicative volition is prone to variation from

personality traits such as apprehension and self-efficacy, but also objective traits such as age and gender (Donovan & MacIntrye, 2004).

An important affective factor, considered the opposite of risk-taking and WTC, is anxiety which, like self-esteem, can be divided into three groups – *trait*, *state*, and *situational*. While trait anxiety is something ingrained in the individual, state anxiety is only experienced in a specific moment, and situational anxiety is triggered by a well-defined situation (such as producing utterances in a foreign language). Related to the ego issues outlined above, language anxiety is a ‘face-threatening’ experience (Brown & Levinson, 1987). Communication is restrained by available resources, this immature command of language challenges one’s self-concept as a competent communicator and may lead to feelings of reticence and self-consciousness. According to Horwitz, Horwitz and Cope (1986: 127-128), the pragmatic and sociocultural nature of language means that attempts at self-expression in an FL are ‘evaluated according to uncertain or even unknown linguistic and socio-cultural standards’. Due to this, the speaker is aware of a restricted range of communicative choices and thus a diminished authenticity which leaves their self-esteem, self-image, and language ego vulnerable to injury.

Finally, personality factors which seem to overlap with sociocultural factors, in that they all involve a relationship with others, include inhibition, empathy, and extroversion. Inhibition is profoundly linked to the notion of self-esteem and the idea of the language ego which were explored above. Displaying an inverse relationship with self-esteem, inhibitions are the defences we create to stand between ourselves and the evaluation of our peers. Inhibitions arise from a conflict between our ‘performing self’ and our ‘critical self’ (Brown, 1987: 104) and while they may effectively protect the language ego from narcissistic injury the result on language learning is overly negative leading, in some extreme cases, to an almost total linguistic paralysis. The importance of empathy as an affective factor in language learning is due to the fact that communication involves ‘social transactions’ (Brown, 1987: 107). Empathy helps us avoid communication break-downs because putting ourselves ‘in the shoes’ of others allows us to assume certain structural knowledge and emotional states included in communicative acts and

understand the cognitive and affective states of the interlocutor. In multilingual communication empathy is more complex because our judgement of structural knowledge and emotional states is mostly mediated through languages we may not fully control. Furthermore, we run the risk that our own thought processes may be misinterpreted by the speaker we are addressing. Finally, extroversion is commonly misconceived as being outgoing and talkative and therefore considered to be a beneficial personality trait in language learning. However, Brown (1987: 109) explains extroversion as ‘the extent to which a person has a deep-seated need to receive ego enhancement, self-esteem, and a sense of wholeness from other people as opposed to receiving that affirmation within oneself’. Thus, in reality extroversion is more likely to be connected to the defence of the language ego as ‘[t]he extroverted person may actually behave in an extroverted manner in order to protect his or her own ego, with extroverted behaviour being symptomatic of defensive barriers and high ego boundaries’ (Brown, 1987: 110).

In conclusion, this opening section has explored the relevance of the affective domain. Using language to communicate is a highly complex and deeply human trait; we cannot separate language use either from our ‘selves’ as autonomous agents or from our necessary social interactions with external agents. While in the previous chapter certain external factors were highlighted, in this section we have focused on internal and personality factors. We have seen how the ego, self-esteem, anxiety, risk-taking, willingness to communicate, empathy, extroversion, and inhibition all exhibit complex and interrelated affective roles in language learning. Now, bearing in mind Dewaele’s (2005: 118) contention that ‘[a]ttitudes are one of the central affective variables of language learning’, the following section will begin to explore research into language attitudes.

3.2 Language attitude research

Attitudes cannot be observed directly, they are latent and influenced by external events. As Baker (1992: 10) puts it, attitudes are a ‘hypothetical construct used to explain the direction and persistence of human behaviour’, and in his opinion, they are both an efficient and

convenient way of doing so. Other definitions of ‘attitude’ which can be found in the related literature are; self-descriptions/perceptions (Bem, 1968); a disposition to favourable or unfavourable reactions toward objects, persons, institutions, or events (Sarnoff, 1970; Ajzen, 1988); ‘an inference made on the basis of a complex of beliefs about the attitude object’ (Gardner, 1980: 267); ‘a construct derived from a subject’s answers to a number of questions about an object’ (Spolksy, 1989: 149); a relation between objects of thought and dimensions of judgment (McGuire, 1985); and ‘evaluative reactions’ (Cenoz, 2004: 204). If, as mentioned above, attitudes cannot be directly observed, why are they so important to our understanding of language? Van Hout and Knops (1988: 1) answer this question quite succinctly when they state ‘language behaviour and language variation cannot be adequately explained through the sole influence of social and situational factors. The position language takes within the value system of individuals and groups has to be taken into consideration in order to better understand the manifold patterns of language use’.

In a great deal of the related literature attitudes and motivation have been studied in conjunction; this relationship was first hypothesised by Arsenian (1945) and Marckwardt (1948). Subsequently, Lambert (1955) speculated that emotional involvement with a language community provided a reason for L2 learning. The first investigation proper into the relationship between attitudes and motivation was Gardner and Lambert (1959) who posited that attitudes towards the L2 group and orientations to the learning task were controlling factors when learning a second language. Motivational research in Canadian bilingual contexts continued throughout the 1970s (Lambert, 1969; Gardner & Lambert, 1972a, 1972b; Gardner *et al.*, 1974, 1976; Gardner, Ginsberg & Smythe, 1976; Gardner, Smythe & Brunet, 1977; Clément *et al.*, 1977; Garner, Smythe & Clément, 1979), until Gardner and Smythe (1981) developed the *Attitude and Motivation Test Battery*, in an attempt to formalise the measurement procedure; the battery has been widely used in subsequent research. Gardner (1985) then published the *Socio-educational Model* (figure 8) which included motivation/attitude as a principal factor and described it as a ‘complex construct’ divided into ‘a goal, effortful behaviour, desire to attain

the goal, and favourable attitudes to the activity in question' (1985: 50). We can see that the model does not distinguish between motivation and attitude which is treated as a single, stable construct. However, Gardner (1985) divided the attitude factor into attitudes to speakers of the TL, and attitudes to its perceived practical use. These concepts are now commonly referred to as *integrative* and *instrumental* orientations.

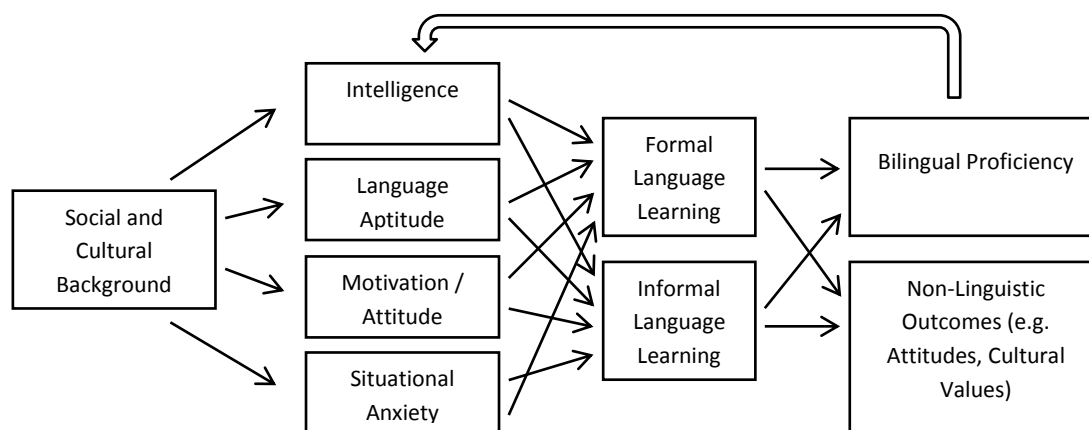


Figure 8: Socio-Educational Model (Gardner, 1985)
The arrows indicate the way in which the factors affect each other.

An orientation is described as the ascertainment of the position of the self with respect to things like attitudes and judgments; we could say that this relates to levels 4 and 5 of Krathwhol's (1964) taxonomy. An instrumental orientation is utilitarian in nature, whereas an integrative orientation is socially and interpersonally defined. Instrumentality is driven by more pragmatic motives; there is an end-state or a final objective which is usually related to achieving economic advantages or social acknowledgement. On the other hand, integrativeness is more empathetic and driven by a desire to identify with another culture (Lasagabaster, 2002). In SLA terms, integrativeness 'reflects a genuine interest in learning the second language in order to come closer to the other language community' (Gardner, 2001: 5). Integrative orientations are generally thought to presuppose a more positive attitude towards a language and it is assumed that if language learners admire the language they are learning (and its associated culture) this will lead to superior and sustained learning in which they are more likely to be successful. Alternatively, other studies have suggested that in certain contexts instrumental orientations are

more influential (Lukmani, 1972), and that a combination of both orientations working together is more effective in terms of language achievement (Zhou, 1999).

Although pertinent in the context of Gardner's research, Dörnyei (2009: 24) suggests that when an FL is taught without any direct contact with its speakers, the so-called 'integrative' orientation 'does not have any obvious meaning'. An alternative theory which may explain how language learners come to hold positive attitudes towards FL speakers and communities which they have little or no real contact with is related to the concept of the *ideal L2 self* (Dörnyei, 2005). As this concept offers a bridge between attitudes on the one hand, and identity, socialization, and imagined communities on the other (ideas which were touched on towards the end of chapter 2), a brief explanation is worthwhile. The ideal L2 self stems from psychological research into 'possible selves' (Markus & Nurius, 1986) which proposes an 'ideal', 'ought to', and 'feared' self; in other words, who we *might* become, *would like to* become, or are *afraid of* becoming. Possible selves have a guiding/regulatory function in terms of pushing us towards an outcome or steering us away from it. From this research, Dörnyei (2005, 2009) derived the 'ideal L2 self', the speaker we want to become; and the 'ought-to L2 self', the speaker we believe we should be in order to meet external expectations. Here, attitudes to the L2 community play an important role because 'L2 speakers are the closest parallels to the ideal L2-speaking self' (Dörnyei, 2009: 27); basically, we are attracted by others who constitute an emulation of who we want to be. However, the way that 'ideal self images are realized in concrete situations' (Dörnyei, 2006: 54) can be understood through the notion of 'imagined communities' (Anderson, 1983; Norton, 2001, 2013). According to Norton (2013: 8), imagined communities 'refer to groups of people, not immediately tangible and accessible, with whom we connect through the power of the imagination'. In spite of no real contact, or the language community being difficult to define in a concrete way, learners can project their ideal selves in order to emotionally and psychologically identify with an imagined language community. Ideal selves are also linked to and affected by socialization practices because communities necessarily have social norms and conditions for membership, Dörnyei (2009: 14) points out that it is

complicated to know ‘whether an ideal-like self state represents one’s genuine dreams or whether it has been compromised by the desire for role conformity’.

Returning to attitudes as a specific variable in language learning, Baker (1992: 14-15) distinguishes attitudes from opinions, motives, ideologies, and personality states in the following ways. Opinions are verbalisable and do not contain affective reactions while attitudes are latent and do contain affective reactions. Motives have an existing drive state and are goal-specific while attitudes are object-specific and create drive states. Ideologies refer to group values while attitudes refer to specific objects. Finally, personality traits do not involve an evaluative process and do not have a target while attitudes are directed towards a target. Furthermore, although earlier studies have tended not to separate attitudes and motivation, or to subsume attitudes as an aspect of motivation (i.e: Gardner, 1979; Spolsky, 1989), Dörnyei (1994: 274 – original emphasis) maintains that the two are quite distinct because attitude is an aspect of the social context and interpersonal/intergroup relationships, whereas motivation constitutes ‘the *motors* of human behaviour in the *individual* rather than in the social being’. However, this contrasts with Dewaele (2005: 122) who states that ‘motivation and attitudes cannot be considered to be orthogonal (i.e. completely independent) dimensions’. While the current study recognizes the interrelatedness of attitudes and motivation and the reciprocal relationship between them (Baker, 1992; Lasagabaster, 2005), the research focus will be on attitudes as a separate, but not orthogonal, dimension.

A number of studies have highlighted language attitudes as an independent variable in language proficiency and consider positive attitudes to lead to higher language learning achievement (i.e.: Baker, 1992; Gardner, 1985; Genesee, Lambert & Holobow, 1986). In fact, many of the Canadian studies mentioned above see the direction of causation to be unidirectional (see: figure 9), that is: *language attitude* → *motivational support* → *successful learning achievement* (Gardner & Lambert, 1972b; Gardner, Smythe & Brunet, 1977; Gardner, Smythe & Clément, 1979). This view is also shared by Spolsky (1989) who states that ‘attitudes do not have a direct influence on learning, but they do lead to motivation which does’ (1989:

149). However, later in the same paper Spolsky proposes a ‘need to consider the question of causality’, asking the question: ‘[e]ven if the main causal effect is from attitude to achievement, might there not also be a reciprocal flow from achievement to attitude?’(1989: 152)

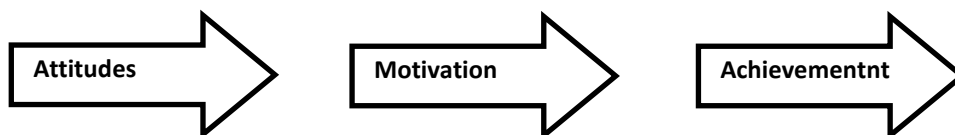


Figure 9: Unidirectional causality (Gardner & Lambert, 1972b)

This unidirectional cause and effect pattern is contested (as reported in Gardner, 1985), in fact other researchers (Muggleston, 1977; Baker, 1992; Lasagabaster, 2005) have proposed that the relationship is bidirectional or reciprocal (see: figure 10). In other words, not only can more positive attitudes lead to higher motivation and subsequently higher achievement, but also higher proficiency, whether perceived or real, can engender more positive attitudes and affect a greater level of motivation. This perspective would appear to make more sense especially from a dynamic perspective which proposes that language systems may experience both growth and decay over time.

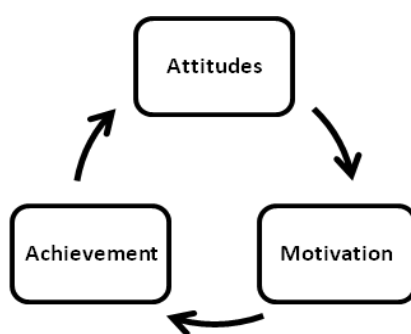


Figure 10: Reciprocal causality (Baker, 1992; Lasagabaster, 2005)

Finally, from a sociolinguistics perspective, Garrett (2010: 15) points out that ‘language attitudes research provides a backdrop for explaining linguistic variation and change’, but concedes that it also extends to other phenomena such as ‘how we position ourselves socially,

and how we relate to other individuals and groups' as well as our behaviour and experiences in the labour market and other influential spheres (education, health and legal systems). He states that language attitudes:

[...]can also tell us about differences within and across communities. If attitudes are learned then some sources of learning are related to group membership. So attitudes may vary according to ethnic, regional and social and professional groups, for example. It is generally difficult to distinguish attitudes to language varieties from attitudes to the perceived groups and community members who use them. Language varieties and their forms are often not simply characteristic of a community, but even enshrine what is distinctive in the community and in a sense 'constitute' that community. In addition, language attitudes researchers are interested in how attitudinal judgements are affected by the social contexts in which the language occurs. A particular language variety or way of speaking can, for example, meet with advantageous attitudes in some contexts, but detrimental ones in others, and perhaps more so in this late-modern epoch. (Garrett, 2010: 16)

So far so good, we can see how language attitudes have been investigated from an SLA perspective as a predictor of performance, but what affects the attitudes themselves? According to Dewaele (2005: 120), '[m]ost studies on language attitudes and motivation show the existence of complex interactions between societal and individual variables'; this is in line with the DMM and a systems-perspective in general. Dewaele (2005) mentions that variables which may affect language attitudes include sociocultural and political factors (ideologies, histories, patriotic identities, etc.), knowledge of previous languages (i.e.: Lasagabaster, 2001), parental attitudes to language, an individual's position in multilingual communication networks, and global personality traits. Further variables may include: historical or economic factors (Baker, 1992; Pavlenko & Blackledge, 2004), cultural contexts (Cenoz, 2009), or governmental policy, national independence, autonomy, civil rights, community, mass media, sociolinguistic, and geolinguistic factors (Burns *et al.*, 2001). Additionally we may include more language specific factors such as: perceived status, use potential, perceptions and stereotypes of language users, personal investment in language learning, and topological difference/similarity to L1. Furthermore, Cenoz (2004: 214) puts forward that attitudes are 'dynamic and can change over time'; again, returning to the systems-perspective of chapter 1, changes in 'initial conditions' may include quantity, quality and frequency of exposure to a language as well as the perceived ethnolinguistic vitality of the language. In fact, any of the factors mentioned above could

potentially constitute a change in initial conditions leading to unpredictable, systemic changes in attitudes over larger timescales.

As will be seen over the current chapter, a wide range of independent variables have been investigated in terms of their effect on language attitudes. Some variables are recurrent and may be considered staples of this field of research, whereas others are less frequent, there are even some which we could consider have been up to now under-investigated. The types of variables used in the studies examined in this chapter include, but are not restricted to: linguistic background (including L1, community / hometown language); social status (including social class, socioeconomic / sociocultural status); competence / proficiency (either perceived or observed); gender; age (including onset of instruction); institutional (including educational model, linguistic model, school type, activity type, training type, classroom conditions); visit / stay abroad; language status/utility; hometown size; out-of-school factors; context / milieu (including for language learning); identity (including individual, regional, national, politicocultural); personality dimensions; language use (including choice and frequency); contact / exposure; accent; geographic region; linguistic knowledge; and, pre-existing attitudes (including speech community, speakers, language learning). It should be noted that this chapter makes no claim to provide an *exhaustive* list of studies; instead it presents a wide selection of language attitudes research in the European context ranging from 1988 to 2015.

Now, in order for us to continue, as the current study focuses on the attitudes of emergent multilingual adolescents, the following section will examine some of the issues which surround the language attitudes of younger learners.

3.2.1 Young learners and language attitudes

Age is undoubtedly an important variable in language attitudes. Baker's (1992) study found that language attitudes became less favourable between 11 and 14 years of age, and that this was most notable at age 13 to 14. This attitudinal 'dip' may in part be attributable to peer group influence, which is especially strong in adolescents. Walqui (2000) points how peer

pressure can negatively affect language learning as teenagers may fear being perceived to leave their native peer group identity as they potentially form affinities with the TL peer group identity. This type of pressure threatens to undermine language acquisition ‘goals set by parents and teachers’ (Walqui, 2000: 4) and has profound effects on notions of the self which should not be underestimated. Nikolov (1999) showed that positive attitudes in young children tend to decrease with age. Young learners tend to show positive attitudes towards ‘intrinsically motivating tasks and materials, and a negative attitude towards tests’ (1999: 51). Cenoz (2004) showed that younger learners have more positive attitudes than their older counterparts, she puts this down to either ‘psychological changes associated with adolescence’ or ‘input and the teaching method used in secondary school as compared to primary school’ (2004: 214); in other words, young learners tend to react better to (inter-)active teaching approaches rather than passive ones, and to autonomy-promoting activities rather than autonomy-detracting ones like exams and tests. This is in line with earlier research by Kubanek-German (1998: 194) who posited that ‘children’s experience with a foreign language ought to be enjoyable and not put an extra burden on them’.

Lopriore & Mihaljević Djigunović (2011) point out that young learners’ language attitudes have not been researched enough, which is probably due to the misconception that there is less individual variation between young learners than there is between adults. A further development that has affected approaches to young learner attitude research is the fact that, far from being a stable and static construct (as in: Gardner, 1985), language attitudes are dynamic and prone to change over time. This highlights the importance of carrying out longitudinal research projects or studies which compare different age groups. Lopriore & Mihaljević Djigunović (2011: 3) explain that longitudinal research in this area has ‘thrown light not only on the development of young learner attitudes and on the impact they have on learning behaviour and learning outcomes, but also on what impacts attitudes themselves’. Mihaljević Djigunović (2012: 58) makes the further observation that rather than simply focusing on attitudes and motivation as causal agents in language learning success, it would be profitable to look at them

as ‘an aim and a result of early FL learning’, taking into consideration their interaction with other variables such as aptitude, anxiety, styles and strategies, as well as contextual factors. This is in line with Baker (1992: 12) who points out the ‘double function’ of attitudes as both ‘predisposer and outcome’.

A study which highlights young learner attitudes to foreign language learning and how those attitudes change over time is Heining-Boynton and Haitema (2007) who collected data from a number of elementary schools in two districts of the United States. This large-scale quantitative study was followed up by interviews with 13 of the original participants when they were in high-school (age 16-18). Results from the elementary schools indicated that females were more interested in FL study than males but, in a similar vein to Nikolov (1999) and Cenoz (2004), their interest declined as they became older. In terms of liking the teacher and the subject matter, continuing FL study, and using the FL outside school, positive attitudes steadily declined regardless of gender. The results showed that the students generally accepted FL study, were willing to learn, wanted to please, and were open to the new experience. However, there were few opportunities to use the FL in external settings and (with the exceptions of bilingual families) the students could not maintain enthusiasm for something they perceived difficult to use in daily life. Results from the high-school, which revisited some of the same students 10 years after their FL instruction at elementary school had begun, revealed that that majority of the participants reported to have liked their elementary school FL classes and expressed a desire to continue learning the FL. An interesting result was that all but one respondent reported using the FL outside the classroom, with one girl remarking that when she was called on to act as a translator for one of her parents she ‘realized that all this is useful and it’s real’ (2007: 164). The researchers point out that, in the US, foreign language instruction in elementary schools positively impacted on students’ ‘perceptions of speakers of languages other than English, foreign cultures, and how FL study impacts their education’, for this reason they conclude that ‘attitude formation toward language learning is a critical component of early schooling’ (2007: 165).

In Sweden, Henry and Apelgren (2008) investigated young students' attitudes before and after a further FL was introduced to their school curriculum, they also compared these attitudes with their attitudes to the first FL (English). The participants were 532 school children (average age range 10.5 to 12.5 years). Options for the second FL were French, Spanish, German, and sign language. An interesting variable in the study was the 'ideal L2 self' (Dörnyei, 2005; Csizér & Dörnyei, 2005) which we have explored above. Results show that attitudes to FLs and FL learning weaken at approximately 11 to 12 years old, but there is no parallel decline for the 'ideal L2 self' measurement. The researchers posit that this is because 'the anticipated enjoyment of learning a new FL is not matched by the actual learning experience', although this does not affect the students' 'conceptions of their future selves as FL speakers' (2008: 614-615). Gender affected attitudes to English as boys held more instrumental motivational orientations whereas girls valued competence as a personal attribute. Furthermore, girls were generally more positive to FLs, but boys gave a higher rating to the importance of multilingualism. One of the results showed that attitudes to the second FL were positive after its introduction possibly because this allowed students the experience of engaging with a new linguistic code, the researchers point out that although language attitudes are maintained at a relatively high level, students seem to become frustrated with the school learning situation. Henry and Apelgren (2008: 619) conclude that their sample shows little 'antipathy to multilingualism' and, after a year of instruction in a new FL, students seem to be more positive about learning this new language than about learning English.

In Italy and Croatia, Lopriore and Mihaljević Djigunović (2011) explored the language attitudes of 91 first grade school children towards English as an FL. The study looked at attitudinal change from grade 1 to grade 2, and also investigated the relationship between attitudes and other aspects such as language behaviour and learning achievement. Results of the study showed significant individual differences between the students. To illustrate this, four profiles (which the researcher felt best described young learner attitude development) were presented:

1) female: in grade 1 she took time to develop control of her learning experience (characterized by quiet periods); by grade 2 she felt in control and her self-perception increased, she was prepared to participate more actively and ultimately she achieved more highly.

2) male: considered a high-achiever, he was highly engaged in the learning task in grade 1; by grade 2 he was affected by a change in teachers and teacher approach which resulted in a deterioration of both attitudes and achievement.

3) male: considered to be self-critical, competitive and a *kinesthetic* learner, in grade 1 he was quite disruptive in class and only displayed interest in activities such as games and singing; in grade 2 he calmed down and appeared to enjoy knowing words that his classmates did not.

4) female: described as active and competitive, she paid attention and displayed high engagement but low self-confidence in grade 1; in grade 2 her achievement dropped considerably probably due to having initially overestimated her competence and having received feedback from the teacher and her peers.

Lopriore and Mihaljević Djigunović (2011) conclude that the young learners attitudes were, on the whole, initially positive, as they moved from grade 1 to grade 2 a divergence of attitudes was observed, some improving and some deteriorating. This is likely the result of individual variation, changes in learning conditions, and the interrelation of attitudes and personality factors.

As mentioned in chapter 2, the *Early Language Learning in Europe* (henceforth: ELLiE) project (Enever, 2011) is a highly comprehensive, pan-European study which examines various aspects of early foreign language learning, for the purposes of the current study we will

focus on the results regarding changing attitudes to how children perceive early language learning. In general most young learners begin with a positive attitude to foreign language learning; in particular, young learners attach a special importance to learning new words because it allows them to feel confident using the foreign language. Listening comprehension and oral production were two performance areas found to be affected by attitudes; young learners who started with more positive attitudes were more motivated and showed enhanced performance. The study looked at changes in attitudes to learning between 2008 and 2010, it was found that:

[...] changes that emerge over time reflect the growing awareness of likes and dislikes of the various elements of the learning process and the accumulating experience of learning in general... the overly positive self-concept turns more realistic with increasing awareness of criteria against which language performance is assessed by the teacher and the growing ability of young learners to compare themselves to peers. (Mihaljević Djigunović & Lopriore, 2011: 58-59)

The ELLiE study not only connected young learner attitudes with indicators of language proficiency but also identified specific factors which may impact on those attitudes. These factors include: the time spent on and the status given to an FL in the school setting, favourable classroom conditions, activity types, and perceived language utility, as well as various out-of-school factors (detailed in chapter 2), which also include parental and family attitudes to FLs. In its conclusion, the study recognizes that not all young learners have positive attitudes to FLs and that attitudes may deteriorate over time. Enver (2011: 149) points out that '[a]s the learning task becomes harder, some children lose interest, become more anxious, or are influenced increasingly by peer and societal pressure to perceive [foreign language learning] as unimportant and not enjoyable'.

In conclusion, language attitude research involving young learners has revealed that there exists more individual variation than was previously thought. Even in younger learners, attitudes are dynamic and change over time reflecting differences in learning conditions and teaching methodology and materials. There appears to be a particular attitudinal 'dip' in early adolescence (Baker, 1992) which, on the one hand, could be attributable to peer group influence (Walqui, 2000), but on the other hand, as concepts of the 'ideal L2 self' remain more stable,

may also be attributable to a discrepancy between the anticipation and the actual experience of language learning (Henry & Apelgren, 2008). Regarding child learners, not only has a great deal of variation and attitudinal change been observed but also positive attitudes have been shown to engender motivation and enhance aural comprehension and oral production. It is important that we create positive attitudes in young language learners as in this way we may help to soften the impact of the attitudinal dip, one way of ensuring this is to pay attention to the language activities young learners are engaged in, we should make sure that these activities promote autonomy and do not place extra burden on the learners. Now that we have dealt with language attitudes as a general construct and have commented on attitudinal variation and change in younger learners, in order to continue the current study we will narrow our focus to attitudinal research in European bilingual and multilingual contexts.

3.3 Language attitudes in European bilingual and multilingual contexts

Language attitudes are of paramount importance in the European context. This is principally due to the following two factors: 1) the great number of languages in contact in a relatively small geographical area, meaning that many areas are bilingual or multilingual by default, and: 2) the social and professional freedom of movement between European countries enjoyed by EU citizens; a heightened mobility which is exacerbated by the economic status of a first-world continent. Language attitude research has been carried out in, but is by no means restricted to, the following European countries: Belgium (Dewaele, 2005; Mettwie & Janssens, 2007), England (Garrett *et al.*, 1994; Fisher & Evans, 2000; Gardner-Chloros *et al.*, 2005), France (Hoare, 2001), Hungary (Dörnyei & Csizér, 2005), Ireland (Ó Loaire, 2007); Malta (Caruana, 2007), the Netherlands (Gorter & Ytsma, 1988; Gorter *et al.*, 2001; Ytsma, 2007), Sweden (Henry & Apelgren, 2008), and Wales (Baker, 1992; Laugharne, 2007). As mentioned above, this is by no means an exhaustive summary of language attitude studies in the European context; to examine them all in detail is a task which falls beyond the scope of this study. The reader will also notice that Spain has been omitted from this list; as the current study focuses on the Valencian Community, previous research from the Spanish context will be explored

separately. First, the following sub-section will explore in more detail some of the studies mentioned above.

3.3.1 European studies

It would be virtually impossible to continue without paying due respect to the seminal study *Attitudes and Language* (Baker, 1992), which is probably one of the most perseveringly influential pieces of research on language attitudes in Europe. This study explored attitudes to Welsh in bilingual contexts and examined the effects of gender, age, linguistic background, type of school, and language proficiency on a sample of 797 Welsh school children. The results showed a generally favourable attitude to Welsh. The participants showed a positive attitude towards speaking Welsh, using it in adulthood, and this use being inherited by their children. They were also conscious of the value of learning Welsh, its place in the modern world, and the need to preserve the language. Welsh was seen as most important for passing exams and getting a job and least important for playing sports and watching television. The study reveals that there seems to be a critical point at around age 13-14 where favourable attitudes to Welsh are at their lowest. Baker states that (1992: 63) '[m]otivational and physical changes, the growth of Piagetian formal operations, changes in self concept, [and] the move away from family identity towards more individual and peer group identity may be connected to attitude to Welsh becoming less favourable'. Finally, involvement with cultural contexts and literacy environments lead to favorable attitudes and provide a support mechanism for Welsh as a minority language. However, contact with Welsh in terms of popular media (music, film, television, etc.) produced less favourable attitudes; this could possibly be put down to dominance of English in modern media forms. Baker's study has proved to be a cornerstone in language attitude research and his questionnaire formula has served as the basis for many subsequent studies. However, his study only addressed attitudes to Welsh and English, as the current study is interested in multilingual language attitudes we will now examine a study in the Welsh context which deals with minority, majority and *foreign* languages.

Moving the focus to a Welsh university context, Laugharne (2007) analysed the attitudes of 203 students enrolled in teacher-training and psychology courses. The study considered attitudes to Welsh, English, and modern foreign languages (including: French, Spanish, German, and others). The independent variables were: gender, age, socioeconomic groups, type of educational training, visit abroad, hometown size, community language, L1, age on starting instruction, and self-assessed competence. Results showed that males were more positive to English and modern foreign languages whereas females were more positive to Welsh. Age only affected Welsh; starting to learn Welsh as a young child or adult resulted in favourable attitudes whereas starting in adolescence had a more negative effect. Socioeconomic groups showed no effect. Educational training showed that students on social or secondary education courses were more positive to modern foreign languages than students on primary or early education courses, and those on primary or social education courses were more positive to Welsh than those on secondary or early education courses. A visit abroad resulted in more favourable attitudes to modern foreign languages. Community language had an effect on both Welsh and English (students were more favourable to the language of their hometown), but the size of the hometown only affected Welsh (less than 100,000 inhabitants = more favourable attitudes). Unsurprisingly, students were more favourable to their own L1 but, in terms of modern foreign languages, students who had both Welsh and English as their L1 were more positive, and L1 Welsh students were the least positive (probably perceiving a threat from languages with greater ethnolinguistic vitality). Finally, self-reported competence showed a positive correlation with attitudes to Welsh and a converse pattern with attitudes to English. Laugharne (2007: 228) concluded that attitudes to Welsh is a 'sensitive variable' which is 'interrelated with many others', this is likely due to the international status of the language.

There seems to be very little research on bilingual or multilingual language attitudes carried out in England, we will continue by exploring some studies which stand out. In educational settings, Garrett *et al.* (1994) focused on attitudes in primary schools in Cardiff and Lancashire. The study reports on a three-month experimental period when both schools carried

out parallel writing activities; some classes in English and other classes in 'mother tongues' (Welsh and Mirpur Punjabi). Attitudes towards writing, the self, ethnic identity, and curiously even to Britain itself, were significantly more favourable in the mother tongue groups after the experiment. However, there were no recorded improvements in written performance over the period of the experiment. In another educational study, Fisher and Evans (2000) focused on three secondary schools around Cambridge exploring students' experiences of learning French on a school exchange trip. Apart from the effect the study abroad period had on acquisition, the researchers were interested in attitudinal changes. Results in this area showed that, in contrast to pre-visit stereotypes, on return the students held markedly more positive attitudes towards France and French-speaking people.

Gardner-Chloros *et al.* (2005) analysed the language attitudes within the Greek-Cypriot community of London. They found that both age and social status were important factors. Although the younger generation valued the social and symbolic status of Greek-Cypriot dialect and standard Modern Greek, they did not 'regard these varieties as necessary for involvement in the Greek-Cypriot community' (2005: 74); young members of the community were also more likely to use English rather than Greek-Cypriot dialect or standard Modern Greek at home. The older generation, and those of a lower social standing, were more prone to perceive English as a threat to Greek-Cypriot identity. However, regardless of age or social class, English was seen as 'a necessary code for economic, social, cultural and symbolic advancement' (2005: 74). Both Greek-Cypriot dialect and standard Modern Greek were considered to form part of the community's cultural heritage, but Greek-Cypriot dialect was more popular, especially with lower social classes. Young people felt more 'detached' from standard Modern Greek due to less contact with the language and a feeling that it was not particularly 'instrumental' for them. Age also proved to be a factor in attitudes to codeswitching. Although a common practice in the community, codeswitching was favoured by young people who used it to express their identity. The researchers relate their findings to the economics of the linguistic marketplace (see: *Outline of a theory of practice* – Bourdieu, 1977), members of the community who are competent in

English as well as standard Modern Greek and Greek-Cypriot dialect, principally those of higher educational and socioeconomic status and the younger generation, have a greater 'share' in the linguistic market and are able to profit from the cultural, economic, social, and symbolic 'capital' this brings. Gardner-Chloros *et al.* (2005) point out that different linguistic market forces operate in Cyprus, where Greek-Cypriot dialect and standard Modern Greek are markers of solidarity and provide cultural, economic, and symbolic capital, they state that such differences in capital forces 'may lead eventually to language shift in the Greek-Cypriot community of London' (2005: 75).

In Ireland, Ó Laoire (2007) analysed the language attitudes of 120 students enrolled on an education and arts degree. The majority of the participants had experience of studying one of the L3s available in the Irish educational system (including French, German, and Spanish); more than half the students had also visited a country where the L3 is spoken. Predictably, the results showed a clear influence from the L1; Irish L1 speakers were positive towards Irish but less so towards both English and the L3, whereas English L1 speakers showed the opposite tendency. The researcher posits that this 'protective attitude' of Irish L1 speakers may be due to a strong attachment and commitment to the language. Age, gender, and socioprofessional status appeared to have no significant effect on Irish, English, or L3s. However, visiting a country where the L3 is spoken showed a positive correlation with attitudes towards that language. Finally, although Irish L1 speakers were less positive towards an L3, competence in Irish did affect a favourable disposition towards L3s. In general, the study indicated a positive attitude towards Irish although the orientation was mainly pragmatic or utilitarian; Irish was seen as important for getting a job, passing exams, and communicating with colleagues. Ó Laoire (2007: 181) concludes that '[t]he symbolic role of the Irish language in ethnic identification continues to constitute an important element in attitudes to Irish [...] [but this] favourable attitude does not translate into active language use'. It is clear from this study that English remains the dominant language at home, at college, in the neighbourhoods, and in popular

media. However, Ó Laoire (2007: 181) points out that the ‘youthful vibrant imagery and discourse’ of Irish-language television programming can ‘transmit positive attitudes to Irish’.

In France, Hoare (2001) analysed attitudes towards Breton and French among school-age children and young people in non-bilingual schools in Brittany. The study focused on self-reported competence, language and identity (including personal vs. regional), accent as an identity marker, and differing perceptions of Breton. Results showed that 45% of the participants claimed to understand Breton, and 10% were confident in their language ability. Unsurprisingly, participants from *Basse Bretagne* (Lower Brittany – where there is greater contact with Breton) saw themselves as more proficient. Gender appeared not to affect these results. In terms of language and identity, participants from *Basse Bretagne* felt more ‘Breton’ than those from *Haute Bretagne*; gender was also significant as males felt notably more Breton than French. Reported competence also correlated positively with Breton identity, but in spite of this correlation, almost half the informants claimed that speaking Breton was not a prerequisite for being considered Breton. Conversely, there seemed to be a notable difference in perceptions between personal and regional identity. Over two thirds of the participants suggested that to be a ‘true Breton’ (a regionally defined identity) it *was* important to have knowledge of Breton. There were also very positive attitudes to preserving the language, precisely because of its role in defining regional identity. However, this was considered ‘passive support’ as many informants did not wish to participate in the revival process and attitudes to children learning Breton and its status as a compulsory school subject were not overly positive. Having a Breton accent, perceived to originate from rural areas, was reported to be closely linked to regional identity; in fact, Breton-accented French was a more significant regional identity marker than actually speaking Breton. Attitudes to the future of Breton were more positive from *Basse Bretagne* informants, the least favourable attitudes came from 15-16 year-old males. The researcher suggests that this age group is under more social pressure to conform to peer group norms which ‘may not necessarily engender positive attitudes towards minority languages’ (2001: 80). Finally, age was a decisive factor in attitudes to Breton speakers as younger

informants perceived Breton speakers as typically old or of rural origins, whereas older informants tended to evaluate Breton speakers as 'intelligent' because it is a difficult language to speak. Hoare (2001: 81) puts this down to the 'distinction between the perceptions of Breton forming part of the traditional world and Breton in the modern world'.

In Belgium, Dewaele (2005) analysed 100 Flemish high-school students to ascertain their attitudes towards French and English. The independent variables were personality dimensions (extroversion, psychoticism, neuroticism, anxiety, and self-perceived competence), gender, social class, frequency of use, and politicocultural identity. Results showed that personality dimensions such as extroversion, psychoticism, and neuroticism were not significant variables, but socially shaped personality factors (communicative anxiety and self-perceived competence) were linked to FL attitudes; the latter being strongly linked. Gender appeared to affect attitudes to French while English was gender neutral. Politicocultural beliefs had an effect on French but not English; where regional identity was more important than national identity attitudes to French suffered. Furthermore, politicocultural identity interacted with gender; 'national' identity females were more positive to French. Dewaele (2005: 132) concludes that 'English is clearly more popular than French' which he puts down to the link between English and youth culture in terms of music, television, films, and the internet, and to the evident potential of English as a *lingua franca* compared to the politically complex use of French in the region.

In a university context, Mettwie and Janssens (2007) analysed the attitudes of 239 teacher-training students toward Dutch, French and English. The independent variables were: educational system, home language, gender, socioeconomic status, region, knowledge of other languages, L2 and L3 starting age, watching TV in English, and a stay in an English speaking country. Results showed that 'language community' (home language, region, and educational system) had the greatest effect. Other significant variables were an earlier start to language instruction and knowledge of other languages, from which the researchers concluded that 'multilingualism goes along with positive attitudes' (2007: 138). Finally, English language TV

and visiting an English speaking country both correlated positively with attitudes to that language. Mettwie and Janssens conclude that, in line with Dewaele (2005), attitudes towards English were more positive than those toward the L2 (French), and that political, social and cultural factors seem to be important in determining language attitudes (2007: 142).

In the Netherlands, specifically Friesland, Gorter *et al.* (2001) point out that language attitudes are a driving factor involved in language choice. Frisian speakers are generally positive about their own language, expressing an emotional attachment to it and extolling its ‘beauty’ and ‘value’. However, somewhat contradictorily, Frisian speakers seem to oppose measures designed to ensure the vitality of the language, such as its use in education or public administration. The researchers distinguish four categories in attitudes towards Frisian: 1) overly negative, in opposition to official use of Frisian and consider its use should be restricted to Frisian speakers; 2) negative in terms of the economic power or ‘serious’ use of Frisian but positive towards maintaining the language; 3) technically positive towards solving the Frisian ‘problem’ rationally but emotionally detached from the language, and 4) overly positive in both emotions and opinions. Gorter *et al.* (2001: 108) state that with these ‘contrasting language attitudes, language conflicts are part and parcel of daily life in Friesland’ but they concede that there is ‘no large-scale social conflict over the use of the language’. Earlier research in this context (Gorter & Ytsma, 1988) highlighted the critical role of linguistic background in attitudes to Frisian and also in attitude shifts; the language used at home or in the community may affect ‘amenability’ to attitudinal shift. Finally, in a further education context, Ytsma (2007) examined the language attitudes of 99 teacher-training students. Results showed that while gender had no significant influence on attitudes towards Frisian or English, male informants were more positive toward Dutch. Contrary to previous research (Gorter & Ytsma, 1988) social status showed no effect regarding any of the languages. The most crucial factor in this study was linguistic background, specifically the L1; as evidenced in other language attitude research, participants had more positive attitudes to their own L1.

In Malta, where there is regular contact between Maltese, English, Italian, and (to a lesser extent) Arabic, Caruana (2007) analysed 189 students from the Faculty of Education and the Faculty of Arts at the University of Malta. The students were enrolled on courses such as Pedagogy, Teaching Methodology and Psychology; all students studied languages as part of their course. The study focused on Maltese, English and Italian, and included the following variables: language use, importance of each language, L1, size of hometown, community language, gender, age, socioeconomic status, visit to TL country, and self-assessed proficiency. Results showed that Maltese was used mainly in familiar settings whereas English was more likely to be used as a vehicular language in education. Maltese was considered most important to 'interact socially, especially to make friends, to live in Malta, and to read and write' (2007: 199), but its academic role was less significant and in terms of watching TV its role was described as 'limited'. In order of importance, Maltese was the most important language followed by English and then Italian. Males were more favourable to Maltese than females, but gender did not affect English or Italian. L1 showed a highly significant correlation; predictably, speakers were more favourable to their own L1. No significant effect of L1 was found for attitudes towards Italian. Higher socioeconomic status correlated positively with favourable attitudes to English whereas lower status showed more favourable attitudes to Maltese; again, Italian was not affected by this variable. The size of the hometown did not return any significant results but the community language showed significant results similar to those of the L1. Age showed an effect in attitudes towards Italian; earlier onset of instruction correlated with a more positive attitude. Visiting a TL country also correlated with positive attitudes to Italian and this variable was considered 'highly significant' in the study. Finally, for all three languages there was a significant correlation between self-perceived competence and positive attitudes.

Finally, in Hungary, Dörnyei and Csizér (2005) analysed the effect of intercultural contact and tourism on language attitudes. The participants were 4,765 school children (age 13-14); data was collected in 1993 and again in 1999. Five target languages (English, German, French, Italian, and Russian) were explored in terms of orientations, attitudes, intended learning

effort, and parental language proficiency. Other variables included: attitudes to L2 community, L2 speakers, and language learning at school; L2/FL contact; vitality of L2; linguistic self-confidence; integrativeness and instrumentality; fear of assimilation, cultural interest; language learning milieu; and, language choice. Interpreting their findings from a ‘contact hypothesis’ (Allport, 1954) perspective the results showed that ‘contact factors played an important role in shaping the student responses’ (2005: 351). The study consistently demonstrated that intergroup and language attitudes were positively affected by intercultural contact. Moreover, the amount of contact was directly affected by perceived self-confidence and milieu. The study indicates that contact not only has a positive impact on self-confidence, but also appears to be beneficial in reducing prejudice (and subsequently challenging stereotypes that may influence attitudes). One of the most interesting, and seemingly contradictory, findings from the study was that attitudes were lowest towards the highest contact L2 group – German speakers. The researchers compare this result to the ‘U-model’ (Pool, 1966; Stangor *et al.*, 1996), a kind of attitudinal dip where initial unrealistically positive attitudes cannot be maintained in the face of the unforeseen negative effects of real contact; length of contact eventually raises attitudes once more, hence the U shape of the model – up, down, up. In this respect, Dörnyei and Csizér (2005: 352) propose that ‘[u]p to a certain point, increased contact promotes intergroup and language attitudes, as well as motivated language learning behaviors, whereas if the contact exceeds a certain threshold level, it seems to “backfire” and work against positive intercultural relations’. To explain this unusual result, the researchers suggest that it is related to the amount of importance attached to intercultural contact depending on location; in large cosmopolitan centers less importance is attached to intercultural contact, the impact of which showed in the attitudes measures. Concluding, Dörnyei and Csizér (2005: 354) state that ‘contact factors fundamentally shape the overall L2-specific disposition of members of a language community’.

In conclusion, the studies presented here have only shown a selection of attitudinal research in European bilingual contexts; however, it is clear that there exists a wealth of studies in this regard, and, moreover, multilingual contexts are now increasingly being examined. It is

clear to see that there are a wide variety of factors which influence language attitudes but some (such as: gender, age, linguistic background, visits abroad, and social status) seem to be more consistently salient in the relevant literature. Of course, each European country is subject to different language policies, forms of language contact, language histories, and socio-political language hierarchies; all these factors may come together in any number of configurations to create a range of individual linguistic contexts. However, as the current paper is centred on the Spanish context (with its own unique configuration of factors), it is necessary for us to once more narrow our focus to examine language attitude studies carried out in Spain.

3.3.2 A focus on Spanish studies

In Spain, a range of previous studies in bilingual communities have explored attitudes towards co-official languages (and languages which do not have official status), for example: *Aragón* (Huguet & Lapresta, 2006), *Asturies* (Llera Ramo & San Martín Antuña, 2003), *Euskadi* (Etxebarria, 1995; Rojo *et al.*, 2010), *Catalunya* (Huguet & Llurda, 2001), *Galicia* (Rei-Doval *et al.*, 1996; González González *et al.*, 2011), and *la Comunitat Valenciana* (Blas Arroyo, 1994; Casesnoves, 2001; Martínez & Blas Arroyo, 2011). However, these studies principally deal with attitudes to the minority language and do not take multilingualism into account. The current section will focus on studies carried out in the Spanish context which do take a multilingual perspective, for example: Lasagabaster (2003, 2005, 2007) who explores attitudes to Spanish, Basque and English in the Basque Autonomous Community; Huguet (2007) whose study focuses on Spanish, Catalan and English in Catalonia; Loredo Gutiérrez *et al.* (2007) who examine attitudes to Spanish, Galician and English in Galicia; Safont-Jordà (2007) whose study explores attitudes to Spanish, Catalan (Valencian) and English in the Valencian Community; Lasagabaster and Safont-Jordà (2008) who produced a study in the Basque Autonomous Community and Valencian Community respectively which takes a holistic approach to languages in contact; Lasagabaster and Sierra (2009) who analysed the effects of the CLIL programme on the attitudes of secondary school students in the Basque Autonomous Community; Nightingale (2012) who focused on the attitudes of emergent multilingual

adolescents in Castelló; and Portolés (2014, 2015), who focused on the attitudes of teacher training students in public and private universities in Castelló and València, and early consecutive multilinguals in the Valencian Community. After this brief summary, the balance of this section will provide a concise outline of the results of each study.

In the Basque Autonomous Community, Lasagabaster (2003) found that L1 had a significant effect on language attitudes; Spanish L1 speakers are less positive toward Basque and Basque L1 speakers show the opposite tendency. L1 also has a 'definitive influence' on attitudes to the L3 English; Basque L1 speakers obtained very low scores in a general attitude index. It was discovered that Basque L1 speakers were 'very reluctant to be taught in English', even though they believed it to be 'enriching' and supported and defended the validity of English being learnt at school. In spite of this, Basque L1 speakers' scores on the general attitude index were higher towards English than to Spanish. Lasagabaster (2003: 221) concludes that: 'this minority group are aware of the need to learn other languages besides their own L1, but they feel that the best way to maintain their own language is to protect it from the risk embodied in more powerful languages with a very high degree of ethnolinguistic vitality [...] such as Spanish and English'. Lasagabaster (2005) focuses on what he sees as the most important variables affecting language attitudes in the Basque Autonomous Community. He concludes that of principal importance are: level of competence, sociolinguistic context, age and gender. Referring to his 2003 study, he states 'the effect of the students' L1 [...] fades in comparison to the pressure exerted by the degree of competence, which becomes the more definitive influence on the attitudes of the participants' (2005: 308). Regarding English as a foreign language and the lingua franca, he states that 'the degree of competence [...] turns out to be fundamental' and that this variable, alongside sociolinguistic context and knowledge of other languages, 'explains the highest percentage of the variance' (2005: 310).

In Lasagabaster (2007) the study focused on the attitudes towards Basque, Spanish, and English of 222 university students (mean age 20 years) who were studying a Teacher Training degree. Results showed that attitudes towards Basque were most favourable although

unfavourable attitudes to any of the three languages were very rare. Gender appeared to have no direct influence, but, as Lasagabaster (2007: 81) points out, the fact that the degree overwhelmingly attracted female students ‘might have had an impact on their male counterparts’ language attitudes’; we could propose that this is a type of peer influence. The influence of L1 was clear cut and displayed typical characteristics, students were more positive to their own L1; however, L1 Spanish students were more positive to English than L1 Basque students. The impact of socioprofessional status was that students from a lower socioprofessional background were more favourable to Spanish. Age of onset of instruction only affected self-perceived FL competence; conversely, a visit abroad appeared to impact on attitudes but not self-perceived competence. Linguistic model of education exerted a great influence on attitudes in a similar way to the L1; Basque immersion students were more favourable to Basque, students who study using Spanish as the vehicular language were more positive to both Spanish and English. Size of hometown and community language both showed significant effects; locations with less than 100,000 inhabitants and/or Basque-speaking areas were more positive towards Basque, whereas locations with more than 100,000 inhabitants and/or Spanish-speaking areas were more positive towards Spanish. Finally, there was a significant correlation between self-perceived competence and language attitudes; which Lasagabaster (2007: 83) states bears out the claims of a ‘direct relationship between language attitudes and language achievement’.

Huguet (2007) analysed language attitudes to Spanish, Catalan and English from a sample of 309 students at the universities of Girona and Lleida. Results showed that in spite of the prominence of Catalan in the linguistic landscape the language was most likely to be used in family relationships, he states that the use of Catalan is ‘remarkably reduced as we move away from the individual’s family nucleus’ which indicates that in Catalonia Spanish is still considered a very important language of social use (2007: 35). Regardless of language use, Catalan is still perceived most positively; 80% of the sample showed positive attitudes to Catalan and there were no negative attitudes. Spanish and English showed more neutral and

some negative attitudes. Gender was not a significant factor but, as the sample was largely female, further research would need to confirm this. L1 was significant in the predictable way mentioned above; Huguet suggests this may be due to ‘a sense of threat from the other language towards the status of our own’ (2007: 35). Socioprofessional status showed no significant effect on any of the languages; Huguet states that English ‘seems to be above the families’ socioprofessional status’ (2007: 36). Age of learning makes no difference to attitudes toward English, but a visit to an English speaking country does; from this, Huguet proposes the need for continual maintenance of positive attitudes and the fact that a visit abroad provides a better perspective on TL culture and a more positive attitude toward those societies. Linguistic model in education and hometown language affect attitudes towards Catalan and Spanish. Finally, the size of the hometown significantly affects attitudes toward Spanish; the attitude being more positive in towns of 100,000 inhabitants or more.

Loredo Gutiérrez *et al.* (2007) realised the same type of study in the Galician context where Galician has co-official status and English is the first choice of FL. Data were collected from 207 students enrolled in courses relating to teacher training or pedagogy at university campuses in Santiago de Compostela, Lugo, and A Coruña. Results seem to show a downward trend in the use of Galician and indicate that it ‘is spoken more in the family environment than in the educational one’ (2007: 61). The study confirms previous findings in this context – that there exists a negative attitude toward the use of Galician. The researchers state that ‘[g]alician is only considered important for reading and writing activities that are limited to the world of education’ (2007: 62) and express concern about the future of Galician in education. Positive attitudes to Galician appeared to depend on a very specific combination of variables: females in the lower end of the social scale from smaller towns with Galician as a L1 and a high exposure to the language in their educational model, media and community were those who showed the most positive attitudes. Positive attitudes to Spanish were dictated by L1, linguistic model of education, town size (over 100,000 inhabitants), hometown language and linguistic competence. Finally, variables affecting a positive attitude toward English were socioeconomic status (higher

social class), visit to an English speaking country and linguistic competence. The researchers conclude that the results are ‘worrying for the future teaching of the Galician language by teachers, as the general belief of the importance of Galician for life in Galicia does not correspond with motives of an instrumental or integrational kind that will benefit its use’ (2007: 62).

Safont-Jordà (2007) focused on competence in Catalan, Spanish, and English, and how this affects attitudes. She found that attitudes towards Catalan were on the whole positive; over half of the sample displayed favourable attitudes and another 40% showed neutral attitudes. However, compared to Spanish and English, Catalan also received the highest overall percentage of negative results (11%). Safont-Jordà points out that, in contrast to Lasagabaster (2003), neither gender nor socioprofessional status had any effect on attitudes. Knowledge of other languages was another variable which appeared to have no effect; however, in this study very few respondents had knowledge of other languages and those who did described their knowledge as ranging from ‘a little’ to ‘good’ (2007: 111). The study found that the age at which the students started learning English did not affect either their perceived competence in the language or their attitudes towards it. Conversely, visits to English speaking countries did affect both perceived competence and attitude. Factors such as L1, perceived competence in Catalan, and predominant home town language appeared to have a powerful influence on attitudes towards Spanish and Catalan, but only the hometown size appeared to have any influence on attitudes towards English. On the relevance of the study, Safont-Jordà (2007: 112) states: ‘[w]e believe that the results show the importance of sociolinguistic and sociocultural factors in language competence, on the one hand. On the other, they raise the importance of educational frameworks in fostering attitudes which in turn may influence language learning’.

Lasagabaster & Safont-Jordà (2008) examined the language attitudes of 416 university students in the Basque Autonomous Community and the Valencian Community; the students were enrolled in teacher training and educational psychology courses. The study builds on previous research (Lasagabaster, 2005, 2007; Safont-Jordà, 2007) but an important distinction is

that it takes a *holistic* perspective to three languages in contact; as such, the questionnaire used was modified to reflect this holistic perspective. Lasagabster and Safont-Jordà justify this approach through the DMM (Herdina & Jessner, 2002) framework, stating that ‘attitudes towards languages must be studied as a whole’, particularly in a situation of minority, majority and foreign language contact which ‘may give rise to a certain linguistic friction’ (2008: 185 – *my trans.*). The researchers hypothesized that: 1) students in the Basque Autonomous Community and the Valencian Community will show positive attitudes to the three languages in contact in their respective linguistic communities, and 2) using a holistic questionnaire would either reduce or totally neutralize the significance of the L1 variable. The second hypothesis was split into three categories: 1) attitudes toward the knowledge of and social presence of multilingualism; 2) attitudes towards language learning; and 3) social and cognitive effects of multilingualism. Results confirmed both hypotheses, attitudes were indeed positive to the three languages in contact across both communities, and the influence of the L1 seen in previous studies virtually disappeared when a holistic approach was employed. Lasagabaster and Safont-Jordà conclude that ‘it seems evident that a holistic focus notably reduces linguistic friction’ (2008: 195 – *my trans.*).

Lasagabaster and Sierra (2009) analysed the effects of a *Content and Language Integrated Learning* (henceforth: CLIL) programme on the language attitudes of the secondary school pupils participating in it. General results ‘seem to confirm that CLIL programmes help to foster positive attitudes towards language learning in general’ (2009: 4). The researchers hypothesized that: 1) CLIL students would be more positive to English than EFL students, 2) gender and sociocultural status would affect attitudes to English, and, 3) CLIL students will be more positive to Basque and Spanish than EFL students. The first hypothesis was confirmed as CLIL students had significantly more positive attitudes towards English as a FL than EFL students, and that using the FL to teach content has a substantial attitudinal impact. The researchers put this down to the ‘more intense exposure’ and ‘more meaningful opportunities to use the target language’ provided by the CLIL approach (2009: 13). The second hypothesis was

partially confirmed, gender affected attitudes in both CLIL and EFL groups, but sociocultural status did not appear to have any effect. Lasagabaster and Sierra (2009: 13) state ‘the importance of English appears to positively affect all social classes’ attitudes by providing students with future possibilities of access to the job market and to promotion’. The third hypothesis was also confirmed, not only did CLIL affect attitudes to English as an FL, it also affected the minority and majority language, improving attitudes to both; this was especially noticeable with older CLIL students in the Basque Autonomous Community who ‘held significantly more positive attitudes towards Basque [...] than those who attended regular EFL classes’ (2009: 14). However, Lasagabaster and Sierra (2009: 14) concede that further ‘[l]ongitudinal studies are needed’ to provide more information and to ‘analyze whether the older students’ more positive attitudes to the minority language have to do with their longer time enrolled in the CLIL groups’.

Nightingale (2012) analysed the language attitudes of 29 EFL students (12-16 years) in the Valencian Community. The study explored how attitudes to English were affected by sociocultural status, a visit abroad, and out-of-school exposure. Results show that, without applying any independent variables, attitudes are positive to Catalan, Spanish, and English; this trend is accentuated when these languages are considered holistically as the holistic measure returned the most positive responses. Interestingly, Catalan returned the least negative responses. Sociocultural status was measured by parental education (university or pre-university), students with university educated parents were more positive to learning English, its utility and cultural value, and were happier to use the language. A simple visit abroad was not enough to affect language attitudes, but a longer stay was. Students who had stayed abroad for a few weeks or longer were considerably more positive to the utility of English and the value of learning it; a stay abroad also seemed to break down cultural stereotypes. Exposure to English in out-of-school contexts unquestionably improved attitudes to that language. Students were more positive to 9 of the 10 attitudes statements, and radically more positive to 8 out of 10. The frequency of exposure returned less clear results, although positive responses peaked when the

exposure was ‘every day’. To my knowledge this study was the first to consider out-of-school factors as an independent variable in language attitude research in the Spanish context.

Portolés (2014) explored the effect of sociolinguistic context and L1 on the attitudes to three languages in contact (Catalan, Spanish, and English) of 75 university students in the Valencian Community. The study involved students from the public university, *Universitat Jaume I* (henceforth: UJI) and the private university, *Universidad Católica de Valencia* (henceforth: UCV). The sociolinguistic context differed in that the minority language, Catalan, was dominant in the public university, whereas the majority language, Spanish, was dominant in the private university. Results found that the sociolinguistic context affected attitudes towards the majority and foreign languages but not the minority one; it turned out that students from the UCV were more open to the three languages in contact than their counterparts from the UJI. Portolés (2014: 63) puts this down to the perceived ‘need to protect the minority language against the two international languages’, and the fact that the geographical location of the UJI means that Catalan is much more present in the linguistic landscape. Results for the L1 showed a marked effect on attitudes to the minority and majority languages; the trend was the same as the studies above, participants showed a preference for their own L1. Furthermore, in line with Lasagabaster (2003, 2007), speakers of the minority language had a less positive attitude to English. Portolés (2014) used the study to call on universities to take language attitudes into consideration when designing language policies, especially in the case of teacher training degrees which may impact on how language attitudes are transmitted to young learners. She states ‘[w]e may expect that if these teachers have positive attitudes towards languages their future pupils are more likely to have them as well [...] language policies at universities play a major role in the promotion of language learning’ (2014: 66).

A further study from Portolés (2015) examined the relationship between pragmatic awareness and language attitudes in consecutive multilingual children. The 402 participants were divided into two groups ranging from 4-5 years (preschool) and 8-9 years (primary school). While the study is wide-ranging and comprehensive, for our purpose here, we will only

investigate the third hypothesis, that of language attitudes. Global results indicate that multilingualism is highly valued by the young learners; however attitudinal difference was observed in their language constellation as Spanish returned the most favourable attitudes. The result regarding Catalan and Spanish was attributed to ‘political, historical and psychological factors’ (n.p) in the region, whereas the result regarding English was attributed to parental influence and the perceived instrumental value of the language. Furthermore, the study correctly predicted that global attitudes would be more positive in the preschool group than in the primary school group. Breaking these results down to individual languages revealed that pre-schoolers were more positive to Catalan and English whereas primary school children were more positive to Spanish. In other words, attitudes seem to become less positive to multilingualism over time. Portolés (2015) puts this down to dynamic cognitive, affective and linguistic development as well as the socialization processes that may affect children in primary education. Furthermore, in terms of minority and majority languages, young children may lack awareness of the status and vitality of a minority language while older children may choose to identify with the dominant language. Portolés (2015), in line with Cenoz (2000), proposes that the decline in positive attitudes towards the foreign language may result from the changes in teaching methodology which occur as young learners move from the preschool to the primary school stage. The study concludes that young learners may not equally value all the language systems that comprise their linguistic configuration. This discrepancy may be the result of political, historical, social and psychological factors, as well as the sociolinguistic status of each language and other influences such as mass-media. The complex and dynamic nature of language attitudes revealed in this study are in line with the DMM (Herdina & Jessner, 2002); attitudes may be modified over time by the influence of other factors at both macro and micro levels.

In conclusion, we can state that the particular social, political, and historical configuration of Spain make the sociolinguistic context of fundamental importance. This also seems to have a profound psychological impact which means we must consider L1 and self-perceived competence as essential variables. In general, English is seen as a lingua franca which

implies a high degree of social and cultural capital (in the Bourdieuan sense) as well as distinct and specific economic advantages. Attitudes towards Spanish and its perceived importance compared to minority languages appear to be highly contingent on L1. Furthermore, there seems to be a lot of protection of minority languages which leads to a type of diglossia: in contexts such as Catalonia and Galicia, *Català* and *Galego* respectively are reported to be used more in familiar settings (even though Catalan has greater public presence). As an anecdote, from my perspective as an *estranger* (foreigner), when I ask students in the Valencian Community how many languages they speak, almost all of them will tell me Spanish, a little English, maybe another European language like Romanian, Italian, French or German. While some students will also proudly say that they speak Valencian Catalan, on many occasions I have to remind them that they speak that language as well, and more importantly that *it counts* as another language! Perhaps because of my *estranger* status some students omit the recognition of Catalan from their linguistic configuration when they speak to me, but the very fact that they do this also illustrates the diglossic situation of the community.

The studies presented in this section in no way claim to constitute an exhaustive account, however what has been included gives a fairly comprehensive understanding of the state of current attitudinal research in Spanish multilingual contexts. We can also see that in the Spanish context language attitudes have been investigated from holistic and dynamic/complexity perspectives allowing us to see results which better reflect the multilingual reality of the country and the wider European context. In the following section we will attempt to expound on the effect on language attitudes of the different out-of-school contexts which were focused on in chapter 2.

3.4 Language attitudes: towards a psycho-sociolinguistic complexity perspective

The final section of this chapter will attempt to synthesise out-of-school factors with language attitudes using a systems-theory framework. In this way we will attempt to illustrate how both of these aspects are in fact interacting nested subsystems in the overall complex

dynamic system of multilingual language development. We take the highly comprehensive DMM (Herdina & Jessner, 2002), which was explored in chapter 1, as a starting point and aim to build on it by moving from their psycholinguistic perspective towards the incorporation of a sociolinguistic perspective; that is, by viewing out-of-school factors and the affective domain as subsystems and proposing that the overall system interacts and evolves at linguistic, personal, and social levels (i.e.: linguistic, affective, and behavioural subcomponents). However, it is first necessary to consolidate the link between this chapter and the previous one by showing how out-of-school factors affect language attitudes.

One of the first out-of-school factors we explored was the role of the parents, specifically their socioeconomic and sociocultural status. Lasagabaster and Sierra (2009: 6) point out that parental attitudes affect the behaviour and interests of children, they state ‘students may be strongly influenced by their parents’ beliefs and values, which are closely tied to their sociocultural status’. This is in line with Gonzalez (2001) who explains that sociocultural factors influence how parents mediate their children’s behaviours for social adaptation. Thus, sociocultural status will inevitably have an effect on language socialization processes. Higher sociocultural status implies more contact with other cultures, enhanced social mobility, less ethnocentrism, and a greater appreciation for and understanding of the academic formative process. This being the case, it is more likely that the notion of language use as a social practice within which one can form part of vibrant and dynamic communities will be transmitted more effectively (albeit perhaps unconsciously). In the Spanish context, where English is the main foreign language, parents with higher sociocultural status are more likely to be capable of combining this *lingua franca* with their existing linguistic resources in order to work within the framework of international or Anglophone markets. What parents transmit to their children in this way is the idea of language as ‘capital’. Apart from the integrative motivation engendered by understanding language as ‘process’ and ‘community’ or the instrumental motivation of language as an economic prerequisite, for speakers of minority languages, this kind of socialization makes it less likely that international prestige languages

will carry the same threat as they would from an ethnocentric perspective. Perhaps for these reasons, Lasagabaster and Sierra concluded that sociocultural status exerts ‘a strong influence on language attitudes’ (2009: 6).

The idea of a study visit or stay abroad was discussed as an out-of-school factor, it would seem apparent the sociolinguistic contact offered in these situations can affect cultural beliefs and language attitudes. Indeed, the Socio-educational Model contends that ‘cultural beliefs about the second language community will influence both the nature and the role played by attitudes in the language learning process’ (Spolsky, 1989: 154). Giving credence to the idea of reciprocity between attitudes, motivation and acquisition (Baker, 1992; Lasagabaster, 2005) we can posit a feedback loop between learning and attitudes in situations of study abroad language contact. In general, contact will affect attitudes towards the TL, its speakers and the associated culture in a positive way. However, depending on individual psychological factors (such as ego-permeability), this effect may also be negative, actually increasing ethnocentrism or resulting in disenchantment due to unfulfilled idealised expectations (Coleman, 1996; Pabatsiba, 2006). Various studies have demonstrated positive linguistic and attitudinal effects from study abroad periods: Yager (1998: 908) demonstrated that ‘improved attitudes’ to native speakers of the TL ‘go hand in hand with greater language gain’; Fisher and Evans (2000) showed how language contact may serve to dispel negative cultural stereotypes, improve understanding of cultural practices and create a more favourable view of TL speakers; Tanaka and Ellis (2003) explained how study abroad can affect learner beliefs and behaviours (including attitudes) which may lead to improvements in self-efficacy and confidence; and Juan-Garau and Pérez-Vidal (2007: 118) highlight that interaction with authentic TL users and contact with the ‘socioinstitutional forces’ which influence authentic TL use may be predictors of positive attitudes.

The linguistic landscape was also discussed as an out-of-school factor. The languages we see around us are pertinent to our attitudes because of the different affective relationships we have with those languages (Javier, 2007). As Cenoz and Gorter (2008) point out, because of

their strong ties to national and ethnic identities, languages are symbolically linked to particular ethnolinguistic groups. In the case of dual language signage and advertising using minority languages, virtually all speakers of these languages will also be competent in the majority language and in most cases the information presented will be the same. Thus, the use of both languages together combines an informative function on the one hand with symbolic and affective functions on the other; the intention of the latter is to create closeness and affinity with the minority language speech community (Cenoz & Gorter, 2008). According to Bever (2012: 324) the linguistic landscape reflects ‘social practices and processes’ which we could link to the language socialization mentioned above, it also represents ‘local, national and global ideologies’ which may impact on attitudes in terms of perceived over/under-representation of languages in the community, extra input and context for FL learners, and the attachment of languages to real-world contexts which reflect the actual preferences of language users. The linguistic landscape may also reflect the special discourse purposes of languages. For example, in Mexico, Sayer (2010) showed how English is used to express advanced, sophisticated, fashionable, sexy, and cool messages, as well as manifest personal stances in terms of subversive, transgressive and counter-culture identities. Furthermore, through contact with the linguistic landscape, learners are able to develop multicompetence and the skills to process multimodal texts (Rowland, 2012) which may have a positive impact on self-efficacy and, in turn, language attitudes. Moreover, Chesnut *et al.* (2013: 114) show how engagement with the linguistic landscape allows learners to ‘develop meaningful understandings of language use in particular places’ and thus contextualise and consolidate existing linguistic knowledge, making languages more ‘real’ (i.e.: not decontextualized textbook representations). Finally, in Dailey *et al.* (2005) a direct correlation between linguistic landscape and language attitudes was found, although only from minority language students living in a majority language context (namely, Hispanic students in California) but not *vice versa*.

Moving on to the main out-of-school factors of the current study, chapter 2 explored input from traditional media and new digital media, both of which we can propose have an

effect on language attitudes. There are very few existing studies which explicitly link out-of-school factors with language attitudes and where this connection is made it is often not the main research focus. Thus, we can consider this area to be academically underdeveloped, an issue which the current study intends to redress. The rich context of media, especially audio-visual material, is known to have an affective impact on language learners (Baltova, 1994). The main reason for this is that learners come into contact with ‘authentic texts’ which promote autonomy in the learning process (Boggs, 1996) and provide a sense of connection with the TL as a living entity (Guariento & Morley, 2001). This sense of connection is linked to the ideas of affinity spaces, Discourses, imagined communities, and future ideal L2-selves which have been explored above. All of these concepts constitute ways of expressing our own identity and reaching out to others through language, in fact they also constitute ways of locating and realizing our identity in relation to others. To summarise, shared interests and communities as well as co-creating language ‘spaces’ helps to build bridges between diverse L1s and thus improve attitudes to other languages and their speakers.

In terms of the traditional media explored in chapter 2, films and television provide a popular (in both senses of the word) context for exchanging ideas, and as such can constitute the building blocks of affinity spaces. Film protagonists are often admired, irrespective of a person’s L1, thus using films and television as language input combines dreams and aspirations with language learning and use and creates inspirational and stimulating experiences (Eken, 2003) in ways that conventional learning materials can only weakly imitate. Popular music may also have a strong affective influence because it combines language learning with enjoyable experiences which may make learners more relaxed and lower their inhibitions. The positive emotions provoked by music may lower the affective filter and determine the extent to which linguistic input is received (Medina, 2002). Furthermore, active engagement with song lyrics may impact on attitudes as repetition, rhythm and timing could make language learning easier (Schwarz, 2012) and relate it to something aspirational, motivational and ‘cool’ (Nightingale, 2012). Aside from the fact that music is one of the most ubiquitous media forms, song lyrics are

usually accepted in their original form, that is, translations are rarely sought (MacLeod & Larsson, 2011), and spontaneous imitation of song lyrics in young language classes has also been reported (Muñoz & Lindgren, 2011).

In terms of new digital media, computer-mediated communication through Web 2.0 provides new ways to define and mediate interpersonal and group relationships. In terms of language learning Web 2.0 focuses more on communities of practice, collaboration and co-construction, and negotiation of identities. In stark contrast to traditional textbook approaches to instructed language learning where the learner is expected to respond passively to a set text or exercise, the Use of Web 2.0 technologies empowers active participation. In fact, in relation to motivation and attitudes, empowerment seems to be a recurring theme of Web 2.0 as a didactic resource. Internet communities offer language learners a space within which they can use their multilingual capabilities to create hybrid linguistic resources which allow them to present more fulfilling and satisfactory identities (Thorne *et al.*, 2009) or, through the social scaffolding of other community members, reposition themselves as respected experts in specific domains of knowledge (Thorne & Black, 2011). Another very visible application of Web 2.0 is the use of social networking platforms. Language learning in this way integrates new literacy skills with the negotiation of identity along with cognitive and social processes, but more importantly it promotes autonomy and gives control over the learning environment (Harrison & Thomas, 2009). The fact that social networking platforms create spaces for minority languages can affect attitudes towards those languages (Cunliffe, Morris & Prys, 2013) and encourage users to take part in communities where both their knowledge of the minority language and their multilingual competence is valued (Caulfield, 2013).

A further form of digital media which may have a strong attitudinal impact on adolescent language learners consists of online multiplayer videogames. Such videogames constitute online, virtual communities of practice and are subject to the same sociolinguistic norms and socialization processes as their offline counterparts. This can affect attitudes in that certain transgressions of the norms may cause negative affective and intellectual evaluation

from peers (Iorio, 2007), but it also stands to reason that adherence to the sociolinguistic norms of these virtual communities will indicate successful socialization and result in positive evaluations. Another, more overt, way in which online videogames can promote positive language attitudes is that they fuse pleasure and learning and enhance control, agency and meaningfulness (Gee, 2007). Many of these games require the formation of dyadic partnerships, short-term groups, and/or long-term social organisations, all of which must be mediated through language and involve socialization processes as novice and experienced gamers interact to achieve their goals (Thorne *et al.*, 2009); in fact, it has been shown that online gamer talk is more socioemotional (that is, more oriented toward relationship maintenance) than task-orientated (Peña & Hancock, 2006). Furthermore, Kuppens (2010: 79) points out that multilingual online gaming ‘might give rise to new, global friendship networks and hence to new forms of language learning’. Other studies have also documented the affective impact of online videogames, for example: the provision of FL communication opportunities outside the classroom develops confidence, increases enthusiasm, reduces anxiety, and improves willingness to communicate (Wattana, 2010); the fact that physical proximity is no longer a barrier to social proximity can spark an interest in intercultural communication and understanding (Thorne, 2008); the sociocultural competence that can be developed from gaming alongside collaboration, negotiation, feedback and self-repair may reduce inhibition and increase enjoyment (Peterson, 2010a, 2010b); and finally, online videogames provide intense self-affirming experiences which encompass ownership and control as gamers are responsible for creating their own online linguistic environments and identities (Henry, 2013).

We can conclude then, that exposure to language in out-of-school contexts affects adolescent language attitudes in a number of key ways: 1) the empowerment of active participation and autonomy in language learning; 2) the creation of interpersonal and intergroup connections, such as shared experiences and communities as well as friendships which can break down language barriers; 3) the use of languages for more personalised, dynamic, and individually relevant purposes, thus taking control of language learning as a meaningful

activity; 4) the repositioning of language learning from the imposed ‘top-down’ methodology of instructed settings to a ‘bottom-up’ participatory methodology in which young people are free to select their own means and modes of expression and communication; and finally, 5) in the case of English, the intrinsic connection to global popular culture which highlights the language as not only being ‘cool’ but also its value in international communication (in other words, its cultural and social capital). However, what the types of media involved in out-of-school exposure have most in common is that they are all forms of leisure activity. Kuppens (2010: 80 – my emphasis) makes reference to this in the conclusion of her study by stating that young learners’ positive attitudes toward English are ‘arguably related to the fact that *they associate the language more with leisure activities than with formal learning*’. While it cannot be denied that English dominates current audio-visual and digital media, out-of-school exposure must logically affect attitudes to other languages. In fact, this has been observed with Russian (Thorne, 2008), Chinese (Thorne & Black, 2011), and Welsh (Cunliffe, Morris & Prys, 2013) and must also stand true for many, if not all, others.

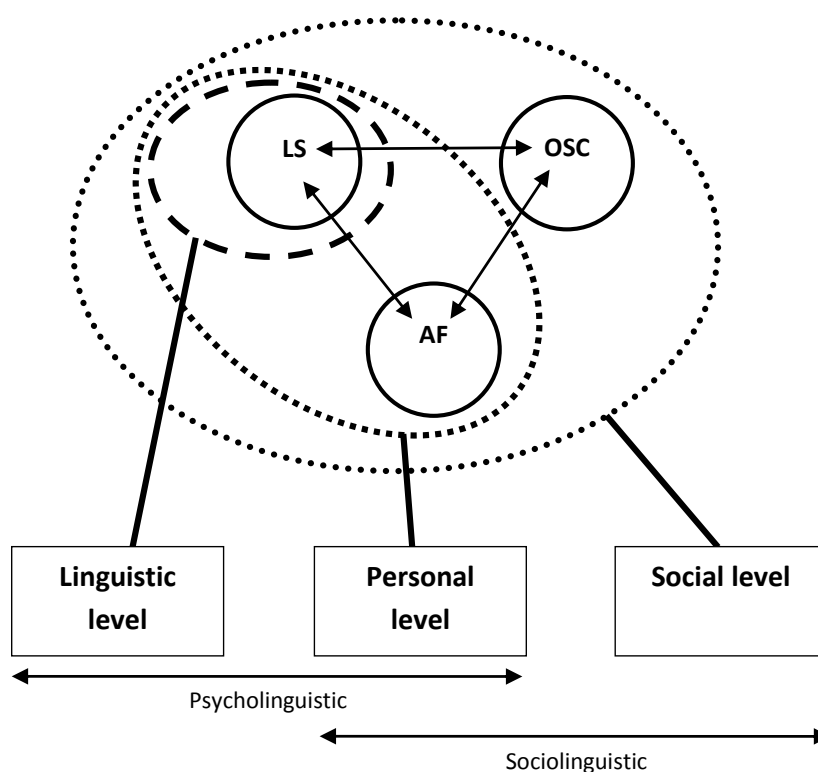


Figure 11: An integrated psycho-sociolinguistic multilingual system.
Key: LS = Language System(s), AF = Affective Factors, OSC = Out-of-School Contact

Bearing all of the above in mind, we can now tentatively present a *psychosociolinguistic* complexity model of multilingualism (figure 11). As covered in chapter 1, the main characteristics of complex dynamic systems are that they are: nested, open, interactive, interdependent, self-organising, emergent, subject to change over time, and sensitive to initial conditions and subsequent feedback. Our potential model is operationalised as the complex interaction of three distinct system subcomponents: *cognitive* (multiple language systems), *affective* (multilingual language attitudes), and *behavioural* (out-of-school language contact). The model also shows three nested levels, linguistic, personal, and social; the personal level being where the psycholinguistic and sociolinguistic perspectives overlap. We shall now attempt to explain how this model displays the characteristics of complex and dynamic systems.

The multiple language systems form part of the overall system at the linguistic level and are nested within the personal level, in other words, the actual language user; in this level the affective domain (including attitudes) is itself a subsystem. These two levels combine to constitute the psycholinguistic perspective as explained in the DMM. In our potential model we propose that, just as the linguistic level is nested within the personal level, both levels are further nested in the social level which contains various contextual subsystems including out-of-school contact. Not only are the systems nested within one another, they are also subject to change over multiple nested timescales. For example, a codeswitching choice, an emotional reaction, or the reception or transmission of language in the social environment may occur on a very small timescale and could be influenced by a single attractor. Whereas, a mood, a stereotype, an affinity space or community, a socialization process, or a multilingual identity may develop over much longer timescales and could result more from the structure of phase space or its temporal modification. Thus, we propose that the overall system is *nested* and *subject to change over time*.

The DMM proposes that language systems are interdependent; that is, the way each system behaves is contingent on the behaviour of previous and subsequent systems. This chapter has examined previous research which suggests that elements of the affective domain overlap, interact depend on one another, and, moreover, that there is a reciprocal relationship between language attitudes and language performance. The previous chapter has shown how out-of-school factors are also interdependent in the sense that they encapsulate multiple modes of linguistic expression and transmission, each setting the scene for the other; basically, they form the input for the environment that they, as a whole, constitute. In our potential model we propose that not only is there interdependence *within* language systems, affective factors and out-of-school factors, but also *between* them as interacting subsystems. Putting that in the terms of the current study, languages *per se* are simultaneously the attitude object, the means of expressing such attitudes, and the environmental input which influences attitude formation. Thus, we propose that the overall system is *interactive* and *interdependent*.

Complex dynamic systems ‘generate novelty through their own activity’ and coherence in the system is generated by the relationship of its components with the ‘constraints and opportunities of the environment’ (Smith & Thelen, 2003: 343-344). This is what is meant when referring to the emergence and self-organisation of a dynamic system. Haken (2008) includes the generation of moods and the formation of opinion as self-organising systems, and points to the example of ‘opinion dynamics’. To expound on this example, research on social networks (Das *et al.*, 2014) shows that user-expressed attitudes and opinions are correlated with similar sentiments in the ‘neighbourhood’ (i.e.: virtual proximity). In this way, the sentiments of others may come together and act as input in the system (forming strong attractors or attractor basins) allowing users to generate their own opinions and attitudes despite lacking full information on the attitude object and, therefore, generating novelty. Thus, through these related examples, we propose that the overall system is *self-organising* and *emergent*.

Finally, the emergence and self-organisation of a complex dynamic system is really the product of the interdependence and interactions of its component subsystems. These subsystems

do not only react to initial conditions, they also provide further input to each other, setting the trajectory and generating the phase space of the overall system; that is, the subsystems feedback on themselves and become new initial conditions. In this way, novel forms can occur and the system can apparently create something out of nothing. As mentioned above, the languages which comprise the language system are, at once, attitude object, means of expression, and environmental input, all of which feedback on each other creating new initial conditions which may affect the perceived and objective vitality of the languages in question in ways which cannot be known *a priori*. Thus, we propose that the overall system is *open, sensitive to initial conditions* and *feedback sensitive*.

3.5 Concluding remarks

This chapter has centred itself on internal factors affecting multilingual development; principally language attitudes. We have reviewed the general framework of attitudinal studies, language attitudes in young learners, and some of the European work in this field before narrowing down the focus to language attitude studies in Spanish multilingual contexts in order to prepare the foundations for the current study. We have revisited the out-of-school factors from the previous chapter in an attempt to explore what effect they have on language attitudes. Finally, we have used systems-thinking to propose a psycho-sociolinguistic complexity model of multilingualism which views linguistic, personal, and social levels holistically.

It is hopefully now self-evident that multilingualism can only be adequately explained from a multilingual perspective; a perspective which necessarily implies holism. If we want to take a holistic perspective it is important to include attitudes and the affective domain because social and situational factors by themselves are not sufficient to give us a full picture, and looking at language from a purely structural perspective is, in our opinion, woefully inadequate as it completely misses the point of what language is used for and the socioinstitutional forces it is subject to. The importance of this holistic perspective has been explained by Jessner (2013: 803) who points out that both the external contextual factors and internal individual factors

‘contribute to the complexity of multilingualism and research of the phenomenon’. Thus, it is of vital importance to research the interactions between languages, language users, and the context of language use – this is the perspective of the current study. Finally, as the first chapter has covered dynamic multilingualism, the second chapter has covered out-of-school factors, and this chapter has covered language attitudes, we are now ready to present our study of out-of-school language exposure and the language attitudes of emergent adolescent multilinguals.

PART II: THE STUDY

CHAPTER 4. MOTIVATION FOR THE STUDY

In a previous study, we demonstrated an initial link between out-of-school factors (contact with television, music, and print media) and the language attitudes of adolescent multilinguals (Nightingale, 2012). However, the project was hampered by a small sample, a lack of qualitative data, and a traditional SLA perspective which limited its scope. In fact, the study concludes by calling for further research on adolescent language attitudes which takes a wider-ranging and more detailed look at language contact through popular media and to do so considering a multilingual context of languages in contact. The current study recognises multilingualism as the world-wide societal norm and the necessity to move away from the monolingual perspective in order to gain data and insights which reflect this new linguistic dispensation (Aronin & Singleton, 2012). Taking the above as a point of departure, the current project aims to:

1. *Demonstrate* a connection between multilingual language attitudes in adolescents and their language contact through popular media in out-of-school contexts.
2. *Investigate* variation in the effects that language contact through different types of traditional and new media has on language attitudes.
3. *Highlight* the complex nature of the relationships between out-of-school language contact, language attitudes, and language systems as subcomponents of the multilingual psycho-sociolinguistic system (see: chapter 3).
4. *Explore* the effects of out-of-school language contact through popular media on multilingual practices, the negotiation of multilingual identities, and socialization processes in situations of language contact.
5. *Analyse* data for all of the above using both qualitative and quantitative methodologies.

Previous research on language awareness and metalinguistic ability highlights a number of qualitative differences between multilinguals and monolinguals (see: chapter 1). We consider that over the last ten years a great deal of attention has been paid to the psycholinguistic, acquisitional and educational aspects of multilingualism. However, to contribute to our understanding of multilingualism *in use* necessitates further research with a sociolinguistic

focus (such as affective factors and out-of-school language contact); in fact, Gorter and Cenoz (2011: 445) explicitly state that ‘the study of out-of-school multilingual and multimodal practices needs urgent attention’. Given the complete connectedness of our ultra-technological postmodern condition this sociolinguistic focus is particularly pertinent when considering input and exposure from communications media and especially what is on offer in terms of social media. For example, the Radein Initiative (2011) pointed out research gaps in terms of ‘cultural spaces’ especially the unregulated interconnected spaces provided by information technology. Research in this area should ask how multilinguals negotiate computer mediated communication, how multilingualism is manifested in virtual communities, and how this dynamically affects other areas of language systems as they evolve over and even beyond the life trajectories of their users. Moreover, Canagarajah and Wurr (2011: 13) called for ‘more studies on everyday contexts of language acquisition and use’. They proposed a move away from classroom based research in order to ‘start studying interactions outside’, not only in real-life situations, but also examining interactions which span diverse communities like ‘chat rooms, Facebook, and other digital environments’. Furthermore, they highlight the need for more qualitative data, ‘emic studies’ and ‘voices from the periphery’ in terms of ‘narrative studies, reflective commentary, and self-report data’. Finally, Franceschini (2009: 46-49) proposed a focus on ‘new forms of multilingual interaction’ which may take place and develop between speakers with diverse language constellations, as well as contexts of ‘unfocused language acquisition’ especially among young people who ‘seem to have a more relaxed attitude than older generations to the simultaneous use of several languages’. In addition to the aims stated above, it is the intention of the current study to take on board some of these concerns.

In order to make clear the rationale for the current study the following section will review and summarise the main points of the theoretical framework presented in the first three chapters before putting forward the perceived research gaps and proposing how the study intends to bridge them.

4.1 Study rationale

Chapter 1 explains the relevance of applying a systems-theory/complexity perspective to the study of language development. More specifically, the chapter shows how systems-theory justifies a new approach to research on multilingualism and third language acquisition; that is, the necessity of a holistic multilingual perspective. The chapter points out that multilingualism is natural and unremarkable for most of the world's population (Edwards, 1994) while monolingual perspectives in linguistics have been ideologically imposed (Franceschini, 2013). This has led to a monolingual bias in SLA research (Cook, 1997) which has extended to multilingualism research (Li Wei, 2011a; Cenoz & Gorter, 2011a). Traditional linguistics often treats language as an asocial phenomenon (see: Chomsky, 1965); this perspective tends to focus on competence rather than performance. However, some research on first and second language development indicates that language itself is highly complex and dynamic (Nippold, 2006), and performance is dependent on and inseparable from the surrounding context and interaction between interlocutors (Larsen-Freeman, 1997; Hopper, 1998; Tomasello, 2003; van Geert & Steenbeek, 2005; Beckner *et al.*, 2009; Ninio, 2011).

Furthermore, SLA research has used systems-thinking to merge social and cognitive aspects of second language development (de Bot *et al.*, 2007), to highlight dependencies within the learning environment as a nested system (Finch, 2004), and to show that TL use is feedback sensitive and adaptive (Ellis, 2008). Thus, a systems-approach reveals hidden developmental patterns and makes sense of 'messy' data (Verspoor *et al.*, 2008), undermines the validity of linear cause-and-effect explanations (Dörnyei, MacIntyre & Henry, 2014), and necessitates new methods to explore development (Larsen-Freeman & Cameron, 2008; de Bot & Larsen-Freeman, 2011; Verspoor, de Bot & Lowie, 2011; MacIntyre & Legatto, 2011; Chan, Dörnyei & Henry, 2014; Dörnyei, 2014). In multilingualism research, systems-theory has been used to distinguish the field from SLA research and to explain the interactions of multiple languages seen as holistic systems and observe their development over time. This has initially been covered from a psycholinguistic perspective (Cenoz, 2000; Herdina & Jessner, 2002; Jessner,

2006, 2008b, 2013) which highlights the emergent properties that develop in multilingual speakers as a result of increased language contact and crosslinguistic interaction.

Systems-theory has also influenced sociolinguistic perspectives on multilingualism research (Kramsch & Whiteside, 2008; Todeva & Cenoz, 2009; Canagarajah & Wurr, 2011). Two prominent perspectives that have emerged are: the ‘new linguistic dispensation’ (Aronin & Hufeisen, 2009; Aronin & Singleton, 2012; Singleton *et al.*, 2013) which highlights the spatiotemporal mobility of multilingualism, differences between historical and contemporary multilingualism, and the fact that multilingualism is now the dominant global paradigm; and ‘focus on multilingualism’ (Cenoz & Gorter, 2011a, 2011b; Gorter & Cenoz, 2011; Cenoz, 2013) which highlights the importance of holism in multilingualism research (i.e.: a joint focus on speakers, linguistic repertoires, and contexts) and additionally points out the importance of multilingual practices in context and the perspective of multilingual speakers themselves.

In sum, chapter 1 lays out the overall framework for the integrated psychosociolinguistic system proposed by the current study. Taking this into account and adding the idea that *forms of learning* are a crucial element in multilingual development (Jessner, 2013), the next step in advancing the integrated psycho-sociolinguistic system is to introduce the behavioural subcomponent. This is achieved in the following chapter by a focus on language exposure in extramural contexts and the input it provides.

Chapter 2 points out that learning also takes place outside explicitly structured educational environments. It highlights the importance of incidental learning from contextual input, which may provide more than grammar and vocabulary (Winitz, 1996) and which often occurs in everyday situations (Lightbrown & Spada, 2003). Reviewing previous research, the chapter shows how incidental language input in out-of-school contexts may also affect non-linguistic areas such as pragmatic development, motivation, attitudes, and cultural awareness and integration. The chapter begins by focusing on the immediate environment. First, parental socioeconomic/sociocultural status (Lasagabaster, 1998; Baker, 2001; Muñoz, 2008; Muñoz &

Lindgren, 2011; Lindgren & Muñoz, 2013) which indicates that parents provide language opportunities and mediate the social behaviour of their children, thus dramatically impacting on early language development. Then, study/stay abroad periods (Freed, 1998; Yager, 1998; Fisher & Evans, 2000; Tanaka & Ellis, 2003; Juan-Garau & Pérez-Vidal, 2007; López, 2010) which impact language development in terms of communicative strategies, linguistic identities, cultural and pragmatic awareness, self-efficacy, attitudes, motivation, and learning approaches. And finally, the linguistic landscape (Gorter, 2006; Cenoz & Gorter, 2008; Shohamy & Gorter, 2009) which provides a rich, ready-made language resource (Sayer, 2010; Rowland, 2012; Chesnut *et al.*, 2012; Chern & Dooley, 2014) affecting language choice and perception, awareness of linguistic behaviours, and even language attitudes (Dailey *et al.*, 2005).

The chapter then moves its focus to traditional media as an authentic material (Berns, de Bot & Hasebrink, 2007; Sundqvist, 2009; Kuppens, 2010; Lefever, 2010; Bunting & Lindström, 2013) which supposes learner agency and active participation through engagement with language as a dynamic, living entity. The chapter pays special attention to film and television and their potential benefits in terms of language acquisition (d'Ydewalle & Van de Poel, 1999; Koolstra & Beentjes, 1999), multilingual pragmatics (Nightingale, 2014), and acculturation (Elias & Lemish, 2010). The chapter also highlights the influence of music on vocabulary acquisition, motivation, and attitudes (Medina, 2002; Milton, 2008; MacLeod & Larsson, 2011; Muñoz & Lindgren, 2011; Nightingale, 2012; Schwarz, 2012).

The chapter then turns to new media interactivity and the affordances offered by Web 2.0, in general, and social networking, specifically (Harrison & Thomas, 2009; Wang & Vásquez, 2012). This is explored in terms of identity (Thorne *et al.*, 2009; Thorne & Black, 2011), virtual communities (Lin & Warschauer, 2011), affinity spaces (Gee, 2005), translanguaging practices (Paolillo, 2011; Androutsopoulos, 2012), and language attitudes (Cunliffe, Morris & Prys, 2013). The chapter also explores online videogames in terms of language learning arenas (Peterson, 2010a, 2010b), affective factors (Ranalli, 2008; Reinders & Wattana, 2010), intercultural communication and language use as a social action (Thorne,

2008), and motivation through control, agency, and self-affirming activities (Gee, 2007; Henry, 2013).

Chapter 2 concludes by focusing on the relationship between out-of-school factors and language socialisation, thus moving the focus from language acquisition to place emphasis on socially situated language practices (Ochs, 2000; Bayley & Schechter, 2003; Duff & Talmy, 2011). This section focuses on the inseparability of language, identity, and community (Lam, 2004; Harklau, 2007; Norton, 2013) as we mark ourselves in relation to other groups through Discourses (Gee, 1996) and our social engagement with them (Knobel & Lankshear, 2015). The remainder of the section explores an interface between out-of-school language exposure and language socialisation. It points out the mediating effect of parents and mass-media (Young, 1994; Gonzalez, 2001), that traditional media constitute trans-border cultural products (Lam, 2004), and that social media and videogames provide spaces for the co-construction of meaning and the negotiation of identities (Thorne, 2008; Harrison & Thomas, 2009; Mitchell, 2012; Cunliffe, Morris & Prys, 2013). The conclusion is that the environment socialises by inculcating beliefs, values and behaviours, traditional media provides the materials for the creation of affinity spaces and imagined communities, and new media are the actual loci of socialisation processes.

In sum, chapter 2 adds to our complexity view on language acquisition and multilingualism with the behavioural subcomponent of the integrated psycho-sociolinguistic system; that is, the opportunities for language exposure and input available in out-of-school contexts and the behavioural choices that lead to them and come from them. Taking this into account, the final step in proposing the integrated psycho-sociolinguistic system is to introduce the affective subcomponent. This is achieved in the following chapter by a focus on language attitudes.

Chapter 3 focuses on the affective factor: attitudes to language. The chapter begins by exploring the emotional side of language learning and use, in terms of factors which comprise

the affective domain (Brown, 1987). As humans are essentially emotional beings, it is fundamental to consider the social contexts of language use in order to study language comprehensively (Van Hout and Knops, 1988; Mesthrie, 2001; Dewaele, 2010). In terms of self-awareness, self-esteem, and identity, some essential considerations are the 'language ego' and 'ego-permeability' (Guiora, 1972), language shock (Schuman, 1986), self-discrepancy (Higgins, 1987), and the concept of 'narcissistic injury' (Clyne, 2001). The first section of the chapter also mentions the affective factors willingness to communicate (MacIntyre et al., 1998), anxiety (Horwitz, Horwitz & Cope, 1986), inhibition, empathy, and extroversion (Brown, 2007), before concluding that language attitudes constitute an essential affective variable in language learning (Dewaele, 2005).

The chapter briefly describes different perspectives on language attitudes (Gardner, 1980; Spolsky, 1989; Baker, 1992; Cenoz, 2004) and charts the history of research in this field before focusing on the Socio-educational Model (Gardner, 1985) which views motivation and identity as a stable, integrated construct. Within this framework, the distinction between instrumental and integrative orientations is discussed (Gardner, 1985, 2001; Lasagabaster, 2002) and attitudes/motivation is related to identity and community (Anderson, 1983; Norton, 2013) through the concept of the 'ideal L2-self' (Dörnyei, 2005, 2006, 2009). In contrast to earlier research which emphasises unidirectional causation from attitudes to motivation to achievement (Gardner & Lambert, 1972b), the chapter recognises reciprocal causality between these elements (Baker, 1992; Lasagabaster, 2005). Furthermore, while attitudes and motivation are recognised as separate constructs, the two are not completely independent (Dewaele, 2005). The chapter highlights the complex interactions of societal and individual factors which result in language attitudes (Baker, 1992; Lasagabaster, 2001; Pavlenko & Blackledge, 2004; Dewaele, 2005; Cenoz, 2009) and, in contrast to the stable construct proposed by Gardner (1985), attitudes are understood to be dynamic and changeable (Cenoz, 2004).

Age is highlighted as an important variable in language attitudes, especially in the period of adolescence which is a critical age for attitudes, particularly towards minority

languages (Baker, 1992; Walqui, 2000). The positive attitudes of young learners are easily lost as they get older and experience changes in the conditions of language learning and use (Nikolov, 1999; Cenoz, 2004; Heining-Boynnton & Haitema, 2007). One study has shown that although attitudes may become less positive, there is not a corresponding drop in the L2-self-image, indicating that the decline is in attitudes to language learning rather than attitudes to becoming a speaker (Henry & Apelgren, 2008). Another study observed a divergence of attitudes which was likely the result of individual variation, changes in learning conditions, and the interrelation of attitudes and personality factors (Lopriore & Mihaljević Djigunović, 2011). There is more individual variation in young learner attitudes than was previously thought. Young learner attitudes are dynamic and change over time reflecting differences in learning conditions and teaching methodology and materials. Attitudinal changes reflect awareness of the learning process and self-concept becomes more realistic with increasing awareness of performance criteria and peer-comparison (Mihaljević Djigunović & Lopriore, 2011). Moreover, task difficulty, anxiety, and negative perceptions of language learning in the environmental context may cause a loss of interest (Enver, 2011). Finally, there is an attitudinal 'dip' in early adolescence (Baker, 1992) attributable to peer group influence (Walqui, 2000; Hoare, 2001) or a discrepancy between the anticipation of language learning and the actual experience (Henry & Apelgren, 2008).

Chapter 3 then moves on to discuss European language attitudes studies, highlighting a number of considerations. L1 is a major contributing factor; more favourable attitudes are shown to a speaker's L1 (Laugharne, 2007; Ó Laoire, 2007; Ytsma, 2007; Caruana, 2007), and in many cases, when the L1 is a minority language, attitudes to majority/foreign languages are less positive. Moreover, there is a close relationship between attitudes and different facets of identity, such as, regional, national, and politicocultural (Hoare, 2001; Dewaele, 2005). Exposure to popular media is a significant variable in positive attitudes (Mettewie & Janssens, 2007). Self-perceived competence also correlates positively (Hoare, 2001; Dewaele, 2005; Laugharne, 2007; Ó Laoire, 2007; Caruana, 2007), thus corroborating the reciprocal causality

concept. Furthermore, knowledge of other languages results in more positive attitudes (Mettewie & Janssens, 2007), thus linking degree of multilingualism to language attitudes. Finally, language attitudes are a contributing factor in language choice (Gorter & Ytsma, 1988; Gorter *et al.*, 2001), indicating interaction between affective and behavioural factors. Attitudes may also be dependent on the perceived symbolic capital (Bourdieu, 1977) of each language in the context of the ‘economics’ of the linguistic marketplace (Gardner-Chloros *et al.*, 2005), and they are positively affected by intercultural contact (Fisher & Evans, 2000; Dörnyei & Csizér, 2005).

Chapter 3 then turns its focus on attitudinal research in Spanish multilingual contexts. The following variables were found to have highly significant effects on language attitudes: the degree of linguistic competence (Lasagabaster, 2005, 2007; Safont-Jordà, 2007); the size and dominant language of the hometown (Lasagabaster, 2007; Huguet, 2007; Loredó Gutiérrez *et al.*, 2007; Safont-Jordà, 2007); the linguistic model of education (Loredó Gutiérrez *et al.*, 2007; Portolés, 2014), especially framing language in meaningful contexts, such as CLIL (Lasagabaster & Sierra, 2009); sociocultural, socioprofessional, and socioeconomic status (Loredó Gutiérrez *et al.*, 2007; Safont-Jordà, 2007; Nightingale, 2012); and visits, stays, or periods of study in TL speaking countries (Lasagabaster, 2007; Huguet, 2007; Safont-Jordà, 2007; Nightingale, 2012). Moreover, similar to the wider European context, the L1 has a significant effect (Lasagabaster, 2003, 2007; Huguet, 2007; Safont-Jordà, 2007; Portolés, 2014). There appears to be a degree of tension between Spanish and the minority languages, and minority language speakers are generally less positive towards English. With regards to the current study, there is little research which takes a holistic perspective, that which does exist shows positive attitudes to languages in contact (Lasagabaster & Safont-Jordà, 2008). Furthermore, holistic language attitudes change at different ages, and are subject to socialisation processes and complex interactions with the environment (Portolés, 2015); this corroborates the earlier finding that attitudes towards majority, minority, and foreign languages are affected in different ways by different combinations of variables (Loredó Gutiérrez *et al.*, 2007). Finally,

there is almost no research in the Spanish context which links media contact and language attitudes. However, that which does exist shows a highly positive correlation between the two variables (Nightingale, 2012).

The final section of chapter 3 applies a complexity perspective to the synthesis of out-of-school factors and language attitudes. It attempts to bridge psycholinguistic (Herdina & Jessner, 2002) and sociolinguistic (Cenoz & Gorter, 2011a) models of multilingualism in order to propose a holistic, integrated psycho-sociolinguistic system. The section mentions parental influence on language attitudes in terms of socialisation in contexts of language contact, the impact of a stay abroad in terms of authentic cultural contact with a TL, and the communicative, symbolic, and affective functions of language in the linguistic landscape. The section then moves on to mention the authenticity of audio-visual material and digital media and the affective impact they have in terms of promoting learning autonomy and contextualised language contact. It is this authenticity which allows us to express our identity linguistically and realise our 'selves' in relation to others, to co-create communities and language spaces through shared interests, and to bring together a range L1s which improves our attitudes towards other languages and speakers. Finally, the section proposes that the link between language, contact, and attitudes can be defined in terms of the following key points: empowerment, active participation, autonomy, connectivity, shared experiences and communities, individually relevant language purposes, 'bottom-up' participation, and a wider connection to global popular culture.

In sum, chapter 3 adds to our complexity view on multilingualism with the affective subcomponent of the integrated psycho-sociolinguistic system; that is, the attitudes held towards individual and group languages in diverse situations of language contact. With the whole theoretical framework in mind, chapter 3 closes by advancing a psycho-sociolinguistic system which is nested, subject to change over time, interactive, interdependent, self-organising, emergent, open, and sensitive to initial conditions and subsequent feedback.

Taking into consideration the above review of the theoretical framework from the first three chapters, the following research gaps have been identified:

1. The dynamism and complexity of multilingualism has been explored from a psycholinguistic perspective (Herdina & Jessner, 2002) but there is little sociolinguistic research of the same area (Cenoz, 2013). The current study focuses on how language systems, affective factors, and contextual factors interact. Thus, we address the gap by approaching multilingualism from a sociolinguistic perspective.

2. Language attitudes studies which extend beyond SLA and bilingualism still tend to treat languages separately and maintain a monolingual perspective; holistic approaches to language attitudes are very scarce (Lasagabaster & Safont-Jordà, 2008; Portolés, 2014). The current study explores attitudes towards three languages in contact. Thus, we address the gap by approaching sociolinguistics from a multilingual perspective.

3. European language attitudes studies have mainly used quantitative approaches which only present a partial account (Dörnyei, 2009; de Bot & Larsen-Freeman, 2011). There is scarce work which analyses attitudes using a combination of quantitative and qualitative approaches. The current study does not put product over process, and instead views these two elements in symbiosis. Thus, we address the gap by exploring language attitudes data using a mixed-method approach.

4. Existing research on the language attitudes of young children (Garrett, 1994; Evever, 2011; Portolés, 2015) and adolescents (Baker, 1992; Fisher & Evans, 2000; Hoare, 2001; Dewaele, 2005; Dörnyei & Cszer, 2005; Lasagabaster & Sierra, 2009; Nightingale, 2012) has not taken into consideration how their attitudes may differ over time. The current study examines attitudinal variation over the age range of the sample. Thus, we address the gap by measuring attitudinal change through the comparison of multiple cross-sectional measures.

5. Out-of-school language contact has received attention as an early-learner contextual variable in sociolinguistic research (Muñoz & Lindgren, 2011; Lindgren & Muñoz, 2013). There is

scarce research focusing on the way that out-of-school media contact affects attitudes towards languages that do not share equal social prestige, and work which further differentiates autonomy-building new media is currently non-existent. Thus, we address the gap by paying special attention to new media exposure in the sociolinguistic context of majority, minority and foreign languages in contact.

6. To our knowledge there is no existing research which analyses language attitudes by focusing on a global construct comprised of three subcomponents: cognitive (language systems), behavioural (extramural language contact and use), and affective (language attitudes). The current study examines interaction among the three subcomponents, particularly the extent to which there is coherence between them. Thus, we address the gap by taking a global approach which unites cognitive, behavioural, and affective subcomponents.

4.2 Research questions and hypotheses

Based on the stated the aims of the study, the specific research gaps which have been identified, and a consideration of the dynamic focus of the current project, we may ask the following research questions:

- **RQ1:** Does out-of-school language exposure through popular media affect language attitudes in adolescents, and does more autonomous and engaging language contact make a difference in this regard?
- **RQ2:** Is there interaction between subcomponents of the psycho-sociolinguistic system, to what extent is there variation in this interaction, and can this be shown by examining adolescent language attitudes from a multilingual complexity perspective (systems theory)?
- **RQ3:** Do adolescent language attitudes change in a non-linear fashion according to age, and is this change influenced by the presence of phenomena which may function as systemic attractors?
- **RQ4:** In the context of out-of-school language contact, what does qualitative analysis reveal about adolescent's language attitudes, as well as their multilingual practices and identities, user agency, and language socialisation processes in online virtual communities?

The research questions posed above in conjunction with the theoretical review allow us to put forward the research hypotheses which will guide the current study.

- **H1:** Out-of-school language contact will relate with positive language attitudes (Lefever, 2010; Kuppens, 2010; Nightingale, 2012; Bunting & Lindström, 2013). Furthermore, language attitudes will be notably more positive as a result of out-of-school language contact with new media (Gee, 2007; Harrison & Thomas, 2009; Thorne *et al.*, 2009; Thorne & Black, 2011; Lin & Warschauer, 2011; Henry, 2013).
- **H2:** Variability will be observed in the relationships between languages, attitude statements, and media types. (Herdina & Jessner, 2002; Jessner, 2008; Verspoor *et al.*, 2008)
- **H3:** Multilingual language attitudes will show non-linear change over the age range of the sample (Herdina & Jessner, 2002; Jessner, 2006, 2008) and will self-organise under the influence of attractor phenomena (Thelen & Smith, 2006; Cameron & Larsen-Freeman, 2007; Dörnyei, 2014).
- **H4:** A qualitative analysis of language attitudes from an emic perspective will reveal complex interactions between online multilingual, multimodal, and identity/socialisation practices (Todeva & Cenoz, 2009; Gorter & Cenoz, 2011; Canagarajah & Wurr, 2011; Wlosowicz, 2014; Dörnyei, 2007, 2014; Chan, Dörnyei & Henry, 2014).

However, before going any further, and given the highly complex situation of language contact in Spain and the associated issues of cultural identity, it is of great importance that we understand the sociolinguistic situation of the focus of the current study; the Valencian Community. This context will be discussed in the following chapter along with information about the study participants, the instruments used, and the data collection and analysis procedures. Furthermore, some issues surrounding the analysis of complexity in applied linguistics will be addressed.

CHAPTER 5. METHOD

In research which takes a dynamic or complexity perspective, the surrounding context constitutes a fundamental and inseparable aspect of any given system (Larsen-Freeman & Cameron, 2008; de Bot & Larsen-Freeman, 2011). In the case of language systems, it is therefore fundamental to consider the sociolinguistic situation (Jessner, 2013). Bearing this in mind we will now explain the sociolinguistic situation relating to the context of the current study; that is, the *Valencian Community*. Therefore, the first section of this chapter will include some basic information on: 1) the position of Catalan in social, political, media, and academic spheres; 2) the conflicts which arise from contact between languages which do not share the same level of prestige, such as Spanish and Catalan; and 3) the way in which these languages are integrated in the educational system. After having given due consideration to the sociolinguistic context, the subsequent section will focus on the methodological issues of the study participants, instruments, and the data collection and analysis procedures. The final section will briefly comment on further methodological considerations regarding mixed-method and complexity approaches in applied linguistics research.

5.1 Sociolinguistic setting

Multilingualism in Spain is a well-documented phenomenon (see: Turell, 2001). In the autonomous communities of Galicia, the Basque Country, Catalonia, and the Valencian Community the local language is used in all official documents and as a vehicle for education. Furthermore, English is now widely recognized as a quasi-official third language, which is reflected by increased English-medium instruction in the public education system. EFL classes generally begin at around four years old and continue through primary and secondary education. Moreover, the Bologna Process has made English an important language of information retrieval and instruction at the university level and a pre-requisite for many students wishing to

graduate. In addition, a large number of learners attend private academies in order to obtain officially recognised language qualifications. All this significantly boosts the societal position of English and thus makes multilingualism a critical issue at all levels of education at a national level. However, as the focus of the current study is the Valencian Community, we will continue by explaining the sociolinguistic situation of this particular Catalan-speaking region.



Figure 12: Geographic location of the Valencian Community

In stark opposition to Catalonia, where Catalan has maintained its prestige through association with the middle-classes, Catalan in the Valencian Community has been traditionally marred by its relegation to agrarian and working-class sectors of society. The effect of which has been that if one wishes to climb the Valencian social ladder, ironically, one is expected to switch to Castellán Spanish. This association of Catalan with the lower classes has greatly impacted on the sociolinguistic situation of the community. For example, Catalan is not only divided by social class but also by geographical location as it is less widely spoken in the urban centres than in the smaller towns and villages. Catalan is also less visible – mainly restricted to shop signs, street names, and other public signage – in urban centres where Spanish, and even

English, are by-and-large given preference; again, this is less the case in smaller towns and villages. In local print media, the use of Catalan is extremely marginalised, and, until its closure in 2013, Valencian Television and Radio (RTVV and *Canal 9*) represented Catalan albeit in a version heavily politicised and influenced by Spanish. Furthermore, while Catalan in Catalonia has enjoyed more top-down, institutional support, in the Valencian Community this support is overwhelmingly bottom-up and popular. One major offender in this sense has been the actual autonomous government itself. Apart from the interventions of smaller political parties (such as *Coalició Compromís*), Catalan has long been underrepresented the Valencian Parliament. Overall, the effect of weak political support compounded by weak educational support means that the Valencian Community shows notably lower rates of linguistic competence in the four skills (see: table 2) than Catalonia or the Balearic Islands (Pons & Sorolla, 2009).

<i>Understand</i>	<i>Speak</i>	<i>Read</i>	<i>Write</i>
78.2%	57.6%	59.9%	32.5%

Table 2: Linguistic competence in Catalan in the Valencian Community (Pons & Sorolla, 2009)

However, on a more positive note, of the three regions which comprise the Valencian Community (Alacant, València, and Castelló), Catalan is most widely used in Castelló and especially so in the surrounding satellite towns and smaller inland and coastal villages, such as Vila-real and Benicàssim, where it can be considered the dominant language. Furthermore, legislation which granted co-official status to Catalan has increased its dominance in more intellectual and influential sectors of society which have higher levels academic achievement (Pradilla, 2001). The *Universitat Jaume I* (UJI) in Castelló uses Catalan as an official language, both administrative and vehicular, in a higher education context and research has shown that students from the UJI frequently use Catalan and hold positive attitudes towards it (Safont-Jordà, 2007; Portolés, 2014). In fact, the latest sociolinguistic study at the university reveals high levels of Catalan knowledge: 85.5% speak well, 91.7% read well, 83.0% write well, and 94.5% understand well (Servei de Llengües i Terminologia, 2015). The university also plays a

notable role in promoting Catalan-language academic publishing. Needless to say, this kind of academic support positively affects the prestige of Catalan in the region. Finally, in the regional elections of 2015, a left-wing coalition took power in the Valencian parliament. While it is still too early to see any results, this coalition is considerably more favourable to Catalan and is already taking steps to support the language.

Taking into consideration language as a symbolic identity resource (Harklau, 2007), to provide an interpretive framework by which we can understand language attitudes in the Valencian Community it is necessary to comment on the conflict between Spanish, Catalan, and Valencian. It is well-documented that political friction has long characterised the historical relationship between Spain and Catalonia. As language, identity, and ideology are virtually inseparable, this conflict is inevitably played out by pitting Spanish and Catalan against one another, the effect of which is also felt in the Valencian Community. To make matters more complex, there is a great deal of friction between the *Català* of the Catalans and the *Valencià* of the Valencians which is exacerbated by the fact that both Barcelona and Valencia are economic and political seats of power. Casanova (2004) points out that this conflict is artificially inflated and, in reality, serves to impede a union of the Catalan-speaking communities and to safeguard the idea of the Spanish nation-state. She suggests that what is in essence a geopolitical battle is played out ideologically as a *batalla por la lengua*. She states:

Postular una independència lingüística per a València és causada per una falsa visió que fa equivalents llengua=nació=estat, que no vol acceptar el origen català de la nostra llengua per a una separació històrica entre les dues zones, i per por a una futura absorció catalana de València. [my trans: The postulation of a linguistic independence for Valencia is caused by the false vision that language, nation, and State are equivalent. Such a vision does not want to accept the Catalan origin of our language due to a historic separation of these two areas, and for fear of a future Catalan annexing of Valencia.] (Casanova, 2004: 124)

After Spain transitioned from *Franquismo* to *democràcia*, the then ruling socialist party enshrined the status of Catalan in the Valencian Community through two legal acts: the Use and Teaching of Valencian Act (1983), and the Three Year Plan for the Promotion of the Use of Valencian in the Valencian Community (1990). However, in 1995 the conservative party won a

majority in the Valencian autonomous government. The conservative party has a vested interest in a unified Spanish nation-state, and, as Pradilla (2001: 68) points out, ‘represents those sectors which are most reticent with regards to regaining the public use of Catalan’. Valencian conservative politics led to the TV3 broadcasting ban in November 2007, followed by the closure of RTVV in November 2013, as well as consistent veiled attacks on Valencian-language education in the public school system, notably embodied in the *Llei Decret 127/2012*. This political manipulation has contributed to the highly complex situation of diglossia felt in the Valencian Community today, which is well summed up by Pradilla (2001):

Valencian society, in general, is uninformed, unaware of its own history, manipulated by ‘official’ information which says that it is not really very different from the other regions of Spain. The vision both within and without Valencia is one which denies it the condition of a ‘historical nationality’ (similarly to the Basque Country, Catalonia and Galicia), as would correspond to its history and its language. [...] [this] misinformation and manipulation have encouraged a certain kind of ideology, which evolved under Franco and takes the guise of a linguistic secessionism, in opposition to the ‘Catalan peril’. An artificial conflict has been created between Catalan and Valencian to hide the real conflict, which is between Valencian and Spanish. The end result has been a growing linguistic defection and self-hatred. (Pradilla, 2001: 68-69)

In summary, exploring the sociolinguistic context of the Valencian Community is fundamental for us to understand and interpret the language attitudes of adolescents in this region because, as Pujolar (2008: 2) explains, ‘unlike children, youths already have a considerably articulated and incipiently political discourse’. In terms of the language/identity nexus, and especially regarding minority languages, this ‘incipiently political discourse’ means that adolescents are highly sensitive to the conflicts which inevitably arise when there is contact between two languages which do not share the same prestige. Now that we have a clearer view of the sociolinguistic situation, we will continue by focusing on the way that languages are integrated in education.

5.1.1 Educational context

As Vila (2005: 67) points out language-in-education policies are ‘crucial to the understanding of the sociolinguistic situation’, it is therefore necessary to look in more detail at

language integration in the Valencian educational system. Secondary education is obligatory for all young people in Spain; this system is called *Educación Secundaria Obligatoria* and is commonly referred to by the initials ESO. Secondary education is carried out in secondary education institutes, teaching colleges and centres, private education centres, and public-private partnerships, known as *centros concertados*, which are state-subsidised but privately managed. In autonomous communities such as the Valencian Community, where two official languages co-exist, local governments have implemented linguistic policies to ensure that both languages are represented in the public education system; students are obliged to learn them both, alongside English as a foreign language.

The linguistic model of the Valencian Community is an ‘enrichment’ model, directed at the whole community and designed to maintain the minority language through its use as a language of instruction in education. In predominant Catalan speaking areas, it is characterised by distinct programmes commonly referred to as *linies* (streams) which are aimed at fostering Spanish-Catalan bilingualism. Until 2012, the programmes in infant and primary education were *Programa d’Incorporació Progressiva* (PIP), *Programa d’Immersió Lingüística* (PIL), and *Programa d’Educació en Valencià* (PEV). In secondary education, the PIP continued while the PIL and the PEV merged into a single Valencian-language programme. However, following the introduction of the *Llei Decret 127/2012* (the autonomous government’s plan for the regulation of plurilingual education at non-university levels), both the PIP and the PIL/PEV have been replaced with so-called ‘plurilingual’ versions: respectively, *Programa Plurilingüe d’Ensenyament en Castellà* (PPEC) and *Programa Plurilingüe d’Ensenyament en Valencià* (PPEV). In the PPEC, Spanish is the main language of instruction. Catalan and English are taught as language classes and these languages are used as the language of instruction for at least one other subject each. On the other hand, in the PPEV, Catalan is the main language of instruction. Spanish and English are progressively incorporated as language classes and instructional languages in at least one other subject each. In both cases, the exact configuration of languages in the curriculum is left for each school to decide individually according to the

sociolinguistic situation of the context. However, there has been criticism that these new programmes are in reality far from balanced and that less than a third of students are enrolled in Catalan-medium education. Many people believe that what these programmes mean in real terms is an increased use of English as an instructional language resulting in a further marginalisation of Catalan. This has led to public protest on the issue, including a large-scale demonstration in favour of Valencian-language instruction, *Crida d'Escola Valenciana*, in Valencia in February 2015.

It should be noted that the target institutions of the current study provide quite distinct sociolinguistic contexts. The first secondary education centre (henceforth: Centre 1) is a public secondary education institute situated in Vila-real, a mid-size town close to Castelló, where Catalan is in much wider use socially and in education as well as enjoying greater representation in the linguistic landscape. The second secondary education centre (henceforth: Centre 2) is a *centro concertado* and is located just between Benicàssim and Castelló, where Spanish is the majority language and Catalan, although present in the linguistic landscape, is underrepresented in both social and educative contexts. Aside from the difference in representation in the wider social context, within the schools the main vehicular language of instruction is also different; Catalan in the case of Centre 1, which follows the PPEV, and Spanish in the case of Centre 2, which follows the PPEC. Moreover, a further factor which has special impact on the level to which other L1s are represented is the difference between the public school, which is free and therefore attracts more students from lower income families (including many immigrant families), and the private school, in which education is free but services are not, and therefore has the opposite effect. The sociolinguistic situations of the two areas impacts dramatically on the linguistic configuration of each centre, as can be seen in figure 13.

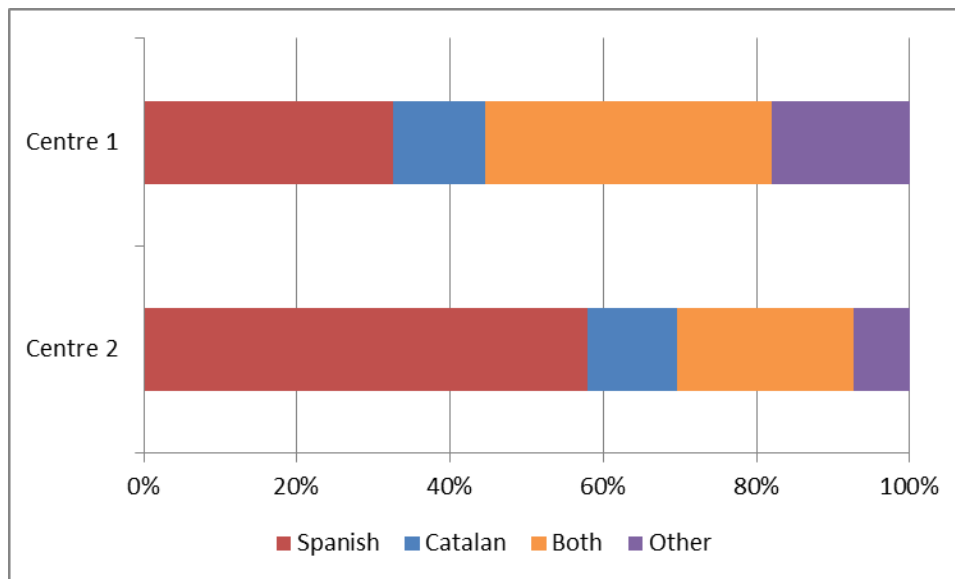


Figure 13: L1 distribution of each centre

In summary, this section has given the necessary consideration to the sociolinguistic situation of the Valencian Community. We have taken into account social, political, and academic support for the minority language, how political interests impact on language friction and diglossia in the region, and how multilingualism is currently integrated in the educational system. We will now continue by turning our attention to methodological issues regarding, first, the study participants, and then, the instruments used, and the data collection and analysis procedures.

5.2 Participants

The participants were 152 students attending two secondary education institutes in the Valencian Community. This sample covered the age range of 12 to 16 years old although two respondents were 17 years old at the time of data collection. The mean age of sample was 14.09 years ($SD = 1.329$), and it consisted of 65% ($n = 99$) female and 35% ($n = 53$) male respondents. The age for the participants corresponds with the four years of obligatory secondary education: first (12-13 years), second (13-14 years), third (14-15 years), and fourth ESO (15-16 years, plus the two 17-year-olds). The distribution of the students between the two

centres was as follows: 54.6% ($n = 83$) from Catalan-dominant Centre 1, and 45.4% ($n = 69$) from Spanish-dominant Centre 2.

In terms of mother tongue, 44% of the participants report their L1 to be Spanish, 12% report Catalan, 31% report both Catalan and Spanish, and 13% report another language (figure 14). Of the participants who reported an L1 other than Catalan or Spanish, the languages included: Romanian ($n = 10$), Arabic ($n = 4$), Brazilian Portuguese, English, Russian, Chinese, French/English, and German/English ($n = 1$ for each). Furthermore, all participants study English as part of their obligatory schooling and some also have extracurricular English classes with private tutors or in language academies. The total length of time the participants reported having studied English ranged from a minimum of 3 years to a maximum of 14 years; the average for the sample was 9.12 years and the mode was 10 years ($n = 37$). There were 41 students who reported having extracurricular English classes in language academies and 24 who reported studying with a private tutor; there were 11 students who reported both.

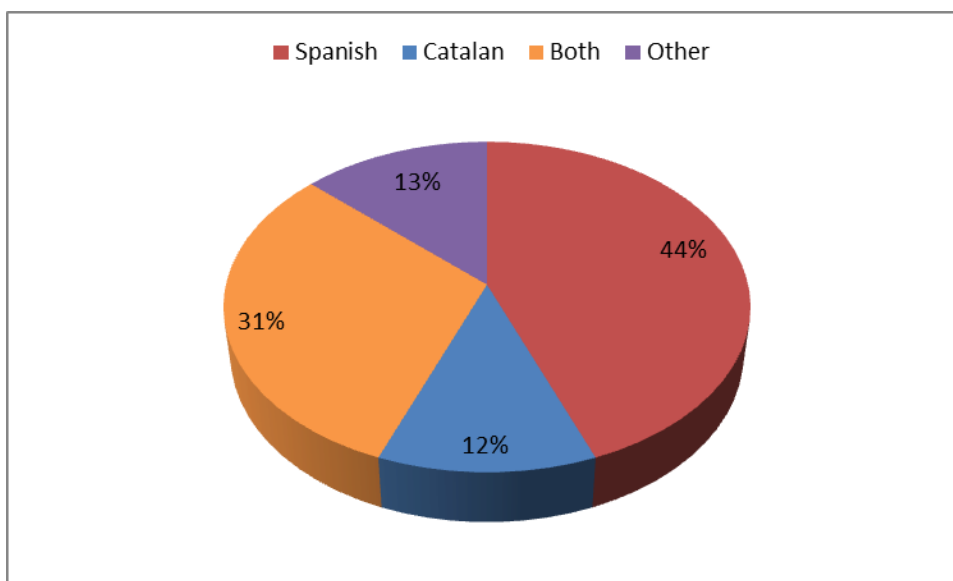


Figure 14: Reported L1s of the participants

The current study assumes that all participants are at least *receptive* bilinguals because an obligatory part of their education is conducted in both official languages of the community

and they are required to complete projects using both languages. On the other hand, *productive* bilinguals have been distinguished as those who use both languages outside the school context, that is, the language their parents use to communicate with them. In our sample, 62 students reported that their parents spoke to them exclusively in Spanish, 15 students reported that their parents spoke to them exclusively in Catalan, 58 students reported that their parents spoke to them in both languages, and 5 students reported that their parents also spoke to them in English. From this we can deduce that 41% of the sample constitutes receptive bilinguals while the rest are, in some capacity, productive bilinguals or multilinguals. However, determining receptive and productive bilinguals in the context of our data is actually more complex. As we are looking at out-of-school language contact and we distinguish between the more receptive contact of traditional media and the more productive contact of new media, we have to consider the 38% of the sample ($n = 58$) who reported no contact with new media in Catalan. Comparing this figure with the students who reported their L1 as Spanish and claim that their parents speak to them exclusively in Spanish we are left with 24 participants that we can consider receptive bilinguals, 4 of which also report no active contact with English in out-of-school contexts.

5.3 Data collection procedure and study instruments

Data were collected from the two centres over four individual sessions which took place in May of 2014. As the current study takes a mixed-methods approach, two instruments were employed. The first instrument consisted of a questionnaire designed to collect quantitative data, whereas the second instrument consisted of an oral interview designed to collect qualitative data and compliment the questionnaire by providing more detailed data on the participants' experiences from their own perspective.

In the first two data collection sessions (one at each centre), data were collected for quantitative analysis by means of the questionnaire which was handed out to students in their classrooms. Students were given around 15-20 minutes to complete the questionnaire; this was considered an ample amount of time after a prototype questionnaire had been trialled in a pilot

study carried out at a different centre in May of 2012. A teacher from each centre and the researcher were present throughout the process of data collection and helped to answer any questions the students had about how to fill out the questionnaire. All questionnaires were anonymous, after collection they were numbered in order to be subsequently entered into a database.

The questionnaire was written in Spanish and made up of three parts, containing a total of fourteen items (see: Appendix 1). The first part gathered general information regarding: 1) age, 2) gender, 3) mother tongue(s), and 4) length of English study (in years). The second gathered data on linguistic contact, including: 5) English classes in a private academy, 6) English classes with a private tutor, 7) the language(s) spoken at home by the parents, and 8) the language(s) the parents use at home to speak to the participant. Item nine ascertained data on linguistic contact and use of Catalan, Spanish, and English in out-of-school contexts. The item was presented as a table split between “traditional media”: television, (original version) films, music, the radio, books, magazines, comics, and newspapers; and “new media”: search engines (such as *Google*), social networks (such as *Facebook*, *Instagram*, *Twitter*, etc.), specific online forums, videogames, online multiplayer videogames, and instant messaging applications (such as *Whatsapp*). The new media table also asked participants to indicate roughly how long they have been using new media in each language. The third part of the questionnaire gathered data on language attitudes. Item ten asked participants to indicate how important they think it is to know Catalan, Spanish, and English in different geographic contexts (city/town, autonomous community, Spain, Europe, and the world). Items eleven to thirteen ascertained language attitudes to Spanish, Catalan, and English respectively and contained ten sub-items consisting of attitude statements with which students are asked to agree or disagree (see: table 3).

<i>Sub-item</i>	<i>Statement</i>	<i>Response</i>
A	I like how [language] sounds	Yes / No
B	I like speaking [language]	Yes / No
C	[Language] is very useful	Yes / No
D	I identify with [language]	Yes / No
E	Everyone should know [language]	Yes / No
F	Knowing [language] makes me feel intelligent	Yes / No

G	Knowing [language] makes me feel accepted	Yes / No
H	I'm sure about why I study [language]	Yes / No
I	It is worth learning [language]	Yes / No
J	I want my children to speak [language] fluently	Yes / No

Table 3: Attitude statements for individual languages (individual attitude measure)

Finally, item fourteen ascertained attitudes to all three languages considered holistically, it contained seven sub-items also consisting of attitude statements (see: table 4).

Sub-item	Statement	Response
A	Knowing all three languages opens your mind	Yes / No
B	I like to see all three languages in my environment	Yes / No
C	I like listening to all three languages	Yes / No
D	Using all three languages gives me access to more information	Yes / No
E	Knowing all three languages will help me get a job	Yes / No
F	I want my children to be fluent in all three languages	Yes / No
G	Knowing all three languages makes me feel more European	Yes / No

Table 4: Attitude statements for languages holistically (holistic attitude measure)

After data collection, the questionnaires were numbered and data were inputted into Microsoft Excel which was used to create the graphics used to illustrate the descriptive statistics. The data were then transferred to Statistical Package for the Social Sciences (SPSS) in order to obtain inferential statistical information. Kolmogorov-Smirnov tests indicated uneven data distribution, so the non-parametric tests Mann-Whitney U and Spearman's rho were used. Dichotomous variables were tested using Chi Squared tests. Effect sizes were calculated for the inferential statistical tests, namely Pearson's r and the Phi coefficient. In some cases, the resulting statistical information was fed back into Microsoft Excel in order to create illustrative graphics.

In the last two data collection sessions (again, one at each centre), data for qualitative analysis were collected by means of semi-structured personal interviews. In the first of these sessions, at Centre 2, 22 interviews were held with groups of between 2-4 students. Each interview lasted between 5 and 13 minutes. The total recorded interview time was just over 187

minutes with an average of 8 minutes 51 seconds per interview. In this session, all interviews were conducted in Spanish. In the second of these sessions, at Centre 1, 16 personal interviews were held with groups of 2-3 students. Each interview lasted between 4 and 7 minutes. The total recorded interview time was just less than 87 minutes with an average of 5 minutes 42 seconds per interview. In this session, most interviews were conducted in Spanish but some conducted in Catalan. The interviews from all sessions were digitally recorded for later transcription and codification.

The study instrument for these later sessions was a semi-structured interview designed to collect qualitative data not only regarding language attitudes but also concerning multilingual practices. The interview consisted of eight questions and allowed for more detailed and open answers than the questionnaire. The questions are as follows:

- Which language are you most comfortable using?
- How do you feel when speaking in Catalan / English / Spanish?
- Which languages do you like to read in?
- Which languages do you use to communicate with on your mobile phone?
- Which languages do you use on the internet?
- How do you feel when using Catalan / English / Spanish on the internet?
- Do you mix languages on social network sites?
- Do you think technology changes the way you use your languages?

After data collection, the interviews were transcribed by the principal researcher using an adapted transcription code (Portolés, 2014). The extracts presented in this study are identified by centre, interview, and school year; so for example, the code C1 I3 E1-2 refers to *Centre 1, Interview 3, 1st / 2nd of ESO*. All interview extracts are subject to the same classification system. Although the interviews have been transcribed taking into account pauses, stretched vowels, false starts, and certain other metalinguistic information, for ease of reading the presented extracts have been simplified to remove all this ‘noise’ and focus on the essence of what the

students have reported. Only relevant extracts were chosen for qualitative analysis, unedited transcriptions of all extracts along with the transcription code are provided in Appendix 2.

5.3 Additional methodological considerations

One aim of the current study is to present both quantitative and qualitative results in order for each type of data to compliment and reinforce the other. While quantitative methods are generally regarded as more objective and controlled (Dörnyei, 2007), they also have limitations in that they may be ‘overly simplistic, decontextualized and reductionist’ (Brannen, 2005: 7). The inclusion of qualitative methods may be more suitable to studies which take a systems perspective because they do not consider products to be more important than processes (Komorowska, 2014), they are more sensitive to individual variation (Wlosowicz, 2014), and they may help to uncover the underlying dynamics of situations and phenomena (Dörnyei, 2007). In light of these arguments it has been decided that the current study will take a mixed-methods approach. However, a further aim of the study is to highlight the complex and dynamic nature of the relationships between out-of-school language contact, language attitudes, and language systems, thus it is necessary to consider some issues when it comes to exploring data in terms of complex systems.

Analysing complexity is notoriously tricky and, for applied linguists, one major challenge is the fact that DST focuses on nonlinear change and integrated holistic systems (de Bot & Larsen-Freeman, 2011; Dörnyei, MacIntyre and Henry, 2014). A further challenge is that there are no simple ‘cause and effect’ explanations for the relationships between individual variables (Dörnyei, 2009); this tends to go against the assumptions of most traditional methods. Previous research has already detailed many issues that should be considered when taking a DST or complexity approach (see: Larsen-Freeman & Cameron, 2008; Dörnyei, 2009), but we shall highlight some of the considerations which are most relevant to the approach adopted in the current study. We should focus on the self-organization of the interconnected system as a whole, focus on the power and influence of attractor and repeller phenomena, avoid separating

individual development from context and environment, take a qualitative or mixed-method approach to data analysis to provide richer contextual data, consider variability an integral part of the system and focus on systemic development, and focus on different timescales, as well as the interactions of groups of variables on micro and macro levels.

In this chapter we have given due consideration to the sociolinguistic situation including language friction and languages in the educational context. Furthermore, we have described the study participants, the instruments used, and the data collection and analysis procedures. Finally, we have commented on some methodological considerations of mixed-method data analysis and systems-thinking. We are now ready to discuss the results obtained from the data in terms of how they relate to our research aims and to what extent they support our hypotheses. This will be the focus of the following chapter

CHAPTER 6. STUDY RESULTS AND DISCUSSION

As stated in the previous chapter, the primary goal of this study is to analyse the language attitudes of adolescent emergent multilinguals. Moreover, and in line with the model proposed by Herdina and Jessner (2002), this study will attempt to take a multilingual complexity-based approach in order to explain the data in terms of processes as well as ‘products’ or outcomes. To recapitulate the aims of the current study, we intend to demonstrate a relationship between adolescent language attitudes and out-of-school media contact, investigate variation in said relationship, highlight the complex nature of an integrated psychosociolinguistic multilingual system, explore the effects of media contact on multilingual practices, identities, and socialisation processes, and apply qualitative and quantitative methods to data analysis. To this end, the first step is to obtain a more detailed picture of our sample by briefly focusing on some descriptive statistics. We will comment on the importance attributed to knowing Spanish, Catalan, and English in various geographic contexts, the degree of contact with traditional and new media types, and, most importantly, the overall language attitudes when no independent variable is considered.

General descriptive statistics indicate the perceived status of English as a global *lingua franca*, Catalan as a local language of cultural identity, and Spanish as a ‘glocal’ language which serves common interactions and bridges the community to the rest of Spain. In terms of language contact, while use of Spanish-language media is virtually ubiquitous and English-language media is well represented, Catalan-language media is woefully underrepresented, only faring slightly better in new media than in traditional media. Finally, the participants hold generally positive attitudes to the three main languages they are in contact with. Considering languages individually, the sample is more positive towards the foreign language, followed by the majority language, and is least positive towards the minority language. However, the greatest positive attitudes are shown when all languages are considered holistically.

The questionnaire asked participants to indicate if they considered knowledge of Catalan, Spanish, and English to be important in different geographic contexts (ranging from local to global). In general, Spanish maintains its importance across contexts, peaking slightly at the national level. Unsurprisingly, given its status, English increases in perceived importance as the geographic context widens. Conversely, Catalan is considered most important at the autonomous community level but increasingly less so at national and European levels. Unexpectedly, the importance of Catalan rises a little at the global level which we believe is a reflection of identity through language; although Catalan may not have a great deal of communicative importance internationally, it may be considered an important in-group identity marker.

As the current study is based on out-of-school language contact, we consider it important to report on the average levels of contact for each media type in each language (table 5). Spanish-language media is dominant in all cases except for music in which it is usurped by English. In terms of traditional media, there are high levels of contact with Spanish, especially through television and books. Considering that Catalan is an official language of the community, contact with Catalan-language traditional media is highly restricted; the vitality of the language appears to be principally maintained through books and, therefore, literary and cultural connections. Contact with English-language traditional media, as mentioned above, is heavily skewed towards music. This is not surprising given that English-language music has by far the most ubiquitous presence in the lives of young Europeans in general (see: Berns, de Bot & Hasebrink, 2007; Kuppens, 2010). In terms of new media, there is fairly high contact with Spanish, especially internet search engines and instant messaging. Regarding Catalan, while the most frequently used new media types are the same, search engines and instant messaging, the overall level of contact is radically lower. Finally, with the exception of music, there is greater contact with English through new media than there is through traditional media, this is especially the case for videogames and search engines.

	<i>Traditional media</i>								<i>New media</i>					
	TV	Film	Music	Radio	Books	Magazine	Comics	Newspaper	Search	SNS	Forum	Games	Online games	Messages
Sp	99%	89%	78%	89%	98%	91%	57%	70%	98%	86%	53%	70%	54%	93%
Ca	16%	9%	15%	16%	63%	7%	12%	13%	52%	13%	7%	2%	3%	24%
En	19%	37%	95%	12%	28%	10%	14%	5%	49%	43%	16%	55%	46%	26%

Table 5: Reported use of media types in each language - percentage of the sample

As language attitudes comprise the dependent variable in the current study, it was considered necessary to describe the initial attitudes of the sample without considering independent variables. The sample reacts most favourably to the holistic measure, this is closely followed by English, then Spanish, and finally, we can see that positive attitudes towards Catalan are considerably lower (table 6). There was very little difference when the educative centres were considered separately. Centre 1, in which the vehicular language is Catalan, is slightly more positive towards both Spanish and Catalan than Centre 2. The difference between the two centres regarding English and the holistic measure is negligible. It is fairly straightforward to interpret these results in light of the sociolinguistic context and the sociopsychological attributes of the participants. It is not surprising that attitudes towards Spanish are more positive than those towards Catalan given the restricted public presence and generally low prestige afforded to Catalan in the Valencian Community, compounded by the self-perceived need for many adolescents to conform to peer-group norms and thus (at least, *outwardly*) identify with the majority language. The highly positive attitudes towards English are also to be expected given the international prestige of the language and its consequent status as a fundamental form of social capital. What was more interesting however was the response to the holistic measure which appeared to minimise the notable attitudinal difference between minority, majority, and foreign languages; this is in line with earlier research (Lasagabaster & Safont Jordà, 2008; Nightingale, 2012).

<i>Spanish</i>	<i>Catalan</i>	<i>English</i>	<i>Holistic</i>
71%	45%	81%	82%

Table 6: percentage of positive attitudes towards each language - no independent variable.

It was also considered important to look at the general measure of positive responses to each attitude statement for each language (illustrated in figure 15 below). We can see that while Spanish and Catalan form a U-shape curve, there is a great deal more variation when it comes to English. The most positive attitude for Spanish is preference for speaking the language while the least positive is that the language makes the students feel intelligent. For Catalan, the two most positive attitudes are preference for how the language sounds and students wanting their children to speak the language (intergenerational transmission), whereas the least positive is that everyone should know the language. For the foreign language, English, the most positive attitudes are preference for how the language sounds, the language being very useful, that everyone should know the language, the value of learning the language, and transmitting the language to offspring. In contrast, the sample was notably less positive about identifying with English and it making them feel accepted. These are general responses which do not fall under the influence of any independent variable. However, it may be useful at certain points to factor them into our interpretation of the effects of out-of-school language contact on adolescent language attitudes. Furthermore, from a systems-perspective, we can consider these responses the *initial attitudinal conditions* of the current study from which we can understand the effect of media contact.

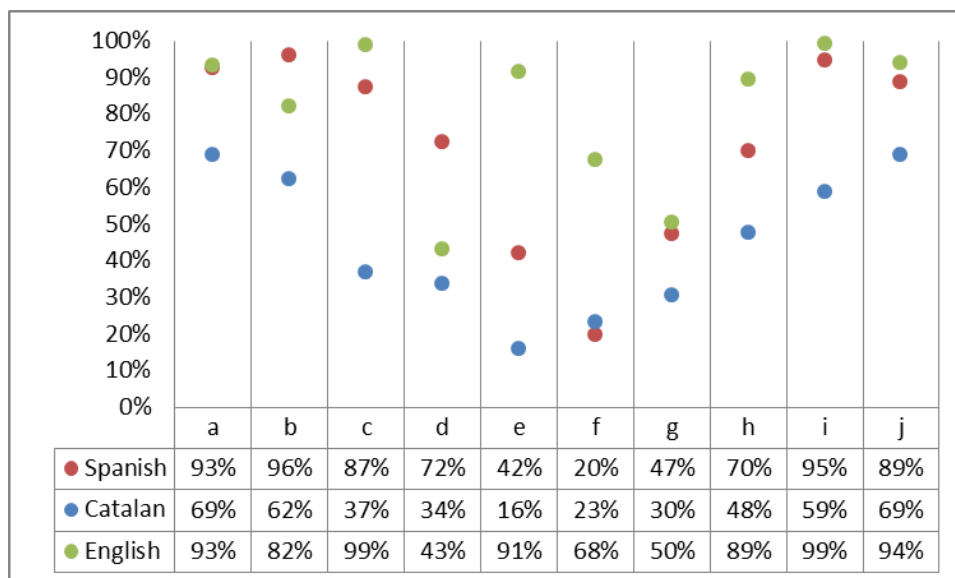


Figure 15: Positive responses for each statement in each language (no independent variable)

Key: a) I like how [language] sounds, b) I like speaking [language], c) [Language] is very useful, d) I identify with [language], e) Everyone should know [language], f) Knowing [language] makes me feel intelligent, g) Knowing [language] makes me feel accepted, h) I'm sure about why I study [language], i) It is worth learning [language], j) I want my children to speak [language] fluently.

After having gained a more detailed picture of the general language attitudes and media-contact behaviour of our sample, we shall explore the predictions made in our hypotheses.

6.1 Results and discussion related to Hypothesis 1

Hypothesis 1 predicted that out-of-school language contact would affect positive language attitudes (Lefever, 2010; Kuppens, 2010; Nightingale, 2012; Bunting & Lindström, 2013). In addition, we also predicted that this effect would be more notable as a result of out-of-school language engagement with new media (Gee, 2007; Harrison & Thomas, 2009; Thorne *et al.*, 2009; Thorne & Black, 2011; Lin & Warschauer, 2011; Henry, 2013). In order to test these predictions we focused on the amount of positive responses to the attitude statements for each language. The sample ($N = 152$) was split in various ways which reflected either 'out-of-school contact' or 'no out-of-school contact' with media types which were grouped as 'Audio-Visual' (TV, films, music, and radio), 'Print' (books, magazines, comics, and newspapers), and 'New Media' (search engines, social networks, internet forums, videogames, online multiplayer games, and instant messaging). As such, 'positive attitudes towards each language' was the

dependent variable and ‘out-of-school contact with media types’ was the independent variable. The data showed that contact with the different groups of Spanish-language media was a constant rather than a variable, thus it was not possible to test for contact effects in this language. Furthermore, a Kolmogorov-Smirnov test indicated that our data for English and Catalan were not normally distributed. For this reason, nonparametric (Mann-Whitney U) tests were used to investigate the hypothesis. A Pearson’s *r* was also calculated in order to report the effect size of the association between variables.

	<i>Attitudes: English</i>	<i>Attitudes: Catalan</i>	<i>Holistic Attitudes</i>
AV En	<i>U = 159.0, p = .008, r = .21</i>	-	<i>U = 283.0, p = .046, r = .16</i>
Print En	<i>U = 2062.5, p = .056, r = .16</i>	-	-
NM En	<i>U = 1297.5, p = .006, r = .23</i>	-	-
AV Cat	<i>U = 1867.0, p = .020, r = .19</i>	<i>U = 1715.0, p = .002, r = .26</i>	-
Print Cat	<i>U = 1784.5, p = .004, r = .26</i>	<i>U = 1839.0, p = .004, r = .24</i>	-
NM Cat	-	<i>U = 1738.0, p = .001, r = .29</i>	-

Table 7: Significant results from Mann-Whitney U tests - grouped media types.

The results of the Mann-Whitney tests (table 7) demonstrate that contact with English-language media increases positive attitudes towards English and that contact with Catalan-language media increases positive attitudes towards Catalan. Furthermore, contact with new media results in the most statistically significant associations in both languages. With this in mind, we can state that both parts of hypothesis 1 are confirmed. Describing these results in more detail, we can see that attitudes towards English are significantly more positive when the sample reported out-of-school contact with English language audio-visual media and new media. However, although the mean score for contact ($M = 82.50$) was higher than the mean score for no contact ($M = 68.92$), English-language print media did not return a statistically significant result. The results also show that attitudes towards Catalan were significantly more positive when the sample reported out-of-school contact with Catalan-language audio-visual media, print media, and new media. It is not particularly surprising that attitudes to a language are more positive when there is contact with media in the same language. A more unexpected result from the statistical tests was a significant association between attitudes towards English

and out-of-school contact with *Catalan*-language audio-visual media and print media. However, looking at the mean scores for these media types (AV yes: $M = 62.84$, AV no: $M = 79.75$; Print yes: $M = 66.48$, Print no: $M = 87.33$) we can see that the association is negative; that is, contact with minority language media actually makes attitudes towards the foreign language less positive. We put this result forward as an illustration of complex interaction between language systems. In terms of attitudes towards Spanish, the results showed no significant associations from out-of-school contact with English-language or Catalan-language media. Finally, the only contact type to significantly increase positive attitudes to the holistic measure was out-of-school contact with English-language audio-visual media.

In order to explore in more detail the prediction we made in hypothesis 1, further Mann-Whitney tests were run for each type of media contact individually. As the degree of contact with different types of Catalan-language and English-language media is far from uniform (see: table 5), these separate tests were intended to consolidate our results by determining more precisely which types of out-of-school language contact may lead to positive language attitudes.

		<i>Attitudes: English</i>	<i>Attitudes: Catalan</i>	<i>Holistic attitudes</i>
TV	En	-	-	-
	Cat	-	$U = 854.5, p = .001, r = .28$	-
Film	En	$U = 1920.0, p = .013, r = .21$	-	$U = 2001.5, p = .014, r = .20$
	Cat	-	-	-
Music	En	$U = 159.0, p = .008, r = .21$	-	$U = 283.0, p = .046, r = .16$
	Cat	-	$U = 855.0, p = .004, r = .24$	-
Radio	En	-	-	$U = 687.0, p = .003, r = .25$
	Cat	-	$U = 1005.5, p = .035, r = .17$	-
Books	En	-	-	-
	Cat	$U = 1839.5, p = .005, r = .23$	$U = 1847.0, p = .003, r = .25$	-
Magazines	En	-	-	-
	Cat	-	$U = 406.0, p = .027, r = .18$	-
Comics	En	-	-	-
	Cat	-	-	-
Newspapers	En	-	-	-
	Cat	-	-	-
Search	En	$U = 2035.5, p = .009, r = .21$	-	-
	Cat	-	$U = 1958.0, p = .002, r = .25$	$U = 2088.5, p = .007, r = .22$
Social networks	En	$U = 1670.0, p = .000, r = .32$	-	-
	Cat	-	$U = 526.5, p = .000, r = .34$	-
Forums	En	-	-	-
	Cat	-	-	$U = 450.5, p = .020, r = .19$
Games	En	$U = 2010.5, p = .009, r = .21$	-	-
	Cat	-	$U = 66.5, p = .038, r = .17$	-
Online games	En	$U = 2146.5, p = .031, r = .18$	-	-
	Cat	-	-	-
Messaging	En	$U = 1455.5, p = .005, r = .23$	-	-
	Cat	-	$U = 982.0, p = .000, r = .39$	-

Table 8: Significant results from Mann-Whitney U tests - individual media types.

Results (table 8) showed that within the ‘audio-visual’ media group, positive attitudes towards English were significantly increased through contact with English-language films and even more so with music. Within the ‘audio-visual’ group, positive attitudes towards Catalan were significantly increased by contact with Catalan-language radio, music, and, above all, television. From the highly significant result of contact with Catalan-language television, it is clear that this activity affirms positive attitudes towards the language and, given the political-linguistic conflict laid out in chapter 5, was probably an influential factor in the decision of the previous autonomous government to restrict public access to the Catalan-language television channels TV3 and RTVV.

Within the ‘print media’ group there are no significant results for English-language print media; we propose that as reading in English is a common in-school teaching method (and, in fact, often constitutes homework) it is therefore unlikely to lead to positive language attitudes in adolescents. Conversely, positive attitudes towards Catalan are significantly affected by Catalan-language print media, namely books and magazines. The fact that reading books in Catalan gives such a significant result is not surprising given that books represent the most frequent type of reported out-of-school contact with Catalan-language traditional media and, moreover, that the value of Catalan appears to be embodied in the maintenance and transmission of social, cultural, and linguistic identity. This is in line with Baker (1992) who argues that cultural contexts and literacy environments lead to favourable attitudes and provide support for minority languages. What is more unusual is that reading magazines, which constitutes the least frequent type of contact, should be the only other traditional media type to return a significant effect. Although reading books in English does not significantly affect attitudes towards English, curiously enough reading books in Catalan *does*. However, looking at the mean rank scores for the ‘contact’ and ‘no contact’ groups ($M = 66.84$ and $M = 87.33$, respectively) we can see that the effect is actually negative; this result corroborates our earlier finding, in fact, it points out that it is not all Catalan-language print media that has a significant negative effect on attitudes to English, it is specifically books. To ascertain exactly why this should be the case

would require more specifically focused research; however, we tentatively propose, in line with the DMM (Herdina & Jessner, 2002), that this unexpected result illustrates interdependence between the linguistic, affective, and social subcomponents of the multilingual psychosociolinguistic system.

Extended results from the ‘new media’ contact allow us to address more conclusively the second part of hypothesis 1, that the effect on language attitudes would be more notable as a result of the linguistic engagement offered by out-of-school contact with new media. With regards to positive attitudes towards English, the results are significant from out-of-school contact with internet search engines, videogames, online multiplayer, instant messaging, and, above all, use of social networks. With regards to positive attitudes towards Catalan, the results show significant results from out-of-school contact with internet search engines, videogames, and above all, use of social networks and instant messaging. Of the six media types which constituted the ‘new media’ contact group, regarding positive attitudes towards English five types have returned significant results (four of which are significant at $p < .01$) and regarding positive attitudes towards Catalan four types have returned significant results (two of which are significant at $p < .001$). It should also be noted that, of all the significant results, new media shows the largest effect sizes: social network use in English ($r = .32$), social network use in Catalan ($r = .34$), and instant messaging in Catalan ($r = .39$). Bearing in mind that a Pearson’s r effect size $> .3$ is considered ‘medium’ and $>.5$ is considered ‘large’ (Cohen, 1988), these results show reasonably strong relationships between variables. In terms of attitudes towards English this represents a marked difference from traditional media (audio-visual and print combined) in which only two out of eight media types return significant results. However, in terms of attitudes towards Catalan the difference is less marked with five out of eight traditional media types returning significant results.

In order to gain a complete picture of our results, mean scores were compared for ‘contact’ and ‘no contact’ groups in English and Catalan; this is visually represented in figures 16 and 17 below (statistical significance is marked by asterisks). Although not all results were

significant, it is plain to see that attitudes are consistently more positive to a language when there is out-of-school contact with that language. In terms of attitudes towards English, we can see that – while not statistically significant – contact with English-language newspapers results in the highest mean score for positive attitudes. Furthermore, while there were only six participants who reported no contact with English language music, where no contact was reported we can see a notable dip in attitudes (significant at $p = < .01$). In terms of attitudes towards Catalan, we can see that the highest mean scores clearly come from using new media, while the lowest dip comes from not reading books (again, significant at $p = < .01$).

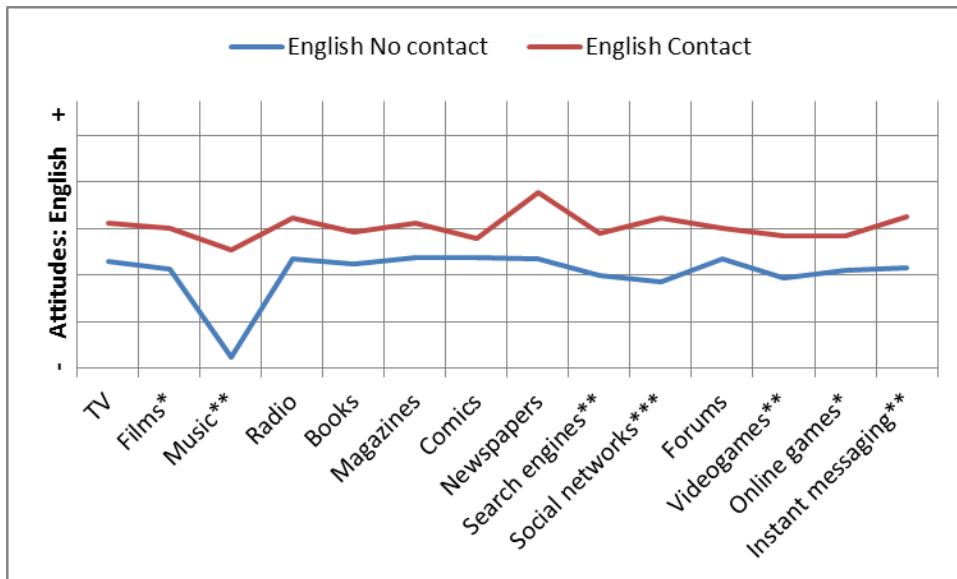


Figure 16: Contact with English-language media and attitudes towards English

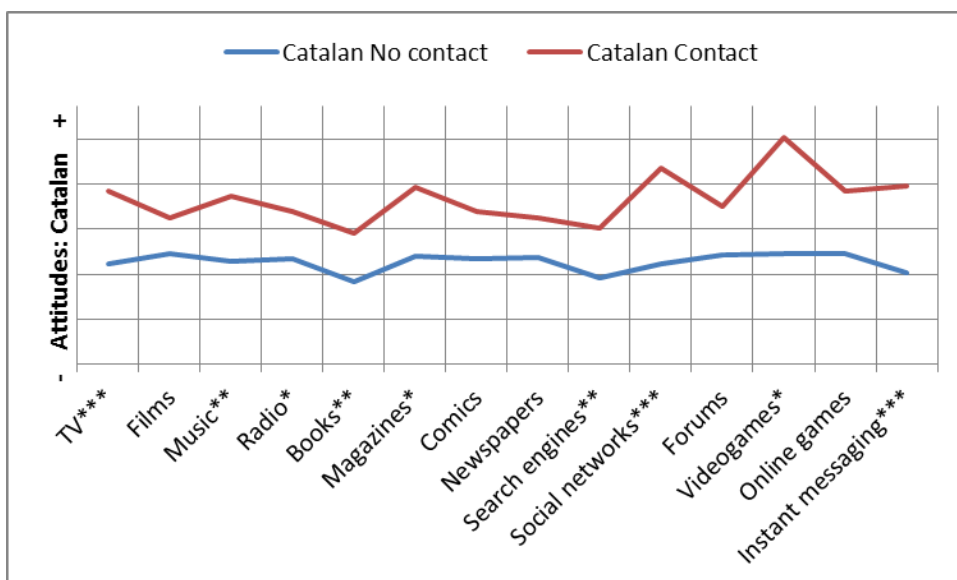


Figure 17: Contact with Catalan-language media and attitudes towards Catalan

It would be beneficial to comment here on the results for attitudes to the holistic measure. We noted above that contact with English-language audio-visual media significantly increased positive attitudes to the holistic measure, looking at this result in more detail reveals that English-language films, music, and radio all have a significant effect. Furthermore, significant effects on positive attitudes to the holistic measure were noted from contact with Catalan in search engines and, albeit to a lesser extent, internet forums; these individual results

did not show up when Catalan new media was considered as a group. Although, these attitudes showed the lowest number of statistically significant results from contact with media types, when taking into consideration the mean rank scores for contact and no contact groups in English and Catalan we can see a clearer picture of what is happening (figures 18 and 19 – statistical significance is marked by asterisks). What we find by looking at the means is that contact with English-language media results in a higher mean score for holistic language attitudes for 10 of the 14 media types; only contact with books, social networks, videogames, and instant messaging return lower mean scores for holistic language attitudes, and the difference between groups is quite minimal. In contrast, contact with Catalan-language media consistently returns higher mean scores for holistic language attitudes, although the difference for newspapers is minimal and the difference for instant messaging is negligible.

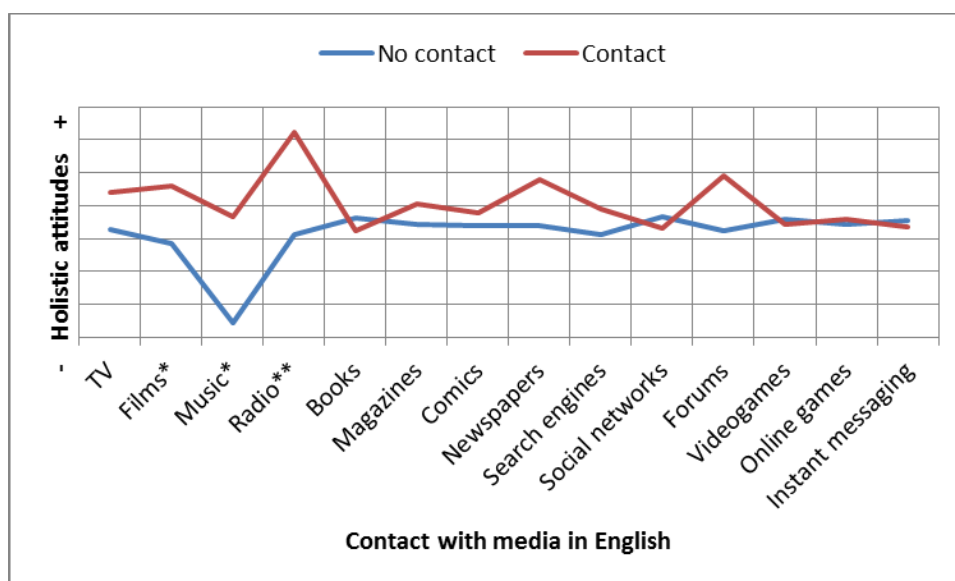


Figure 18: Contact with English-language media and holistic language attitudes

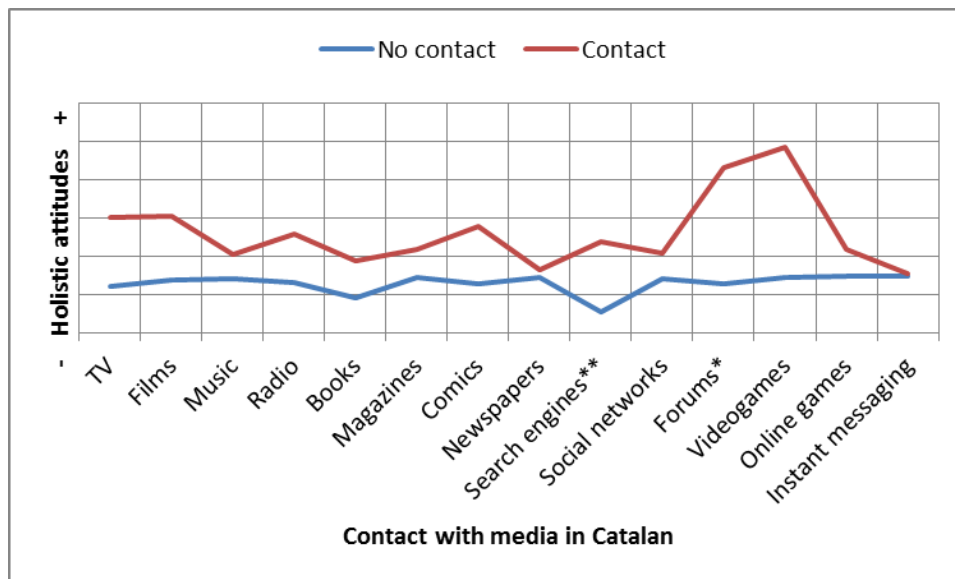


Figure 19: Contact with Catalan-language media and holistic language attitudes

Another discovery derived from these results was the effect that contact with Catalan-language media had on attitudes towards English. As reported above, contact with Catalan-language books showed a strong negative correlation with positive attitudes towards English (significant at $p = <.01$). Furthermore, on analysing the mean rank scores for the ‘contact’ and ‘no contact’ groups we found that positive attitudes were consistently lower when the sample reported contact with Catalan through television, music, radio, magazines, comics, newspapers, social networks, online games, and instant messaging; while these differences in means were not statistically significant, they do comprise a clear trend (figure 20).

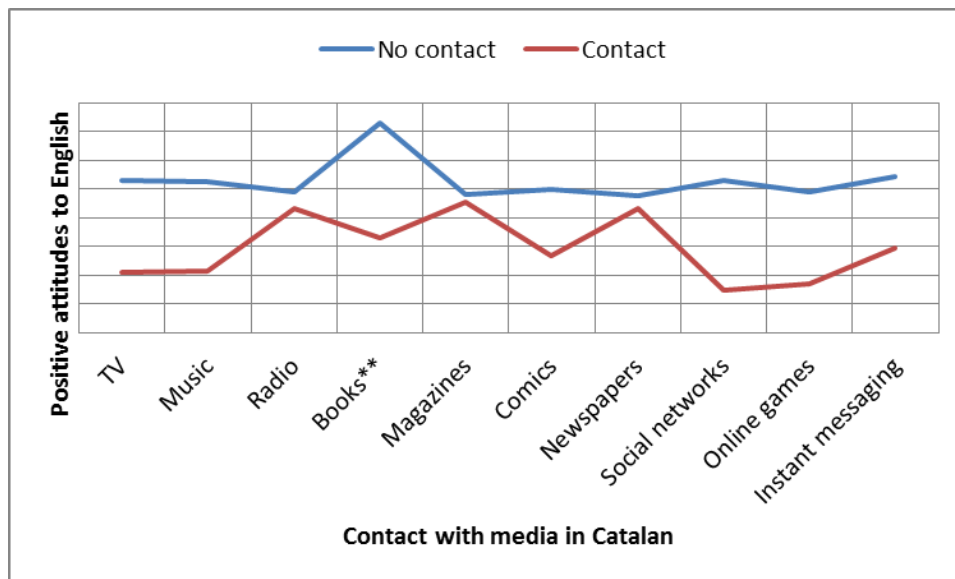


Figure 20: Contact with Catalan-language media and attitudes towards English

The inverse situation, the effect of contact with English-language media on attitudes towards Catalan (figure 21), is also very interesting. Mean scores for positive attitudes are lower when the sample reports contact with English through television, books, magazines, search engines, social networks, and instant messaging. While none of these differences are statistically significant, what is very telling is that all these media types have a highly significant effect (as reported above) on attitudes to Catalan when they are used in Catalan: television ($p = .001$), books ($p = .003$), magazines ($p = .027$), search engines ($p = .002$), social networks ($p = .000$), and instant messaging ($p = .000$). In other words, more positive relationships between contact with Catalan and attitudes towards Catalan show a tendency to produce a negative impact on attitudes towards English.

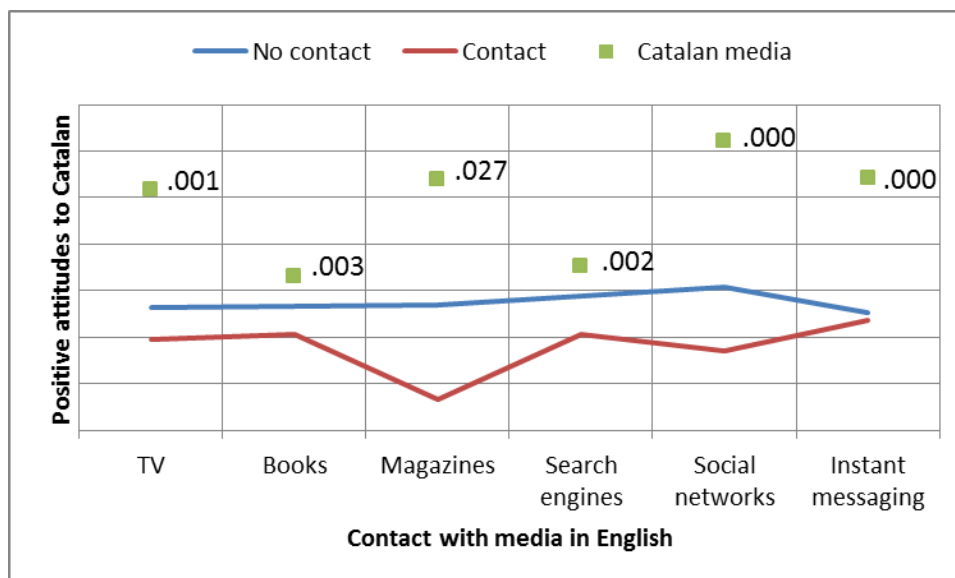


Figure 21: Contact with English-language media and attitudes towards Catalan

(Mean scores and p values for contact with Catalan-language media are also indicated)

What could it be that causes this effect? We propose it is a result of the marked differences in prestige and ethnolinguistic vitality between English and Catalan. This view supports previous research in the Spanish context which has indicated that minority language speakers may perceive their language as under threat from larger, more powerful languages (Lasagabaster, 2003, 2007; Huguet, 2007; Portolés, 2014). Moreover, this result is also in line with earlier research in multilingual contexts which has indicated that children as young as four years old acknowledge the social prestige of the languages they are in contact with (Portolés, 2015). A further explanation could be that, given the sociolinguistic situation, more effort has to be made to maintain contact with the minority language. For example, if you wish to watch television in Catalan, you have to look for opportunities to do so; it is not overtly available as is the case with Spanish. Likewise, if you use Catalan in instant messaging or read books in Catalan, you have to make an effort to do so and it is thus more likely that you will be genuinely passionate about the language and be more acutely aware of potential threats to it.

The results above have confirmed the first part of hypothesis 1; out-of-school language contact *does* affect language attitudes. This outcome is in line with more general SLA research

which points out the efficacy of language contact with authentic materials (Baltova, 1994; Cortazzi & Jin, 1994; Boggs, 1996; Guariento & Morley, 2001; McCoy, 2009), it provides attitudinal evidence which can be used to supplement previous research relating out-of-school factors with language proficiency (Sundqvist, 2009; Lefever, 2010; Kuppens, 2010; Bunting & Lindström, 2013), and it corroborates and extends earlier research which indicated a link between out-of-school language contact and language attitudes (Nightingale, 2012). The fact that, in particular, contact with audio-visual media significantly affects language attitudes means that we can add to previous research relating film, television, and music to linguistic proficiency (d'Ydewalle & Van de Poel, 1999; Koolstra & Beentjes, 1999; Medina, 2002; Milton, 2008; Schwarz, 2012) with new evidence from the affective domain. Furthermore, due to the age range of the sample, we are able to extend the important results from the ELLiE project regarding out-of-school factors and young learners (Muñoz & Lindgren, 2011; Lindgren & Muñoz, 2013) from primary school children to adolescents in the secondary education stage.

The results have also confirmed the second part of hypothesis 1; linguistic engagement offered by out-of-school contact with new media *does* more notably affect language attitudes. We consider these results to be in line with earlier research which illustrates the autonomy promoting nature of new media (Gee, 2007; Harrison & Thomas, 2009; Thorne *et al.*, 2009; Thorne & Black, 2011; Lin & Warschauer, 2011; Henry, 2013), and we wish to add that not only does engagement with language using this type of media benefit competence and motivation, but we now have empirical evidence that it also dramatically improves language attitudes towards foreign and especially minority languages. Indeed, the stronger relationships we have seen between attitudes, social networking and instant messaging corroborate research by Cunliffe, Morris and Prys (2013) which highlighted the role of social networking sites like Facebook in the formation of youth language attitudes. In fact, these authors focused their study on the minority language (Welsh), so it is interesting to see in our study that contact with new media in Catalan also has a significant effect on the formation of attitudes towards this minority language. We may speculate that this is the case with Catalan, more so than with English,

because, given the relative absence of Catalan media in youth out-of-school environments, social networking constitutes a way for young people to connect to and express themselves in a minority language. This also relates to the idea that young people selectively choose the media with which they wish to participate and thus build their own media environments (Berns, de Bot & Hasebrink, 2007) and ties in to concepts of language socialisation (Bayley & Schechter, 2003; Duff & Talmy, 2011) where young people, apparently ‘novices’, show considerable agency in understanding and acting in their own linguistic environments, and even in resisting top-down imposition of linguistic policy. Bearing all this in mind, we hope that the results from this part of hypothesis 1 might also respond, in some modest way, to the call from Wang and Vásquez (2012: 424 – my emphasis) to explore how learners ‘in secondary education [and] *more informal learning contexts* are using Web 2.0’, and Duff and Talmy’s (2011) call for more attention on multilingual and multimodal language socialisation practices.

Thus, in conclusion, we consider both parts of hypothesis 1 have been borne out. Regarding the first prediction, out-of-school contact with languages shows a marked effect on attitudes to minority and foreign languages. When the language contact and the language attitudes are aligned, that is, Catalan contact → Catalan attitudes or English contact → English attitudes, the effect is always to increase positive attitudes. When the language contact and the language attitudes are crossed, that is, Catalan contact → English attitudes or English contact → Catalan attitudes, there is a tendency for the effect to lessen positive attitudes. Out-of-school contact seems to have little significant effect on attitudes to the holistic measure. However, it is clear from the results above that contact with media in the foreign language and even more so in the minority language shows a steady trend of increasing holistic positive attitudes. Regarding the second prediction, the effect of out-of-school language contact on language attitudes is more notable when we focus on engagement with new media. We consider this part of the hypothesis confirmed because when we analyse the effect of new media we see greater significant relationships, that is we see the lowest *p* values and the highest *r* values. This is compounded by the fact that, especially regarding English, the percentage of new media types which returned

significant results is higher than the percentage of traditional media types which return significant results. In other words, provided that the language configuration is congruent, contact with new media is not only more significant, it is also more *consistently* significant in its effect on the positive attitudes towards foreign and minority languages held by adolescent multilinguals. Looking at the results from this hypothesis from a systems-perspective, we can see unexpected interactions between the language systems of emergent multilingual youths who are in contact with minority, majority, and foreign languages. If we had taken a traditional TLA approach and focused on ‘one language only’ (Li Wei, 2011a; Cenoz, 2013), we would only have a partial account of these students’ language attitudes. Furthermore, we would have completely missed important interaction phenomena, such as the generally negative influence when we cross minority and foreign language media and attitudes. In that sense, these results corroborate the importance of adopting a multilingual approach to the study of multilingual development and are thus in line with the DMM (Herdina & Jessner, 2002) and other research which proposes a move away from the ‘monolingual bias’ that has tended to characterise earlier SLA and TLA research (Cook, 1997; Cenoz & Gorter, 2011a; Cenoz, 2013).

After having discussed hypothesis 1, which has confirmed the connection between out-of-school language contact and language attitudes in multilingual contexts, we shall explore this phenomenon in more detail by looking at variation among the system subcomponents. This will be the focus of the following section.

6.2 Results and discussion related to Hypothesis 2

In line with the non-linear characteristic of dynamic systems (Larsen-Freeman, 1997; de Bot & Larsen-Freeman, 2011), Herdina and Jessner’s (2002) DMM, and Verspoor *et al*’s (2008: 215) contention that ‘variability is the expression of the adaptability of the system’. Hypothesis 2 predicted that we would observe variability in the relationships between languages, attitude statements, and media types (Jessner, 2008). To test this hypothesis we performed a Chi squared (χ^2) test which looked for a significant association between each attitude statement and each

media type in each of the three languages under investigation. In these tests each media type was an independent variable and each attitude statement was a dependent variable. To this end, our analysis was achieved by plotting all significant χ^2 associations on a single graph to highlight variability in interaction between the *cognitive* (language systems), *affective* (language attitudes), and *behavioural* (out-of-school media contact) subcomponents of our complex psycho-sociolinguistic model.

The results are visualised in figure 22, which shows the statistical significance of the χ^2 results and presents all three languages together in order to make comparisons between them. We believe that presenting the results in this way is in line with a holistic approach to languages in contact. To facilitate visual analysis of the resulting multivariate data, each significant association has been plotted on a radar graph; Catalan is presented in blue, Spanish in red, and English in green. The radial axes of the chart represent different media types and measure p value ranging from $p = .05$ at the innermost point of the radial to $p = .000$ at the outer edge. Therefore, the closer each dot is to the outer edge of the radial, the greater the statistical significance of the association between variables.

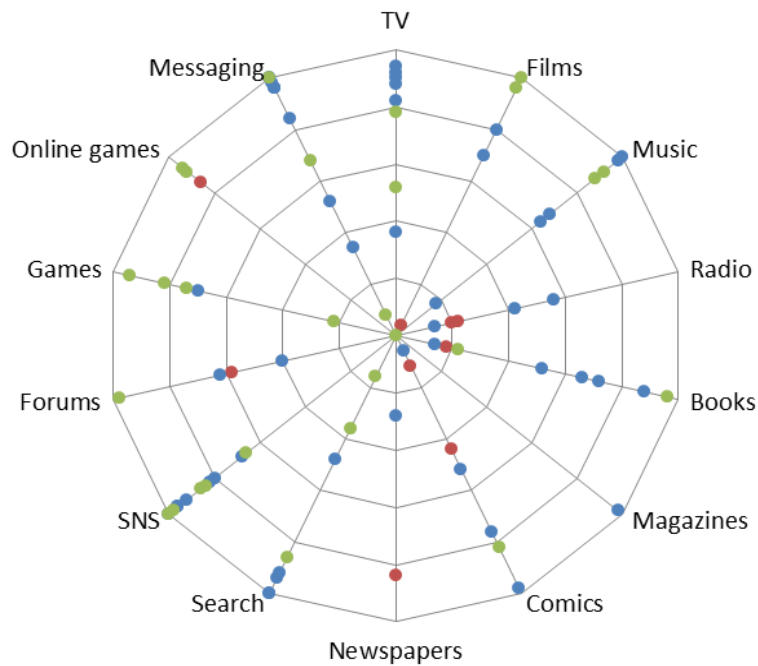


Figure 22: Statistical significance of media contact
(Spanish = red, Catalan = blue, English = green)

The first thing we can see is that there are only 8 significant associations for Spanish (2 of which are at $p < .01$) and it must also be noted that for reading books in Spanish two of these associations are actually negative. On the contrary, there are 28 significant associations for English (17 of which are at $p < .01$), but Catalan shows almost double this at 50 significant associations (23 of which are at $p < .01$). From this we can conclude that: firstly, there is a great deal of variation between the cognitive, affective, and behavioural subcomponents of the multilingual system; and secondly, out-of-school contact with a minority language clearly has a highly significant effect on attitudes towards that language. For Catalan, with the exception of newspapers and videogames, we can see a number of significant associations across the range of media types. Alternatively, for English, contact with new media appears to be more significant than contact with traditional media. Finally, what most affects positive attitudes towards Spanish appears to be contact with Spanish-language newspapers and playing videogames in Spanish. These results not only bear out the hypothesis but also give us rich information about

the imbrication of multiple languages, language attitudes, and linguistic contact. They demonstrate that different types of media contact do indeed vary in their effect on different types of language attitude, and this also varies across languages; that is, the same media type may have radically different effects on the same attitude type in different languages. For this reason we consider hypothesis 2 to be confirmed.

As we are taking a systems-perspective, we start from the assumption that individual media types constitute attractor phenomena and have a variable influence on language attitudes within and between linguistic systems. This influence from the behavioural subcomponent reflects the systems theory characteristics of ‘dependence on internal and external resources’ and ‘change caused by interaction with the environment and internal reorganization’ (de Bot & Larsen-Freeman, 2011). The chart above allows us to see clusters of significant associations and thus offers a method to visually interpret the ‘pull’ on the whole attitudinal system of each independent variable as a system attractor. This is important as it shows how ‘attractor basins’ can be formed as related media types affect different attitudes in different languages. It is also useful to see the strength of attraction of each media type as they affect a number of distinct attitude statements even across languages. The stronger an attractor is the more likely it will be capable of stabilising or temporarily destabilising systemic behaviour.

It is quite clear from the data that the densest and most consistent cluster for attitudes towards both minority and foreign languages is contact with social networking sites and applications; for this reason, we can interpret social networks as a strong attractor. For Catalan we can see that the densest cluster is contact through television. Bearing in mind the sociolinguistic situation of the community, this has some serious implications for the political policy of suppressing Catalan-language television programming. Furthermore, the dense cluster for search engines indicates that this media type is quite a strong attractor for attitudes towards Catalan, while music, books, and instant messaging all have a notable effect in this respect. The effect of instant messaging is significant in 8 out of 10 cases for Catalan and 3 out of 10 cases for English; for Catalan 6 out of 10 of these associations are at $p < .01$. Thus, we can assume

that this media type constitutes another strong attractor for the minority language. For English, we observe clusters for television, music and social networks, which, again, we may interpret as attractors. Moreover, we can see that videogames (both online and offline) are strong attractors for the foreign language, and we also notice that online multiplayer videogames constitute the strongest attractor for attitudes towards Spanish. This raises two interesting questions for educators: 1) how can we take advantage of videogames as an in-class language learning activity in a way that will not counteract the affective impact of its authenticity in out-of-school contexts?; and 2) in what ways can we combine this learning activity with majority and minority languages in order to promote and maintain positive attitudes towards multilingualism during secondary education? Finally, that contact with English-language films and music also has a significant attitudinal effect presents the challenge of how to effectively integrate these authentic materials in the learning processes of secondary education students.

While these results highlight variability between system subcomponents and show how different media types constitute attractor conglomerates of varying strength within and between language systems, simply looking at statistical significance does not distinguish between positive and negative associations. As we wanted to make a more detailed exploration of the psycho-social multilingual system as an integrated whole (as proposed at the end of chapter 3), we decided to look at all of our data to see if we could determine both attractors and repellers and explore the emergent variability their interactions produce. For this reason, in line with Dörnyei's (2014) suggestion of identifying attractor-governed phenomena, we used the χ^2 effect size (Phi coefficient) so as to measure both the extent and the polarity of association between independent and dependent variables. This approach allowed us to take an analytical 'step back' from reductionist interpretations of individual data in order to look at the 'bigger picture' of interaction within and between language systems. The Phi coefficient measures relationships between dichotomous variables, it ranges from minus 1 to plus 1 and can be interpreted as disagreement (-1), no association (0), or agreement (+1). It should be mentioned that, according to Davis's (1971) interpretation of measures of association, even the strongest associations we

can see in our results are considered ‘moderate’ while many others are considered ‘low’ or even ‘negligible’. In spite of this, even ‘low’ Phi figures can still be statistically significant so we consider these results important and worth reporting. In complexity terms, we have interpreted language attitudes as the phase space, negative Phi figures as repellers and positive Phi figures as attractors (which, respectively, have the potential to push or pull the system into certain modes of behaviour). Not all of the associations between variables will be of interest; thus, to make this section more concise we will only expound on the noteworthy associations. A side-effect of this form of analysis is that it also gives us a further level of detail with which to interpret the results of hypothesis 1; now, not only have we broken down the media types, but we have also broken down the language attitudes into individual attitude statements.

As above, to facilitate visual analysis, the Phi coefficient data were plotted on a series of radar graphs. First, it is necessary to make some comments on the format of the graphs so that the reader can better interpret what they display. The language systems are colour-coded and each one is indicated in the legend to the right of the graph, the solid black line identified as ‘Base’ is the point at which the Phi figure is 0 (no association). This means that data points which are outside the ‘base’ line are positive Phi figures and are thus interpreted as *attractors* (agreement between variables), whereas data points which are inside the ‘base’ line are negative Phi figures and are thus interpreted as *repellers* (disagreement between variables). Furthermore, in order to maintain consistency between graphs and allow for a global analysis of differences between dependent variables, the range of the radial axis is maintained at -0.2 to +0.45, reflecting the lowest and highest Phi figures. Finally, the media types have been coded in short form for reasons of space but they follow the same order as in the questionnaire (see Appendix 1) and thus the coding should be fairly intuitive. With this information in mind, we shall now interpret the graphs in order of dependent variables (see: section 4.2.3).

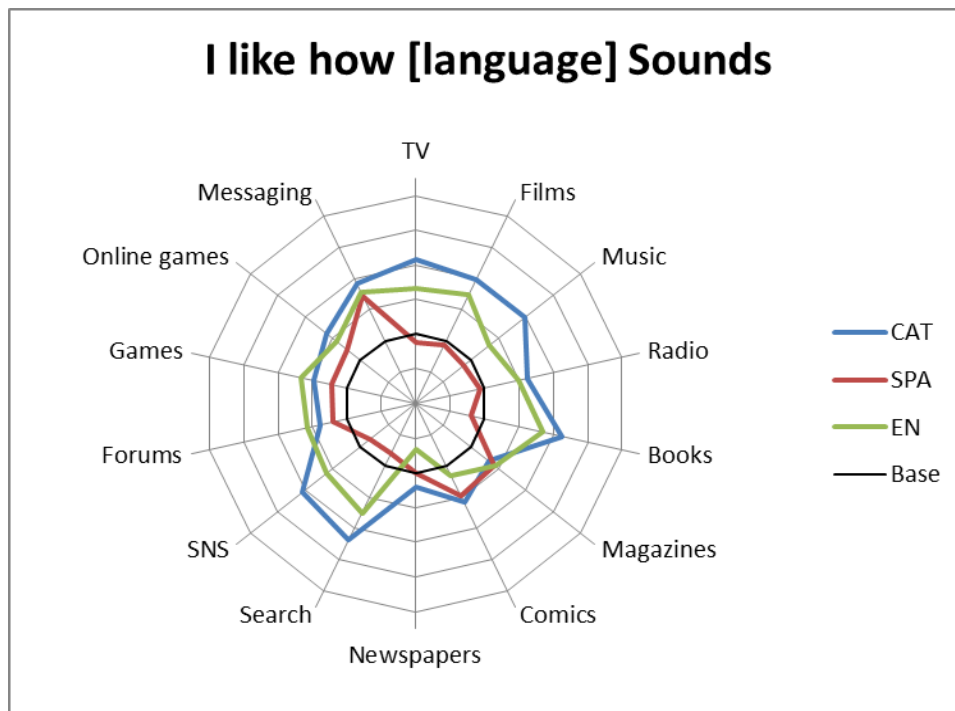


Figure 23: Radial graph for attitude statement A

For the first dependent variable, ‘I like how [language] sounds’, we can see that Spanish is not greatly affected by the different media types. The strongest attractor is instant messaging whereas the strongest repellors are books and search engines. Curiously enough, audio-visual media, in which the language is actually heard, shows little association. This could be due to the dominance of Spanish media forms and their prevalence in the sociolinguistic context; as Jessner (2013) points out, the social context must figure into explanations of multilingual phenomena. The media type ‘newspapers’ is exactly on the baseline and, as such, shows no association with the dependent variable. Comics and magazines appear to exert a pull on the system, and videogames, internet forums, and instant messaging can also be interpreted as attractors. There were no statistically significant associations for this dependent variable in Spanish but it should be considered that attitudes before independent variables were applied were already very positive at 93%.

For Catalan, all media types can be considered attractors to a greater or lesser degree. The audio-visual group showed significant associations for TV ($\chi^2 = 6.915, p = .009$), films, (χ^2

= 5.819, $p = .015$), and music ($\chi^2 = 5.833$, $p = .016$); this is not surprising as these media types actually allow you to hear the language and, unlike day-to-day conversations, the context may be more entertaining or emotional. New media shows significant associations from search engines ($\chi^2 = 8.477$, $p = .004$), social networks ($\chi^2 = 6.782$, $p = .009$), and instant messaging ($\chi^2 = 5.082$, $p = .024$). It is interesting that contact with Catalan in these, usually textual, ways affects preferences for how the language *sounds*. We propose that these media types allow language users to plug into a pre-existing community of other users (Norton, 2013) which may support linguistic identity and promote positive attitudes in general subsequently making users more receptive to future aural encounters with Catalan.

For English, we can see that all media types are attractors except ‘newspapers’ which is a repeller. Audio-visual media shows a positive association although it is not statistically significant and not as strong as it is with Catalan. All new media types show positive associations, and in the case of forums and videogames these associations are stronger than for the other languages. We suggest that as modern videogames have narrative sections which complement gameplay and many popular games are in English, they frame the language in an exciting, pleasurable and self-affirming context (Gee, 2007; Henry, 2013). Furthermore, as online forums are often used for adolescents to talk about videogames, they provide pre-existing affinity groups which, for the language users in this study, must be negotiated in a foreign language and thus promote general positive language attitudes. Finally, the only significant association for English was, oddly enough, books ($\chi^2 = 4.264$, $p = .039$), which was also highly significant for Catalan ($\chi^2 = 7.586$, $p = .006$) but showed a negative association for Spanish.

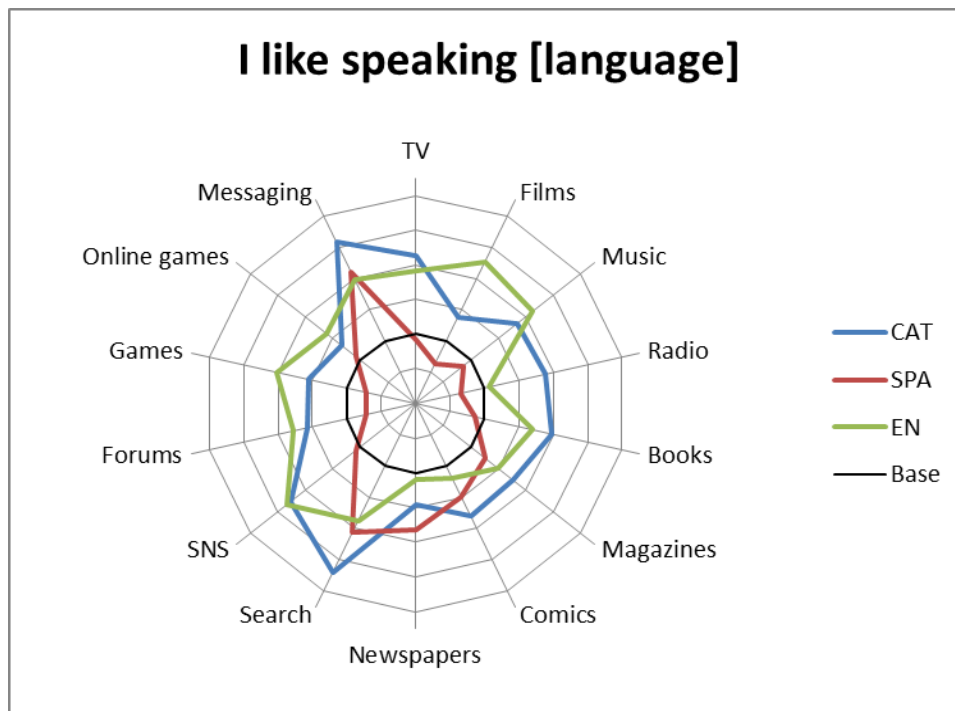


Figure 24: Radial graph for attitude statement B

For the dependent variable ‘I like speaking [language]’, we can see that, in Spanish, audio-visual media shows a generally negative association and can be considered a repeller. With the exception of ‘books’, print media constitutes an attractor, and ‘newspapers’ shows a significant positive association ($\chi^2 = 4.059, p = .044$); in fact, this association is stronger for Spanish than for the other languages. Social networking and online videogames show virtually no association, videogames and internet forums are repellers, and significant positive associations come from instant messaging ($\chi^2 = 7.275, p = .007$) and search engines ($\chi^2 = 6.970, p = .008$). For both Catalan and English almost all media types are attractors for this variable to a greater or lesser extent. On the whole, positive associations are stronger for Catalan, and for English the positive association from both ‘newspapers’ and ‘radio’ is negligible. Regarding attitudes towards speaking English, watching films and listening to music are quite strong attractors; music is also an attractor for Catalan but films are much less so. Attitudes towards speaking Catalan show stability for music, radio, books, magazines, and comics; however, this same range of variables shows a great deal more variability with regards to speaking English.

Use of search engines has a significant positive association with attitudes towards speaking English ($\chi^2 = 4.611, p = .032$), Spanish ($\chi^2 = 6.970, p = .008$), and, above all, Catalan ($\chi^2 = 17.475, p = .000$); this positive effect may derive from autonomous authentic language activity with a specific goal and quick results (however, why it has such an effect on ‘speaking’ is unclear). As an attractor, the use of search engines is strong enough to exert an influence across languages and we can thus consider it a point of interaction between cognitive, behavioural, and affective subcomponents of the multilingual system. A further interesting result from new media is that social networking constitutes a strong attractor for attitudes toward speaking English ($\chi^2 = 10.689, p = .001$) and Catalan ($\chi^2 = 9.761, p = .002$) but its positive effect on Spanish is negligible. We propose that this is once again the dominance of Spanish in the sociolinguistic situation means that language contact in open online environments, such as Facebook, will contribute little to the formation of positive attitudes. Conversely, in terms of Catalan and English, social network users may be actively looking for ways to engage with these languages online which may engender more positive attitudes in general.

The strong attraction from certain types of new media on attitudes towards speaking is interesting considering that new media is, on the whole, a text-based medium. To interpret this result we could consider the possibility that these adolescent participants, in whose lives social networking is an ever-present and virtually normalised practice, may have not distinguished speaking a language from *using* a language. Another possibility is that there are now several instant messaging applications on the market (including the highly popular Whatsapp) which support voice messaging. The novelty of this approach to instant messaging may be considered a new digital literacy (Harrison & Thomas, 2009) which positions the use of spoken language at the intersection of communication and technology and thus makes this way of ‘speaking’ more exciting to adolescents. The fact that, specifically, instant messaging also seems to constitute a strong attractor across languages – showing significant positive associations for English ($\chi^2 = 5.824, p = .016$), Spanish ($\chi^2 = 7.275, p = .007$), and especially Catalan ($\chi^2 = 15.134, p = .000$) –

and may be indicative of a new *multilingual* digital literacy and may support research indicating youth agency in building personal media environments (Berns, de Bot & Hasebrink, 2007).

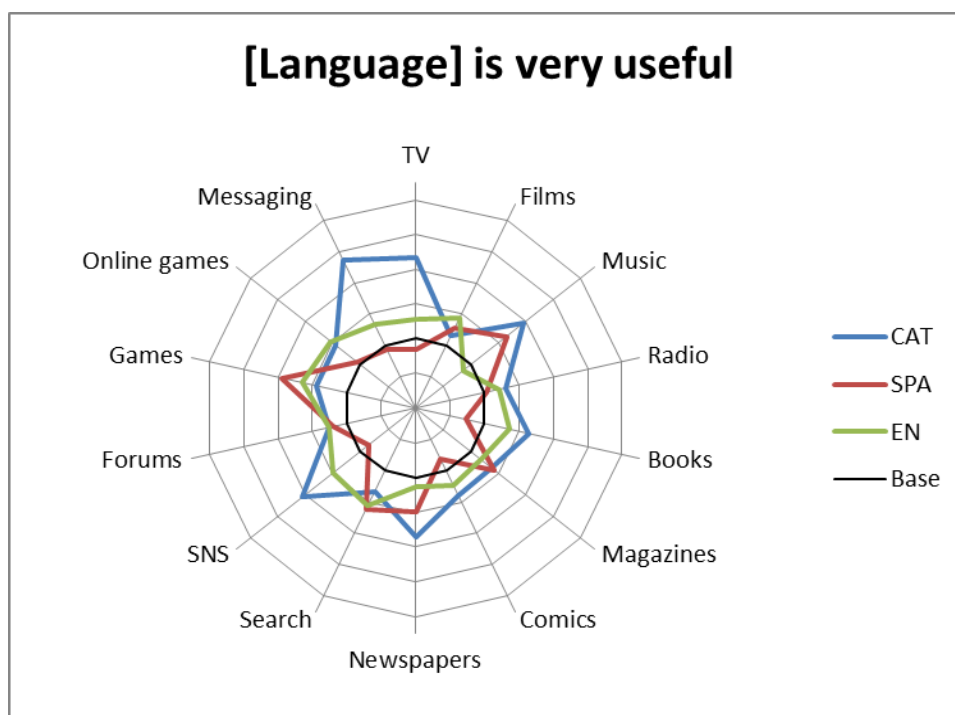


Figure 25: Radial graph for attitude statement C

For the dependent variable ‘[language] is very useful’, which concerns an instrumental perspective on the languages (Gardner, 1985), we can see that associations are generally weaker than they have been in the previous two attitude statements. In Spanish, TV, books, comics, and social networking are all repellors. Films, music, magazines, newspapers, and search engines appear to attract the system but not as much as videogames, which shows the only significant positive association ($\chi^2 = 5.306, p = .021$). In English, all media types can be considered attractors except for music; this may be because listening to music in English is considered a leisure activity and has no obvious instrumental value. In fact, considering the current prestige and status of English in Spanish society, it is quite surprising that media contact does not have a stronger association with how *useful* the language is perceived to be. Perhaps perceived differences between formal and informal learning restrained the students in terms of what they consider useful in an instrumental sense (Bunting & Lindstrom, 2013). However, these weaker

associations do not necessarily mean that the sample does not find English useful; in fact, the initial attitude to this statement was 99% positive. In this sense, the instrumental value of English appears to be so engrained that a much stronger attractor would be needed for a greater influence to be seen.

Contact with media in out-of-school contexts seems to have more impact on the perceived usefulness of Catalan. In terms of its utility, the Catalan linguistic system probably experiences more pull from the variables due to the minority status of the language. For example, reading Catalan-language newspapers ($\chi^2 = 4.149, p = .036$) may increase the perception of usefulness of this language because it allows language users to keep up to date with what is happening in Catalonia (and, to a lesser extent, the Valencian Community) from the perspective of Catalan speakers. Reading news articles in Catalan may help to give prestige to the language because it is being used in a formal and widely distributed context. Such exposure could provide evidence of a pre-existing network of Catalan users and greater visibility of Catalan. This could also be the case for TV ($\chi^2 = 8.211, p = .004$), another important, and more immediately accessible, source of news. Social networking ($\chi^2 = 6.575, p = .010$) and instant messaging ($\chi^2 = 10.988, p = .001$) may also highlight the instrumental value of the language as a means of participating and being accepted in virtual social communities. Listening to music also showed a significant positive association ($\chi^2 = 5.583, p = .018$), this may be due to the access to culturally significant texts afforded by use of a minority language.

Taking into consideration the utilitarian nature of the attitude statement, it is worth highlighting a couple of interesting interactions between language systems. The media type 'films' is an interesting example, all three language systems are more or less in the same place but the order of attraction is English, Spanish, and Catalan. This could be interpreted as a reflection of access to this type of media. Of course, knowing a language allows access to original versions of films and thus access to contemporary cultural and artistic texts, we propose that the variety and availability of films in English, Spanish, and Catalan reflects the way this variable attracts the perception of the usefulness of each language. A similar pattern emerges

with the search engines media type, this time the order of attraction is Spanish, English, and Catalan, which probably reflects the extent to which these languages are used to retrieve information; although more information can be obtained in English, Spanish is likely to be of more use to the students in our sample due to the requirements of their school work. In this sense, the usefulness of each language may reflect the extent to which it is valued as ‘capital’ in different contexts (Bourdieu, 1977, 1986).

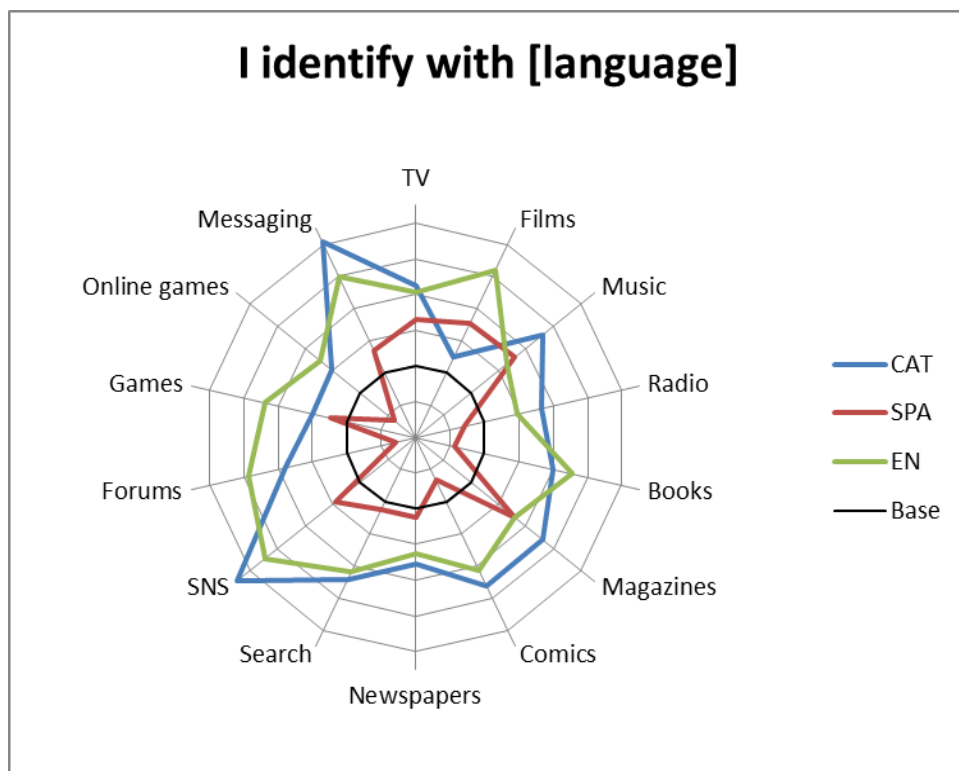


Figure 26: Radial graph for attitude statement D

For the dependent variable ‘I identify with [language]’, we can see a great deal of variation among the languages. There are also a number of significant associations regarding the minority and foreign languages; actually, in this sense, we observe the widest spread of effect of all the attitude statements. Regarding Spanish, we can see that out-of-school media contact is not a strong attractor for the extent to which the sample identifies with the language. In fact, here we can see stronger repellors than in previous attitude statements. The strongest attraction is from magazines, TV, films, and music ($\chi^2 = 3.902, p = .048$ – the only significant

association), whereas books, comics, internet forums, and online videogames all appear to act as repellors. We again suggest that this is due to the dominance of Spanish in the sociolinguistic context. Whether they ‘identify’ with a language is probably quite a strange thing for an adolescent to conceptualise, especially with the majority language of their community. It may be easier to conceptualise identification with a minority or foreign language because they contrast with the dominant language in the community. For this reason we see a radically different situation for Catalan and English, both of which show a much broader range of positive associations. On the one hand, for Catalan, there are significant positive associations from TV ($\chi^2 = 7.694, p = .006$), music ($\chi^2 = 10.266, p = .001$), radio ($\chi^2 = 4.106, p = .043$), books ($\chi^2 = 6.066, p = .014$), magazines ($\chi^2 = 10.231, p = .001$), comics ($\chi^2 = 10.227, p = .001$), search engines ($\chi^2 = 8.883, p = .003$), internet forums ($\chi^2 = 4.73, p = .030$), and especially social networking ($\chi^2 = 30.146, p = .000$) and instant messaging ($\chi^2 = 25.021, p = .000$). On the other hand, for English, there are significant positive associations from TV ($\chi^2 = 6.404, p = .011$), books ($\chi^2 = 9.707, p = .002$), comics ($\chi^2 = 6.745, p = .009$), search engines ($\chi^2 = 7.15, p = .007$), internet forums ($\chi^2 = 11.99, p = .001$), videogames ($\chi^2 = 8.529, p = .003$), and especially films ($\chi^2 = 15.221, p = .000$), social networking ($\chi^2 = 17.494, p = .000$), and instant messaging ($\chi^2 = 13.502, p = .000$).

The fact that social networking and instant messaging are very strong attractors for identifying with Catalan and English (and even influence Spanish) is not surprising given the salient relationship between identity, language socialisation, and imagined (virtual) communities (Gee, 1996; Duff & Talmy, 2011; Norton, 2013; Knobel & Lankshear, 2015). As mentioned in chapter 2, types of new media like social networking and instant messaging, in terms of identity and socialisation, allow people to connect, to negotiate identities, roles and norms, to enact cultural stances, and to create and participate in affinity spaces and communities of practice. Online social networks provide platforms for minority languages (Cunliffe, Morris & Prys, 2013) so minority language users have a space where they can try out and mutually affirm language identity; these spaces are commonly underrepresented in offline society.

Conversely, in terms of English, social networks can provide language learners with powerful platforms which give them the opportunity to speak and negotiate their identity (Norton, 1995) with other learners and also TL speakers. We consider that the connection between personal identity and out-of-school language contact with minority and foreign languages seen here is in line with previous research which has shown that how a language is currently used is a powerful indicator of an enhanced perception of its emotional resonance (Dewaele, 2010). To put that another way, more varied, frequent, and consistent language use is likely to evoke stronger emotions regarding the significance and richness of the language. Moreover, in our sample, we can see that this relationship is stronger regarding minority and foreign languages which had much weaker initial positive attitudes (Catalan 34% and English 43%, compared to Spanish 72%) and are thus more susceptible to being attracted by the influence of popular media.

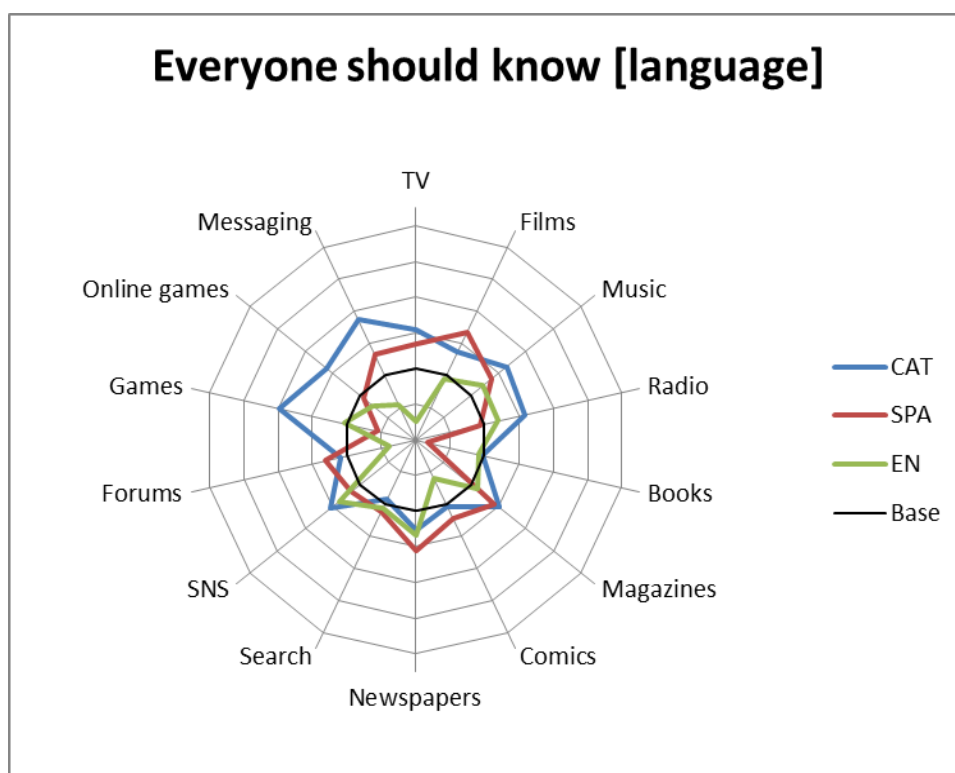


Figure 27: Radial graph for attitude statement E

For the dependent variable 'Everyone should know [language]', the very weak associations for English are immediately noticeable; in fact, there are no significant associations

at all. Weak positive associations come from contact with music, radio, magazines, newspapers, search engines, social networking (the strongest), and videogames (the weakest), whereas negative associations come from contact with TV (the strongest), films (the weakest), books, comics, forums, online videogames, and instant messaging. For Spanish there are less negative associations than for English, but we can see that the only significant association (books – $\chi^2 = 4.208$, $p = .040$) is actually the most negative. The two strongest associations for Spanish are films and newspapers. Overall, contact with Catalan returns the greatest number of positive associations with the attitude statement but, even so, there are only two significant positive associations, namely, instant messaging ($\chi^2 = 4.544$, $p = .033$) and videogames ($\chi^2 = 5.902$, $p = .015$).

Perhaps the most straightforward way to interpret these results is to look at the differences between languages. Here attitudes to the minority and foreign languages are in stark opposition, whereas in the previous attitude statements we have examined they seemed to be more closely aligned with each other than they were with the majority language. Considering that English is almost universally recognised as being very useful for future academic and professional achievement, the fact that increased media contact actually results in such weak associations is somewhat puzzling. The general results from this attitude statement towards English were 91% positive, considerably higher than the 42% positive attitudes towards Spanish. This attitude towards Catalan, at only 16% positive, was actually the least positive of all the statements. These results indicate that media contact inverts this attitude towards the three languages, putting Catalan in first place, followed by Spanish, and actually creating more negative attitudes towards English. We speculate that what influences this inversion of attitude is protectionism. On the one hand, in terms of competitiveness in a job market which is particularly volatile for young people it is possible that more people knowing English is perceived as a threat to the students' own future economic prospects. If that is the case, exactly what it is about media contact that would make students perceive this threat is unclear and would be an issue for future research. On the other hand, as positive attitudes to the three

languages run in exactly the inverse order to their ethnolinguistic vitality, it is possible that media contact highlights their inequality in terms of reach and prestige. If that is the case, the students' reaction may be to protect Catalan by wanting to promote its use and thus protect its future; this protectionism of minority languages would be in line with previous research (Lasagabaster, 2003).

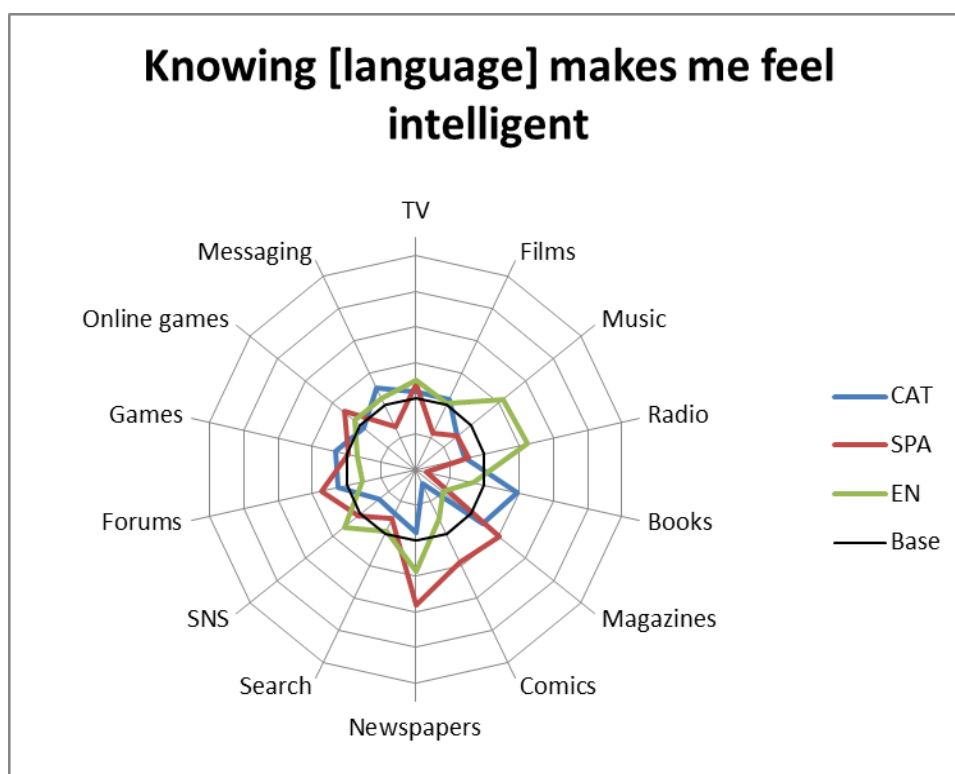


Figure 28: Radial graph for attitude statement F

For the dependent variable 'Knowing [language] makes me feel intelligent', again we see quite weak associations from all languages and a number of negative associations from Catalan. English shows less negative associations but seems to be the most negatively affected by print media (excluding newspapers). The fact that associations are generally weak or negative for all languages may indicate a more global effect; it is possible that the students do not make a connection between languages and intelligence. In fact, this is congruent with the general attitude scores we saw at the beginning of the chapter. With no independent variable applied, this was the least positive statement for Spanish (20%) and the second least positive for

Catalan (23%). These low scores may originate from the sociolinguistic situation of the community but each may do so in quite different ways. On the one hand, that fact that Spanish is dominant may affect feelings of intelligence because the language is not seen as anything special; to a layperson, it is simply a way of communicating. On the other hand, the general low prestige of Catalan and its association with smaller villages rather than large urban centres may also mean that the students do not positively associate it with their level of intelligence. The general score for English making the students feel intelligent was relatively high (68%), so it appears that out-of-school media contact actually has a negative impact on this language. It seems that for the minority and majority languages, the initial negative attitudes have a very strong influence which is affected very little by the attraction of out-of-school media contact. Whereas, for English, these initial attitudes appear to be more susceptible to influence from the same attractors, except in the case of this language the system displays more negative behaviour. We put forward that this is a form of cognitive dissonance. When English is used away from the safe microcosm of the classroom students are presented with new and more complex communicative needs which challenge their conceptions of their own intelligence and make them feel psychologically uncomfortable. In this sense, we may connect this to the affective concepts of language ego (Guioria, 1972; Brown, 1987) and narcissistic injury (Cline, 2001).

In terms of individual languages, the most positive associations for English come from contact with music and radio, for Spanish it is contact with magazines and newspapers, and for Catalan it is contact with books and magazines. We speculate that as listening to music is a self-affirming and pleasurable activity linked to FL vocabulary acquisition (Medina, 2002; Milton, 2008; Schwartz, 2012), understanding song lyrics may empower the students and make them feel more intelligent. This would be in line with earlier research (Nightingale, 2012) in which adolescents reported that managing to understand the lyrics of popular music encouraged them to continue learning English. The fact that Catalan is most positively affected by books and magazines leads us to speculate that because literature, especially books, uses a wider range of

more eloquent vocabulary (which is usually quite impoverished in daily speech) the students are exposed to a much richer form of Catalan and understanding a more advanced representation of a minority language may make them feel intelligent. This exposure to richer Catalan may also go some way towards counteracting the peer-influenced cultural stereotype held by some adolescents in the Valencian Community that Catalan is the language of the villages. For Spanish, the greatest positive association comes from newspapers and magazines which may simply be because they provide a way for the students to keep up to date with what is happening in society at both a national and an international level. Conversely, the greatest negative association comes from books which may have something to do with the fact that reading books in Spanish is such a common form of media contact (98% of the sample read books in Spanish) that the students do not feel it enhances their intelligence.

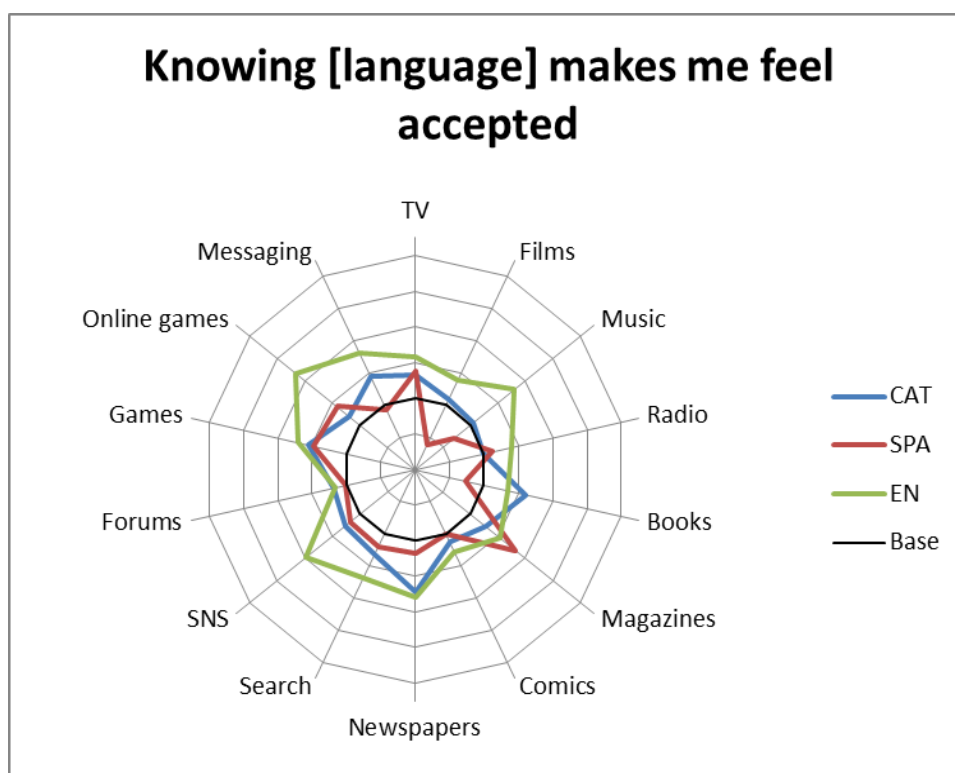


Figure 29: Radial graph for attitude statement G

For the dependent variable 'Knowing [language] makes me feel accepted', we notice that contact with media types has the greatest positive association with attitudes towards

English. On the one hand this is unusual, because English is not one of the community languages, in this sense contact with a *foreign* language leading to feelings of acceptance is a little perplexing. On the other hand, if we look at the media types which show the greatest positive association we can see that they all suppose contact in virtual communities and they are all statistically significant (instant messaging – $\chi^2 = 3.989$, $p = .046$; social networking – $\chi^2 = 5.734$, $p = .017$; and online videogames – $\chi^2 = 8.190$, $p = .004$). Viewed in this way we can speculate that the acceptance felt by the students is not in their own community but rather when they use English to affiliate with virtual and/or imagined communities (Norton, 2013). Although non-significant, contact with English-language music also appears to contribute to the students' feelings of acceptance, this is likely the result of music constituting an affinity 'space' (Gee, 2005) and its perceived value as a trans-border cultural product (Lam, 2004).

In terms of the two community languages, contact with Catalan-language media contributes to feelings of acceptance less so than English but more so than Spanish. This is probably attributable to the sociolinguistic context and friction between the two languages. As Spanish is the majority language it is likely to lead to feelings of acceptance by default and is less likely to be susceptible to the pull of the attractor. Whereas Catalan, being the minority language, may be rejected by some members of the community; its position in this sense is less stable and it is more likely to be affected by the attractor as increased contact will reinforce the vitality of the language. On the one hand, for Catalan, the two media types which appear to have the greatest positive association with feeling accepted are books and newspapers. This result is similar to what we have seen in the attitude statement 'Catalan is very useful' which could indicate that these two attitudes are interconnected and the perceived use of Catalan is as an identity marker within the community. For Spanish, the only significant media type is magazines ($\chi^2 = 4.162$, $p = .041$). The fact that this media type is more positively associated with the attitude statement is perhaps due to a focus on specific areas of cultural interest, a more prominent tendency in magazines than in newspapers or books. In this sense, magazines are more likely to reflect affinity groups to which the students may affiliate.

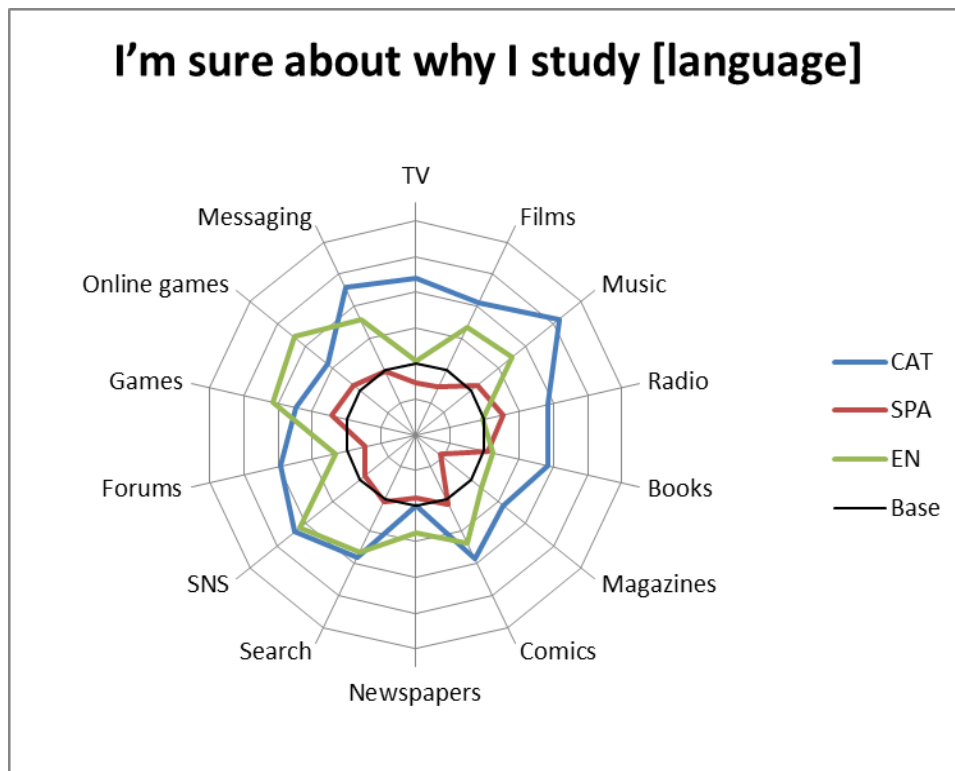


Figure 30: Radial graph for attitude statement H

For the dependent variable 'I'm sure about why I study [language]', we can see that out-of-school contact with media makes the students feel most sure about why they study Catalan and English. However, in this sense, contact appears to have little effect on attitudes to Spanish. A notable difference between the minority and foreign languages is that both traditional and new media appear to be strong attractors for Catalan while it is mainly new media that seems to attract this particular attitude towards English. In fact, for Catalan we see a large number of significant associations from contact with, on the one hand, TV ($\chi^2 = 8.536, p = .003$), films ($\chi^2 = 6.624, p = .010$), music ($\chi^2 = 15.446, p = .000$), radio ($\chi^2 = 5.208, p = .022$), books ($\chi^2 = 5.111, p = .024$), and comics ($\chi^2 = 5.083, p = .024$), and, on the other hand, search engines ($\chi^2 = 4.927, p = .026$), social networking sites ($\chi^2 = 8.517, p = .004$), internet forums ($\chi^2 = 5.542, p = .019$), and instant messaging ($\chi^2 = 10.024, p = .002$). Whereas, for English there are significant associations from contact with search engines ($\chi^2 = 4.129, p = .043$), social networking sites ($\chi^2 = 7.060, p = .008$), videogames ($\chi^2 = 6.849, p = .009$), and online videogames ($\chi^2 = 8.555, p = .003$). There is little that can be said about Spanish in terms of this attitude statement as the

attitudinal 'pull' of almost all media types is negligible and there are no significant associations between variables. This is once again probably due to the dominance of Spanish as the majority language of the community and its use in education being so widespread and normalised. One thing that does stand out is that the influence of magazines is negative here, while in all the other attitude statements so far it has generally been positive.

These results may be interesting to educators because they indicate that in order to make adolescents more positive about studying a minority language such as Catalan, it is of fundamental importance to increase their access to traditional media, especially television and music, and encourage engagement with new media in this language. To a lesser extent, we can say the same for English; out-of-school contact with films and music as well as engagement with new media in this language should be encouraged if the goal is to make attitudes more positive. Admittedly, applying these extramural forms of contact to the classroom in an effective way will present a pedagogical challenge. Nevertheless, if we are to reflect the reality of language contact and social agency in multilingual society, this is something which should be taken into consideration when planning multilingual education in Spain (or any other country where majority, minority, and foreign languages are in contact in the educational system). In this sense, the policy of limiting access to Catalan-language television which was a characteristic of the previous regional government (mentioned in chapter 5) is clearly at odds with its so-called 'plurilingual' education policy. Furthermore, we may also interpret interdependence between types of attitude contingent on contact with media forms. In terms of the foreign language, contact with films and music in English makes students enjoy speaking the language and makes them more sure about why they study it. We propose that certain attitudes have an effect on each other, and thus they are interdependent. In this case, enjoying speaking a language and being sure why you study it can potentially be brought together by watching films and listening to music in that language. Not only are certain attitude types interdependent but systems-thinking posits that they also build on each other, with subsequent states critically depending on earlier states (van Leir, 1996; de Bot & Larsen-Freeman, 2011; de

Bot *et al.*, 2013). Thus, we interpret these results as another instance of complex interaction between cognitive, affective, and behavioural subcomponents of the multilingual system.

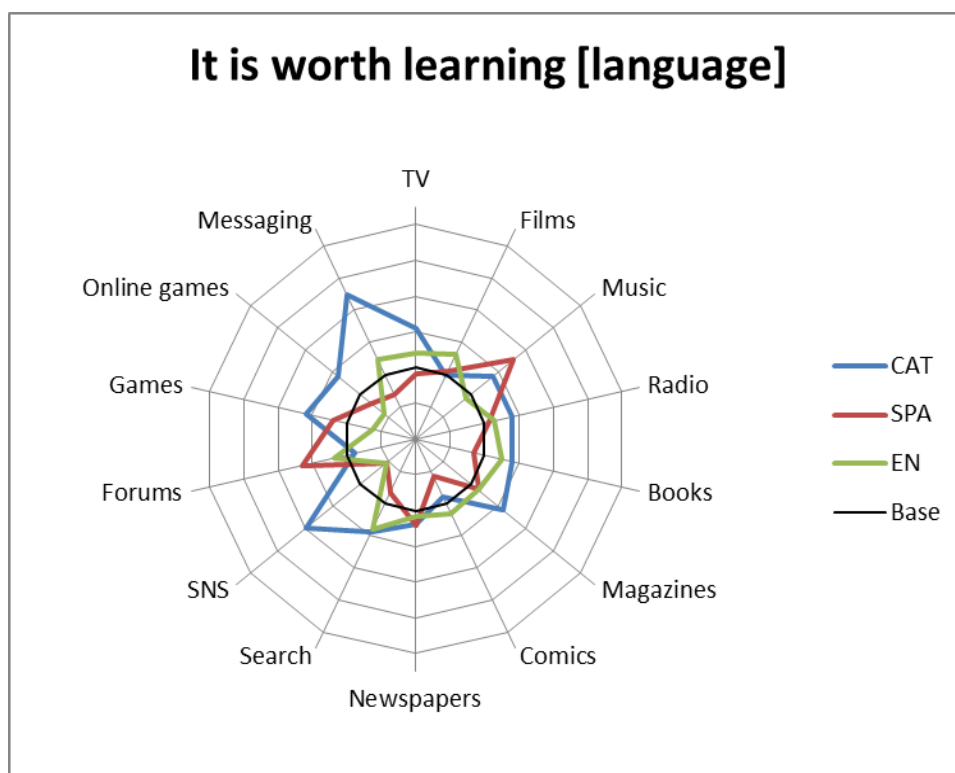


Figure 31: Radial graph for attitude statement 1

For the dependent variable ‘It is worth learning [language]’, again we see very weak associations for English. In fact, there are no significant associations at all. However, if we consider that, before the application of any independent variables, the initial attitudes towards the validity of learning English were 99% positive we can speculate that this condition is too strong to be affected by contact with English-language media. One comment we can make is that the negative associations come from videogames, social networking, and music, all of which are considered leisure activities. It is possible that the students do not see the connection between these activities and the value of learning the language. Furthermore, this is the only attitude statement towards English which returns a negative value for social networking. It would appear that while using social networks in English has a positive impact on the related attitude statement ‘I’m sure about why I study English’ it has the opposite impact on the validity

of learning the language. There are no significant associations for Spanish and, again, the general attitudes towards the validity of learning this language are very positive at 95%. Media contact appears to apply a little more pull than it does with English, with music and online forums constituting possible attractors.

While there is little to remark on for Spanish and English, what is interesting about this attitude statement is the effect of Catalan-language media contact. Initial attitudes towards the validity of learning Catalan were only 59% positive, however media contact with social networking sites ($\chi^2 = 5.854, p = .016$) and instant messaging ($\chi^2 = 9.359, p = .002$) both showed significant positive associations. Both social networking and instant messaging rely on communication with other language users. We could speculate that they exert pull on the system in terms of this attitude statement because learning Catalan and thus feeling confident to use the language facilitates this kind of communication; in this sense, it seems to constitute another point at which *behavioural* and affective subcomponents interact. Conversely, the fact that Catalan is the minority language may produce positive affect when communicating and identifying with other users in this way; in this sense, we may interpret a point at which *cognitive* and affective subcomponents interact.

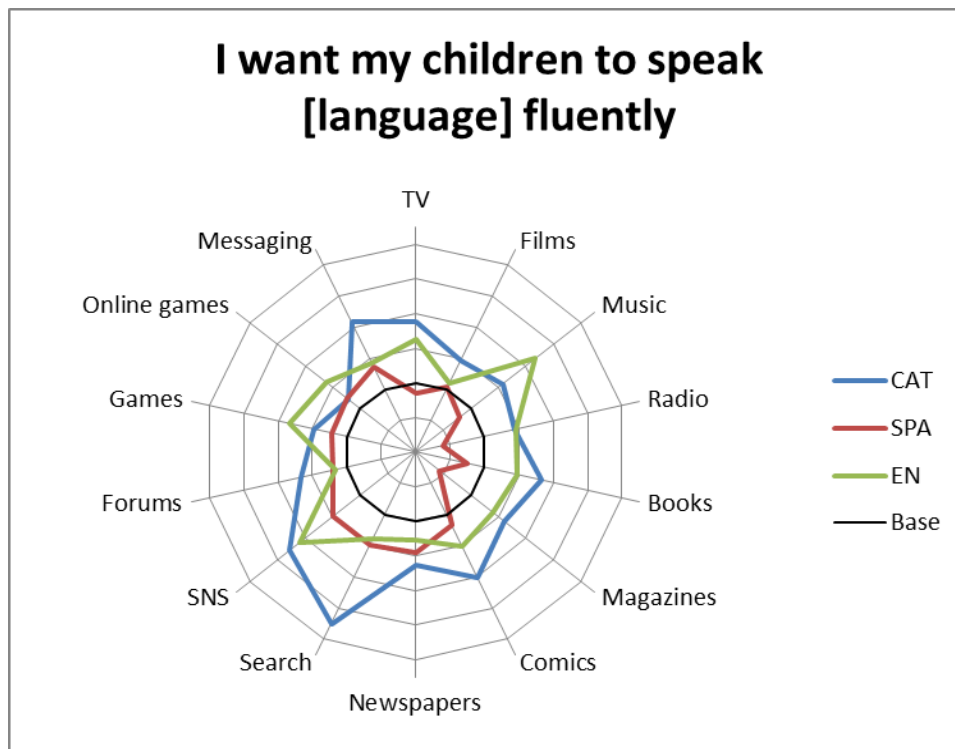


Figure 32: Radial graph for attitude statement J

Finally, the dependent variable ‘I want my children to speak [language] fluently’ is the most directly linked to language socialisation practices because it is related to intergenerational language transmission. The initial attitudes towards this statement were 94% positive for English, 89% positive for Spanish, and 69% positive for Catalan (actually one of the most positive responses for this language). Regarding Spanish, there are no significant associations but we can see that new media constitutes a stronger attractor than traditional media which may be related to the participatory nature of new media which helps to create a sense of ownership and control (Henry, 2013). In contrast, attitudes towards English show significant associations from contact with music ($\chi^2 = 8.279, p = .004$), social network sites ($\chi^2 = 7.322, p = .007$), and videogames ($\chi^2 = 4.247, p = .039$). This may also be attributed to the affective impact of self-affirming activities (Henry, 2013).

We see more interesting significant associations between attitudes towards Catalan and contact with TV ($\chi^2 = 4.618, p = .032$), books ($\chi^2 = 4.107, p = .043$), comics ($\chi^2 = 6.317, p =$

.012), search engines ($\chi^2 = 18.649, p = .000$), social network sites ($\chi^2 = 9.822, p = .002$), and instant messaging ($\chi^2 = 7.091, p = .008$). It is evident that contact with types of new media related to information, communication, and identity are stronger attractors than traditional media for this type of attitude. However, it is also interesting to see that most traditional media has a negative effect on this attitude towards Spanish while the same media types notably boost this attitude towards Catalan. Overall, we can see that media contact has the greatest pull on attitudes towards passing down the minority language to the next generation; this is especially pertinent when we consider that initially this attitude type was notably weaker towards Catalan than towards Spanish and English. The fact that strongly significant positive associations come from language contact with social network sites and instant messaging is not surprising given that this particular attitude statement is closely related to socialisation processes and that social networking and instant messaging provide communities of practice which constitute the loci of modern virtual language socialisation processes.

Looking at all the results above from a multilingual perspective, we can see that, for the adolescents in our study, out-of-school contact with different media types has a generally more positive attitudinal effect regarding the minority and foreign language, especially in terms of speaking a language, identifying with it, and being sure about the reason for studying it. Furthermore, the way in which the data have been presented not only shows us what happens in each language but also allows us to see clear differences in outcomes between languages when different types of language attitudes are investigated. If we had not looked at the data in this way, that is, from a holistic perspective, we would only have a partial account of the language attitudes of these students. This gives further support for the application of a multilingual perspective to the study of multilingualism (Herdina & Jessner, 2002; Cenoz & Gorter, 2011a; Cenoz, 2013). In many of the cases we have seen above, attitudes towards the minority and foreign languages have more in common with each other than they do with attitudes towards the majority language. Of course, Catalan and Spanish are more typologically similar to each other than they are to English, and Catalan and English are even more divergent in terms of social

prestige and ethnolinguistic vitality than Spanish and English are. Furthermore, when we consider the initial attitudes of the sample (figure 14 above), Spanish and English are closer to each other than they are to Catalan. Therefore, we can conclude that there is something about contact with media which brings attitudes towards minority and foreign languages closer in line with each other and pushes them further away from majority languages; however, what that ‘something’ is exactly will require further research to fully uncover.

The absence of previous research linking media contact in multiple languages to multilingual language attitudes has meant that the interpretation of the results for this hypothesis have been largely descriptive and speculative. Because of this, and owing to the number of questions raised in this section, one thing which has become apparent is that the research instrument has not been sufficient to provide thorough explanations for the associations we have observed. However, we could only know that we would actually see such variation *a posteriori* so we interpret this as a limitation of the research design rather than a flaw. Moreover, what has proved to be a limitation in the context of this study may open up exciting avenues for future research in terms of designing an instrument that could provide fuller explanations for the observed phenomena.

Our discussion of hypothesis 2 extends the results of the preceding hypothesis by illustrating the variability which can be observed when considering different constellations of linguistic, affective, and behavioural subcomponents. With this in mind, we are now ready to add further detail by looking at attitudinal change and self-organisation over a macro timescale. This will be the focus of the following section.

6.3 Results and discussion related to Hypothesis 3

Hypothesis 3 predicted that, as non-linearity and self-organisation are fundamental characteristics of complex dynamic systems (Larsen-Freeman, 1997), multilingual language attitudes would exhibit non-linear change over the age range of the sample (Herdina & Jessner, 2002; Jessner, 2006, 2008) and would self-organise under the influence of attractor phenomena

(Thelen & Smith, 2006; Cameron & Larsen-Freeman, 2007; Dörnyei, 2014). To test this hypothesis we looked at attitudinal change over a ‘macro’ timescale which was operationalised as the age range of the sample (12 to 17 years). We first used a simple correlation test to determine the relationship between age and positive attitudes to the three languages individually and holistically. We then factored in self-organisation under the influence of attractor phenomena by plotting and comparing mean scores across the age range for those participants who reported out-of-school media contact in different languages and those who did not; this method was also applied to the three languages individually and holistically, and further distinguished between traditional media and new media.

The results of our analysis show non-linear change in multilingual language attitudes at various points across the age range whether or not there is out-of-school language contact through popular media. This can be observed by sudden fluctuations which break the linear tendency of the mean scores for positive attitudes. For example, in the no contact condition, Spanish shows a dip between age 12 and 14 ($M = 0.66$, $M = 0.64$, $M = 0.68$, respectively). In Catalan, this happens between age 14 and 16 ($M = 0.56$, $M = 0.30$, $M = 0.32$). In English, we see fluctuation between age 13 and 16 ($M = 0.79$, $M = 0.69$, $M = 0.78$, $M = 0.70$). Finally, the holistic measure fluctuates throughout but shows a strong dip between age 15 and 17 ($M = 0.75$, $M = 0.67$, $M = 1.00$). Alternatively, in the contact condition, the strongest fluctuation in the mean scores is observed in exactly the same age range for each measure; that is, between 14 and 16 years. In Spanish this fluctuation is $M = 0.72$, $M = 0.74$, $M = 0.73$. In Catalan it is $M = 0.49$, $M = 0.40$, $M = 0.46$. In English it is $M = 0.82$, $M = 0.81$, $M = 0.84$. Finally, in the holistic measure it is $M = 0.86$, $M = 0.81$, $M = 0.84$. For this reason, we believe that the first prediction of hypothesis 3 has been borne out.

	<i>No media contact</i>				<i>Media contact</i>			
	Spanish	Catalan	English	Holistic	Spanish	Catalan	English	Holistic
Range	0.26	0.40	0.21	0.33	0.21	0.17	0.18	0.12
Difference	--	--	--	--	-5	-23	-3	-21

Table 9: Difference in mean score range as an expression of stability in the system in 'contact' condition.

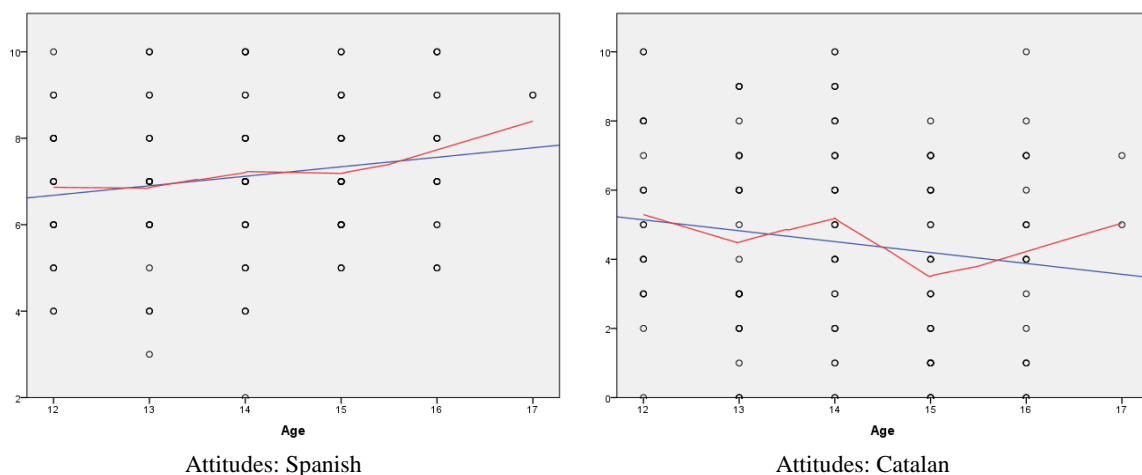
However, simply observing this non-linear change is not sufficient for us to conclude that we are actually observing complex dynamic behaviour. This is what is interesting about the additional prediction of the hypothesis, that attractor phenomena would be influential in systemic self-organisation. The results show, in all cases, that when the sample reports out-of-school media contact (our 'attractor phenomenon') the mean scores for their language attitudes show less variability over the age range – this can be seen in the 'range' score which is consistently lower for each measure (table 9). For this reason, we also believe that the additional prediction of hypothesis 3 has been borne out. Furthermore, we claim that the consistency of the results, not only between but also within language systems, provides further support for the hypothesis; that is to say, out-of-school media contact produces an emergent stabilising effect on language attitudes in multilinguals, and this effect appears not to be random. With this in mind we shall now discuss the results in more detail.

We first looked for a straightforward relationship between age and positive responses to the attitude statements for each language individually and to the holistic measure. As the data were not normally distributed Spearman's Rho (ρ) correlations were run to determine the nature of this relationship.

<i>Attitudinal measure</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>ρ</i>	<i>p</i>
Spanish	7.13	1.691	149	0.155	.059
Catalan	4.48	2.820	149	-0.147	.073
English	8.10	1.675	147	0.027	.741
Holistic	5.72	1.251	149	-0.073	.378

Table 10: Results from Spearman's correlation between age and attitudinal measures

Results show no significant correlations between age ($M = 14.09$, $SD = 1.329$) and any of the attitudinal measures (table10). However, in spite of not being statistically significant we can see that the greatest positive correlation regards positive attitudes towards Spanish, which falls just short of significance, and the greatest negative correlation regards positive attitudes towards Catalan. While these correlations are too weak for us to make any inferences ($\rho .00 - .19$ is considered ‘very weak’) the fact that the correlation is positive for Spanish ($\rho = 0.155$, $p = .059$) and negative for Catalan ($\rho = -0.147$, $p = .073$) and both are close to significance indicates that at least *within* the sample as age increases attitudes towards Spanish tend to become a little more positive and attitudes towards Catalan tend to become a little more negative (this is illustrated by the blue trend line that can be seen on the scatterplots in figure 33). We can interpret this result within our theoretical framework in two ways: 1) the role and status of these two languages in the community, and 2) the effects of language socialisation on adolescents in terms of identifying with the majority language (similar to Portolés, 2015). Given the relatively low prestige of Catalan in the community, this result is hardly surprising.



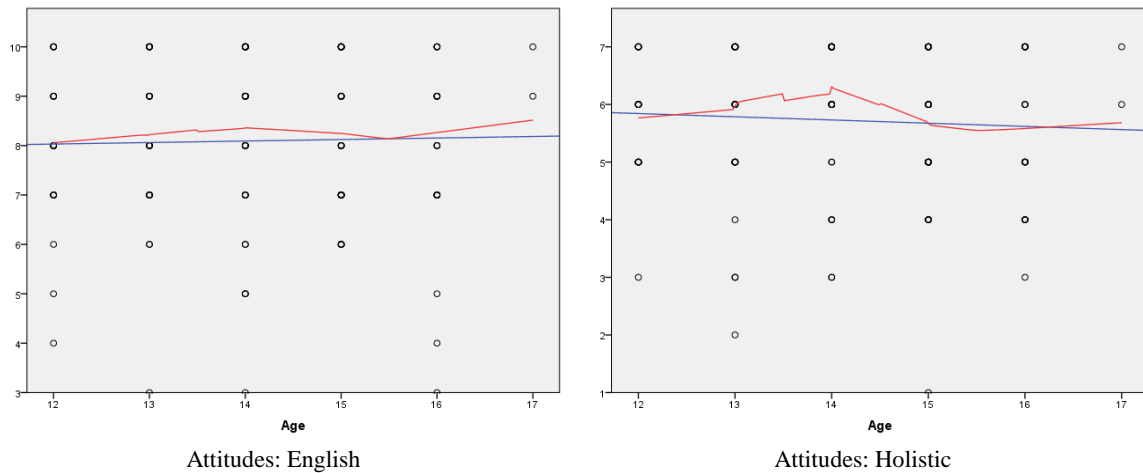


Figure 33: Scatter plots for each attitudinal measure showing trend line (blue) and LOWESS fit line (red)

Although these results are not statistically significant we should take into account that the Spearman's correlation coefficient measures the strength of a *monotonic* relationship between paired data; that is that x in relation to y may either increase or decrease but not both. A linear relationship is monotonic by default. A non-linear relationship can also be monotonic providing that the relationship between the x - y data is consistent in the same direction even if it levels off at points to form plateaus. Conversely, a *nonmonotonic* relationship is non-linear by default, in other words there is not a consistent single direction. The weak results we have seen from the Spearman's tests show that the data are nonmonotonic and thus non-linear by default (this is illustrated by the red LOWESS fit line that can be seen on the scatterplots in figure 33). As we wish to explore our data from a systems perspective we start with the assumption that the development and change in multilingual language attitudes has no default reason to be linear and, therefore, we will abandon linear analytical methods. As Dörnyei (2014: 83) points out, because linear cause and effect relationships and isolated variables are of little use when exploring complex dynamic systems, '[w]e cannot follow our established research practices in an unquestioning manner'; we will need to take an alternative approach.

In our alternative approach, the way that we will attempt to observe development and change is to look for patterns that may emerge in the trajectory of the system as it comes under

the influence of attractors. This can be achieved by taking advantage of the capacity for self-organisation inherent in complex dynamic systems. Dörnyei (2014: 84-85) suggests that as a result of self-organisation ‘complex systems display a few well-recognisable outcomes or behavioural patterns [...] rather than the unlimited variation that we could, in theory, anticipate in an erratic system’; a similar sentiment is also expressed in Van Geert’s (2008) allegorical *Alice*. Complex dynamic systems self-organise into so-called ‘attractor states’ when they interact with external phenomena which comprise attractors or attractor conglomerates (Thelen & Smith, 2006; Cameron & Larsen-Freeman, 2007; Van Geert, 2008; Dörnyei, 2014) this causes a phase shift as the system temporarily settles into a new mode of behaviour. As mentioned in chapter 1, these phase shifts allow us to observe global systemic behaviour patterns.

In order to look for these patterns we will operationalise the phase space as the age range of our sample (x axis) and positive attitudinal responses (y axis). Furthermore, based on the results to hypotheses 1 and 2, we approach the analysis with the assumption that out-of-school contact with different types of popular media constitutes ‘attractor’ phenomena of variable strength which are able to pull the system into an attractor state. We have included contact with both Catalan and English and we have simplified these measures by only including two possibilities, namely, ‘contact’ and ‘no contact’. Spanish has not been included as contact with Spanish-language media is a constant rather than a variable; again, given the dominant role of Spanish as the majority language of the community, this is not surprising.

Figure 34 provides a visualisation of the mean score results summarised above (see: table 9). The results show the mean score for positive language attitudes to each measure (Spanish, Catalan, English, and Holistic) for each group within the age range. We can see that under the influence of the attractor – media contact – there is a marked decrease in the variability of the mean scores across the age range.

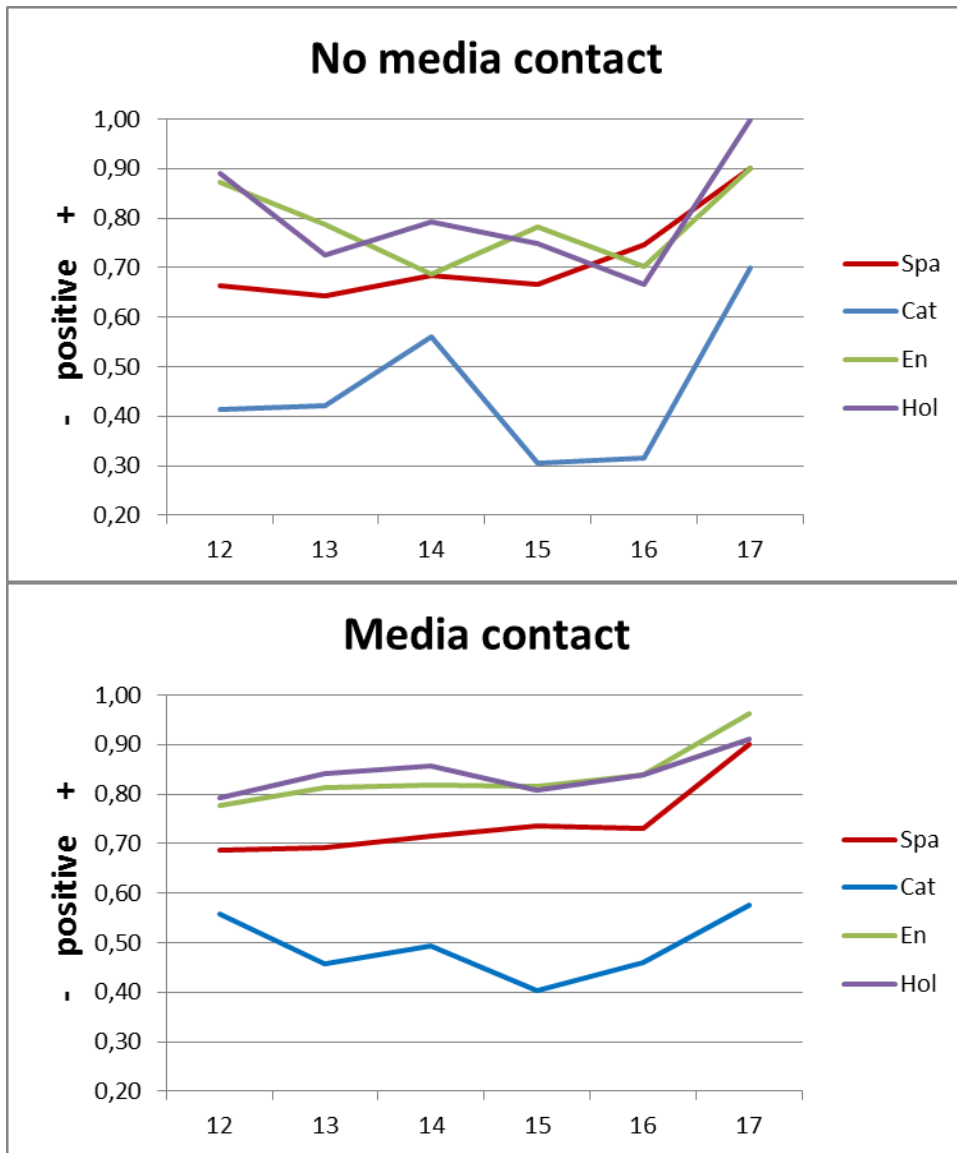


Figure 34: Attitude trajectory between language systems

This does not mean to say that under the influence of the attractor the mean scores are consistently higher; on the contrary, they are not. However, the mean scores for each attitudinal measure visibly appear to smoothen out when influenced by media contact in out-of-school contexts. In terms of systems-thinking, it is relevant to comment on what happens to the different attitude measures. The most stable measure across the age range is Spanish which is unsurprising given the status and vitality of this language in the community and the fact that contact with Spanish-language media is a constant among the sample. The greatest degree of change is 7% more positive at age 15 whereas the most negative change is -2% at age 16.

Taking into account that for an attractor to modify system behaviour it must be strong enough to destabilise any pre-existing attractor state (Cameron & Larsen-Freeman, 2007) we can assume that contact with Catalan-language and English-language media is not a sufficiently strong attractor to affect the very stable attitudes towards Spanish. However, we see quite a different story for attitudes towards Catalan and English both of which show considerably less fluctuation over the age range when there is media contact in these languages in out-of-school contexts. For Catalan the greatest positive change is 15% at age 12 whereas the most negative change is -13% at age 17. In contrast, for English the greatest positive change is 14% at age 16 whereas the most negative change is -10% at age 12. In fact, while the x - y relationship for Catalan remains nonmonotonic (but considerably less so) under the influence of media contact, the same relationship for English changes from a nonmonotonic to a positive inclined *almost* monotonic relationship (age 15 years shows a 1% decrease). This seems to indicate that, over the age range of our sample, media contact consistently increases positive attitudes especially towards the foreign language. In general, what we see here is that contact with popular media *stabilises* attitudes towards minority and foreign languages over time; we propose that this result is consistent with the complexity characteristic of dependence on initial conditions (van Geert, 1994; Larsen-Freeman, 1997; de Bot & Larsen-Freeman, 2011; de Bot *et al.*, 2013) because media contact at each different cross-section (that is, age) ‘sets-up’ the conditions for the next. This same stabilisation can be seen with the holistic measure. Of course, this measure integrates majority, minority, and foreign languages and therefore shows that contact with Catalan-language and English-language media also has a stabilising effect on multilingual language attitudes.

We decided to look at this result in more detail by separating the attitudinal measures so that Spanish, Catalan, English, and Holistic measures could be considered individually, and by expanding the types of media contact to distinguish between traditional and new media for both Catalan and English contact variables. Furthermore, in the resulting graphs we have also included an average (represented by the dotted black line), this average is basically the

trajectory for media contact for the corresponding language from figure 36 above. The average allows us to see the central trend regarding attitudinal change over the age range and to observe variability by comparing the different effects of contact with traditional and new media in English and Catalan. The results can be seen over the following series of graphs (figures 35 to 38).

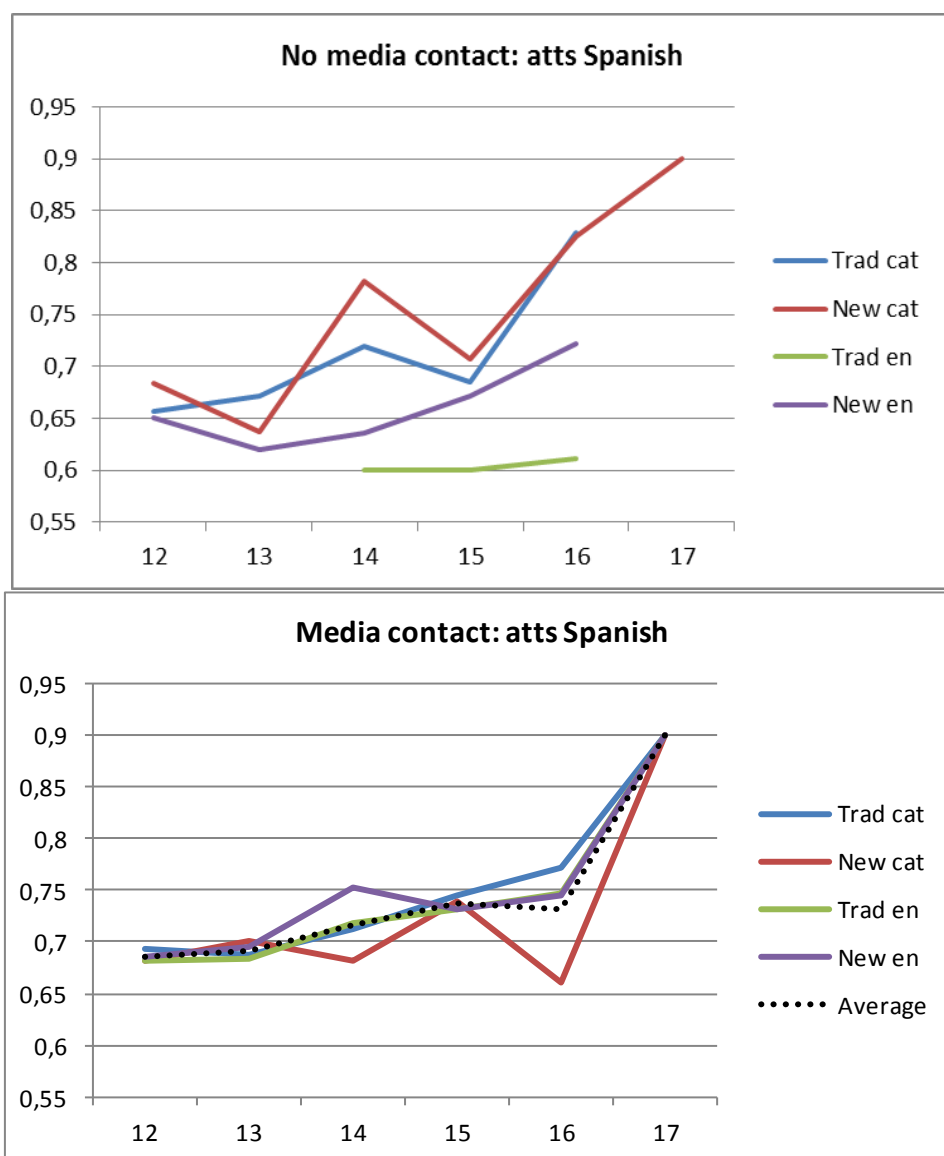


Figure 35: Trajectory of attitudes towards Spanish

First, looking at attitudes towards Spanish we see a small but noticeable change. In general, the attitudes are more stable over the age range. However, in relation to the average, we

notice that contact with English-language media and Catalan-language traditional media exerts a positive influence on the system while contact with Catalan-language new media appears to be more negative. Over the ages of 12 and 13, media contact has a very stabilising effect on the system which then becomes more variable as the age increases. Even though the change in attitudes to Spanish over the age range is weaker compared to the other measures, what is interesting about this result from a systems perspective is that it shows complete connectedness in the multilingual system (van Geert, 1994); that is, contact with minority and foreign languages in the social context make a mark on the affective domain regarding the majority language. Thus, in terms of the psycho-sociolinguistic system construct laid out at the end of chapter 3, not only is there interaction between the languages which comprise the multilingual system but there also appears to be interaction between its cognitive, affective, and behavioural subcomponents.

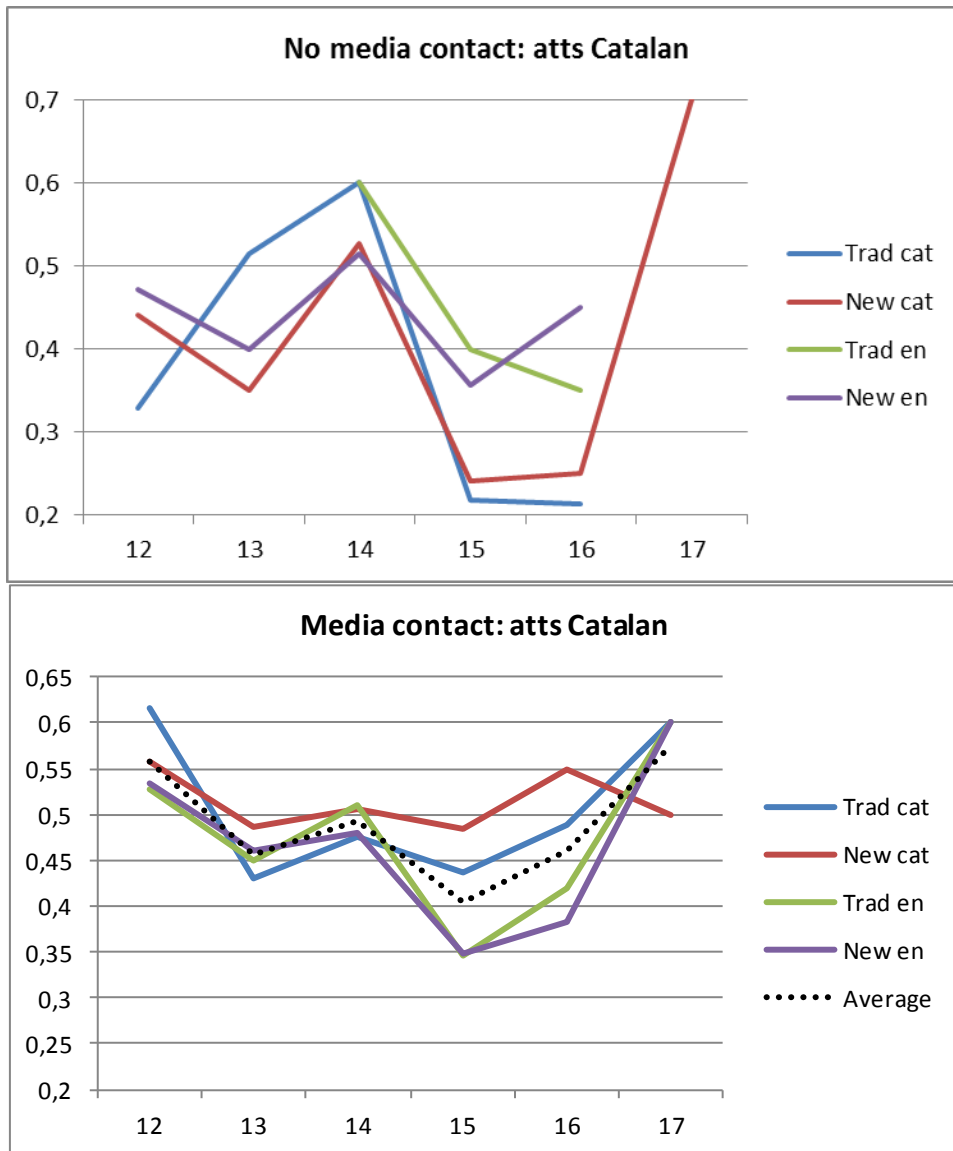


Figure 36: Trajectory of attitudes towards Catalan

Moving on to Catalan, in this measure we see the greatest variation over the age range in the ‘no media contact’ state. In particular, between age 15 and 16, we see quite an extreme dip in positive attitudes towards Catalan where there is no contact with Catalan-language media. Furthermore, we see that the absence of contact with traditional media (which includes television) in this age range has a greater negative impact than the absence of contact with new media. On the contrary, when media contact is present as an attractor we see a great deal more stability in the attitudinal measures across the age range, particularly at the somewhat volatile age range of 15-16 years where the addition of Catalan-language media contact has a very

positive stabilising effect. In fact, we can observe that between ages 14 and 16 there is more variation between the attitudinal measures, however it is contact with English-language media that has a more negative influence. This provokes two interesting questions for educators: 1) is it possible that the 15 to 16 year old age range is a critical period in the maintenance of positive attitudes towards Catalan?; and 2) if we are interested in the ‘continual maintenance’ (Huguet, 2007) of positive attitudes towards Catalan over this age range, should contact with Catalan-language traditional media and especially new media be augmented?

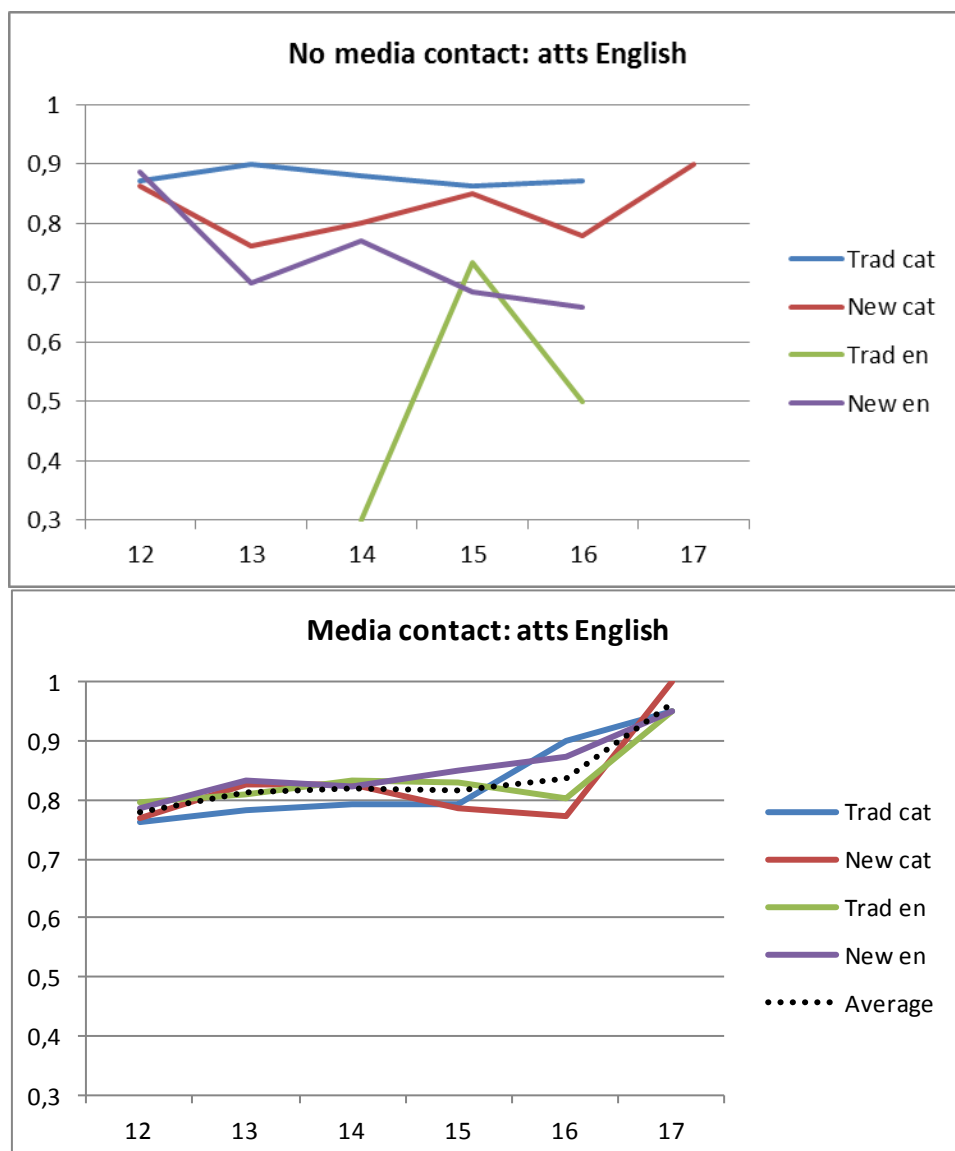


Figure 37: Trajectory of attitudes towards English

When we look at attitudes towards English we can see the most extreme example of self-organisation. We observe a much greater degree of stability over the age range, even in the 14 to 16 years range which was considerably more volatile with regards to Catalan. Contact with English-language new media appears to make attitudes consistently more positive over the age range. Moreover, between 15 and 16 years old the effect on positive attitudes is notably above the average. In contrast, the students who claim not to use English-language new media show an overall decline in positive attitudes. This is interesting in the light of the results from the first two hypotheses which showed that new media such as online games and social networks were highly significant attractors for positive attitudes towards English. Now we can not only see that such media has a strong positive influence but that it also has a consistent positive influence over the age range of the sample. Going back to what we observed in the first graphs (figure 37), that media contact transformed attitudes towards English from a nonmonotonic to a positive inclined virtually monotonic x - y relationship with the age range, we can see that this change is most influenced by contact with new media in English and also, contrary to hypothesis 1, by contact with traditional media in Catalan. Again we see more variation in attitudes in the second half of the age range, especially around 15-16 years, but it is far more restrained compared to the other languages. In general, from a systems perspective we can see that, for positive attitudes towards English, media contact is not only a very strong attractor but also a very consistent one over time.

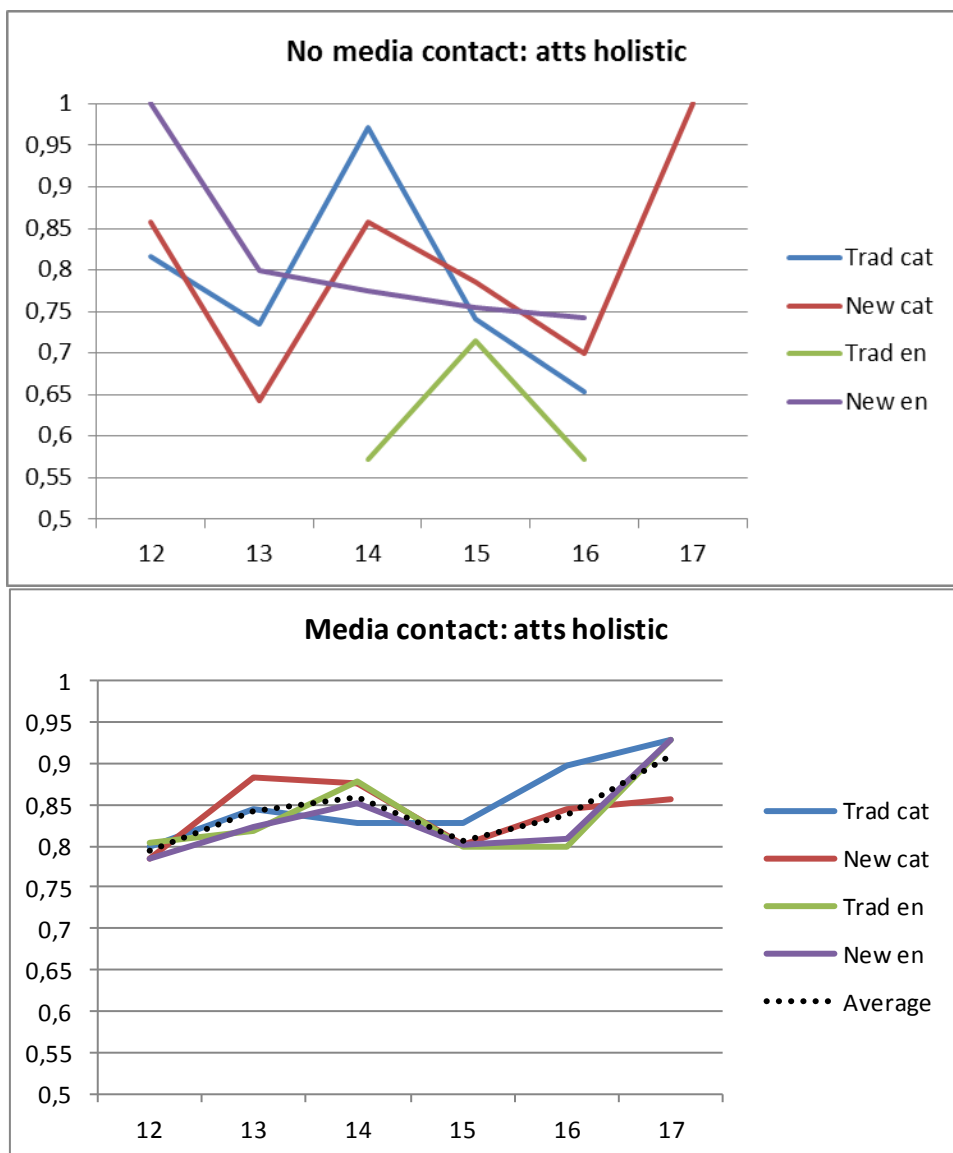


Figure 38: Trajectory of holistic language attitudes

Finally, we come to the holistic measure which asked participants to consider the integration of majority, minority, and foreign languages. In a similar way to the English measure, when we look at holistic language attitudes we see very noticeable self-organisation. No contact with Catalan media shows a great degree of variation across the age range, no contact with English new media shows a consistent decline in positive attitudes, and no contact with English traditional media shows a small peak at 15 years old. These results change radically in the media contact condition. First, we can see a much greater degree of congruence across the age range; the average shows a general tendency of increasing positive attitudes with

the exception of a small dip around 15 years, and the attitudinal trajectories from the different media types and languages are much more tightly packed around this general tendency. Catalan-language media shows the most variation; interestingly, over the first half of the age range it is contact with Catalan new media which results in higher than average positive attitudes, while over the second half of the age range it is Catalan traditional media which has this effect. This may affect educators' choices of how to dynamically integrate contact with Catalan-language media over the duration of obligatory secondary education in order to maximise positive attitudes towards multilingualism. On the contrary, English-language media remains very close to the average with only a little variation towards the end of the age range. We observe minimal difference between traditional and new media types so we may assume that they have more or less equal influence across the age range. However, compared to the 'no contact' condition, it is clear that contact with English-language media, that is the addition of English to an already bilingual context, has a notable effect in terms of maintaining positive attitudes towards multilingualism.

To conclude, in line with the fundamental characteristics of complex dynamic systems, hypothesis 3 predicted that multilingual language attitudes would change in a non-linear fashion over time and would self-organise under the influence of attractors. We believe that the results we have reported above confirm the hypothesis. Moreover, from these results two major themes that have come to light are *variability* and *stability*. We can see that in the absence of the attractor the multilingual system displays a high degree of variability regarding attitudes towards majority, minority, and foreign languages across the age range; there is almost no discernible pattern. Alternatively, under the influence of the attractor, these attitudes are much less variable over the first half of the age range (which would roughly translate to 1st and 2nd of ESO) and only a little more variable over the second half (roughly 3rd and 4th of ESO). The degree of variability is different for the different languages; the greatest variability is observed for Catalan and the least for English, which we should consider in terms of the ethnolinguistic vitality of the two languages (Lasagabaster, 2003, 2007; Huguet, 2007; Portolés, 2014). Our

results indicate that the influence of media contact creates certain patterns of system behaviour and, as a result, systemic stability. Furthermore, this stability can not only be observed within each individual measure but also across measures and holistically; in other words, the presence of this particular behavioural subcomponent (media contact) constitutes an attractor which stabilises the multilingual system. As Thelen and Smith (2006: 291) point out, variability can often be a 'researcher's nightmare' because it can obstruct our view of experimental effects; however, rather than measuring a 'static ability or unchanging concept' systems-thinking puts the emphasis on 'the relative stability of behaviour in context over time'. In all cases here we have seen that the presence of media contact provokes an attractor state providing relative stability to the system. That this happens with different media types and different languages gives further indication of interaction between the cognitive, affective, and behavioural subcomponents of the system. Unlike the results from hypothesis 2, this interaction is not just a static snapshot, rather it constitutes an integral part of the system trajectory.

The relative absence of an established methodological framework pointed out by Dörnyei, MacIntyre and Henry (2014) has compelled us to investigate this hypothesis by taking an alternative and quite experimental approach. Exploring the data in this way, we believe that the results are in line with Dörnyei's (2009) suggestion of a focus on developmental change at different timescales. Here we have only focused on a macro timescale but this type of approach has the potential to look at micro, and nested, timescales in future research. Furthermore, by taking a systems-inspired approach we believe that the results are in line with the contention by Verspoor *et al.* (2008) that systems theory can help uncover otherwise hidden developmental patterns and avoid unnecessarily discarding so-called 'bad data'. In fact, the results here show two specific examples of this: 1) the fact that the two most extreme examples of self-organisation are the English and Holistic measures, which returned the weakest correlation results in the Spearman's tests; and 2) contrary to the results in hypothesis 1, at the upper end of the age range, contact with Catalan traditional media appears to have a positive influence on attitudes towards English, which indicates that the negative effect we saw in hypothesis 1 could

actually be age-sensitive. Finally, MacIntyre and Legatto's (2011) study on willingness to communicate observed rapid fluctuation in WTC measured over a micro timescale; they state that 'these fluctuations are lost when considering only a single summary score' (MacIntyre & Legatto, 2011: 164). Although the current study is less targeted, the results for this hypothesis are similar – the difference being that our affective focus is attitudes and our timescale is macro. Differences aside, we may still claim that a single summary attitudes score would have missed both the fluctuations and the effect of the attractor which we have seen here. We believe that all the above serves to corroborate the notion that traditional linear analysis cannot fully account for multilingual data and, in fact, may completely miss interesting interaction and time-sensitive phenomena. Needless to say, in our opinion, this provides ample justification for using a systems approach.

The discussion of hypothesis 3 builds on the results of the two preceding hypotheses by showing attitudinal change over the age range of the sample and how the presence of our independent variable affects systemic self-organisation. Bearing this in mind, we are now ready to complement these results from the perspective of the sample itself by exploring their personal commentaries. This more detailed qualitative analysis will be the focus of the following section and will make up the balance of the current chapter.

6.4 Results and discussion related to Hypothesis 4

Hypothesis 4 predicted that a qualitative analysis of language attitudes from an emic perspective would reveal complex interactions between online multilingual, multimodal, and identity/socialisation practices (Todeva & Cenoz, 2009; Gorter & Cenoz, 2011; Canagarajah & Wurr, 2011; Wlosowicz, 2014; Dörnyei, 2007, 2014; Chan, Dörnyei & Henry, 2014). In this part of the study, we were interested in finding out what qualitative analysis could tell us about not only adolescents' language attitudes but also their multilingual identities, multimodal practices, user agency, and language socialisation processes specifically in online virtual communities, and how this can be framed within the cognitive, behavioural, and affective

subcomponents of the psycho-sociolinguistic system. A qualitative approach is justified in order to avoid the potential decontextualized and reductionist outcomes of purely quantitative research (Dörnyei, 2007). Furthermore, as a systems-theory approach to issues of multilingual development emphasises not just outcomes but also the paths leading to them, qualitative data analysis is essential for us to gain insight into multilingual processes (Komorowska, 2014) and to be able to approach with sensitivity the individual variation and complexity we find in multilingual systems (Wlosowicz, 2014). Finally, an emic perspective is emphasised in holistic multilingualism research (Todeva & Cenoz, 2009; Gorter & Cenoz, 2011; Canagarajah & Wurr, 2011) as a way for the researcher to set aside personal bias and focus on the reports of multilingual speakers regarding their own multilingual practices. In fact, Todeva and Cenoz (2009: 2) argue that an emic perspective, with an emphasis on process, is well aligned with 'more recent approaches to language development such as complexity and dynamic systems theory and various socio-cultural and ecological approaches'.

In order to investigate the hypothesis we conducted semi-structured interviews with many of the students who filled in the questionnaires, we selected extracts from the interviews which we felt were relevant to the current study and we attempted to interpret them in the context of our theoretical framework. The extracts presented in this section have been edited and generally cleaned up to remove unnecessary non-verbal elements (umms and ahhs, false starts, stutters, etc.) and make the comments more concise and reader friendly, should the reader be interested, original, unedited transcripts of the extracts are available in Appendix 2. While the following student comments focus on language attitudes, out-of-school language contact, and multilingual practices and experiences at a subjective and individual level, meaning that we cannot generalise the results, they do give valuable insights which we can use to complement our quantitative analysis (Dörnyei, 2007; Wlosowicz, 2014). The students' comments will be presented in the same order as the interview questions (see section 5.4). All extracts are presented in the original language. They are separated from the main text, and certain comments are highlighted in bold type. Translations (or close interpretations) of the comments appear in-

line in the main paragraphs and are distinguished from the rest of the text using double quotation marks. The highlighted comments from the extracts feature a reference number written in superscript to allow the reader to connect each comment with its translation, which features the same reference number in square brackets. Comments from the same speaker are generally marked with only one reference number, unless the separation of individual comments from the same speaker is convenient for analysis. Finally, while in the analysis the term ‘Catalan’ is used, it must be noted that students generally refer to the Catalan they speak as *Valenciano* and in some cases differentiate between Catalan and Valencian; this is a reflection of the sociolinguistic situation which was explained in chapter 5.

The reader will remember from section 5.3 that the interview was structured in eight questions, the answers to which provide detailed information related to our hypothesis. The first two questions asked students to reflect on the affective domain. The first question asked students which language they were most comfortable using. Their comments revealed sensitivity to language socialisation and the sociolinguistic context, and also that positive attitudes may be linked to an individual’s degree of multilingualism. The second question asked students how they felt when speaking in Catalan, Spanish, and English. Their responses indicate interconnectivity between motivation, attitudes, self-evaluation, and perceived language competence, and also the importance of the home and social environment. The remaining questions focus on out-of-school media contact and its connection to the affective domain. The third question asked the students which languages they like to read in. Their responses reveal user-agency in multilingual literacy practices, environmentally generated systemic change, the influence of the family, and the transmission and maintenance of cultural heritage. The fourth question asked students which languages they used to communicate with on their mobile phones. Their comments show evidence of translanguaging and the maintenance of long-distance and trans-border relationships, as well as sensitivity the sociolinguistic context and carrying offline socialisation practices into online environments. The fifth question asked students which languages they used on the internet. Their responses reflect educational

obligations, interactions with technology, online leisure activities, and strategic use of language on social networks. The sixth question asked students how they felt when using Catalan, Spanish and English on the internet. Their comments reveal both positive and negative self-evaluation, future orientation as language users, agency, autonomy, and empowerment in online communicative contexts, projection into virtual communities, continuity between offline and online sociolinguistic practices, and reciprocity between linguistic competence, motivation, and attitude. The seventh question asked students if they mixed languages on social network sites. Their comments reveal a high degree of metalinguistic awareness, including linguistic playfulness and creativity, as well as translanguaging practices contingent on technological affordances, socialisation, the perceived social context, and the perceived characteristics of specific languages, and, most interestingly, consciously outcome-oriented language-switch motivations. The eighth, and final, question asked students if they thought that technology changed the way they used their languages. Their responses reveal terminological innovation in linguistic repertoires, socialisation processes within communities of practice, enhanced language contact, motivation and new ways of learning, and heightened metalinguistic awareness.

The findings above provide rich information about adolescent multilingual identity and socialisation practices across a range of modalities and for a range of communicative purposes. Many of the participants' comments also evince M-factor characteristics predicted in the DMM (Herdina & Jessner, 2002) and make evident interconnectivity between cognitive, behavioural, and affective subcomponents of the psycho-sociolinguistic system. For this reason, we believe that the prediction made in hypothesis 4 has been confirmed and that our results are in line with the multilingual approach laid out in *Focus on Multilingualism* (Cenoz, 2013) which 'examines language practices in context' and is thus 'closer to the reality of the speakers' (Gorter & Cenoz, 2011: 443). Moreover, the responses to the interview questions intersect with our theoretical framework by corroborating earlier research in a number of areas. In terms of the participants' language attitudes and multilingual practices, the main influential factors we have uncovered

seem to be: the L1; the language of education; the family language; linguistic proficiency/competence; the reciprocal relationship between attitudes and perceived competence; the ideal L2-self; a visit or stay abroad; sensitivity to the socio-political linguistic context; language socialisation; continuity between online and offline language behaviour; (multilingual) digital literacies; translanguaging practices; projection into imagined/virtual communities; linguistic playfulness and creativity; self-affirmation, control and autonomy; and language-Ego and peer-evaluation. Finally, in relation to complexity theory (Larsen-Freeman, 1997; de Bot & Larsen-Freeman, 2011) and the Dynamic Model of Multilingualism (Herdina & Jessner, 2002), the participants' comments highlight the following features: the enhanced metalinguistic and metacognitive abilities of multilinguals, particularly linguistic objectivation; iteration and sensitive dependence on initial conditions; dependence on internal and external resources; change through, and caused by, internal reorganization and interaction with the environment; and emergent properties produced by complete connectedness within the psychosociolinguistic system.

Now that we have confirmed the hypothesis and highlighted how our findings intersect with and corroborate existing theory we shall continue by discussing the results in more detail focusing on selected extracts from the interview questions.

Question 1: Which language are you most comfortable using?

This question is quite general and is not aimed at language contact with popular media. The comments generated by this question seem to confirm that, at an individual level, many of the participants are susceptible to the sociolinguistic context and to language socialisation processes. In general, from Catalan-dominant Centre 1, we found that 66% of the sample who participated in the interviews reported feeling more comfortable using Spanish, 28% using Catalan, and 6% using both. Additionally, 9% reported feeling comfortable using another language. Conversely, from Spanish-dominant Centre 2, we found that 74% of the sample who participated in the interviews reported feeling more comfortable using Spanish, 11% using Catalan, and 15% using both. Additionally, 6% reported feeling comfortable using another

language. The additional languages reported by the sample included: English, Arabic, and Rumanian. These figures can be seen in graphical form in figure 39 below.

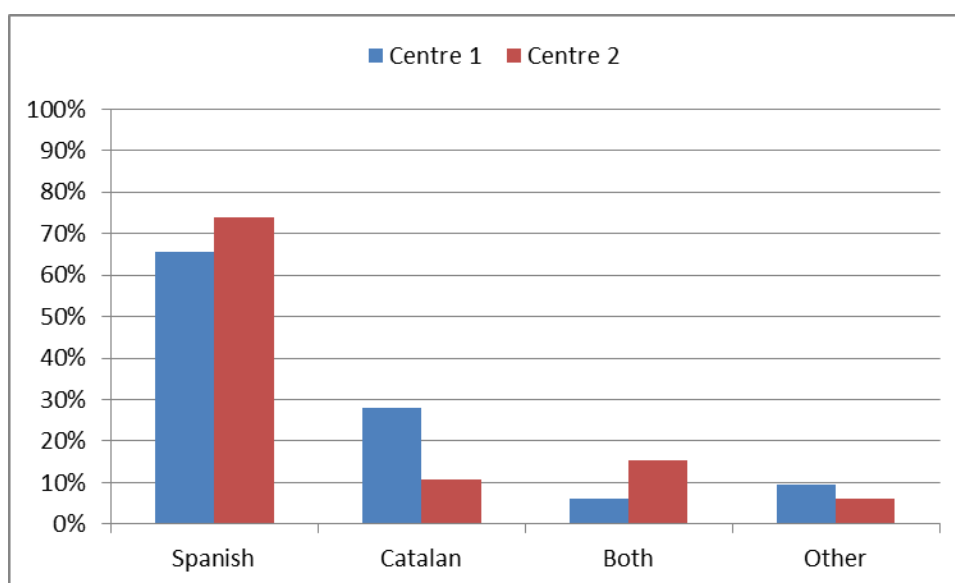


Figure 39: Quantitative responses to 'which language are you most comfortable using?'

We will now begin to explore selected comments made by the students in response to this question:

Extract 1 (C2 I2 E1-2):

S1: con el valenciano

R: con el valenciano? muy bien, y por qué?

S1: pues porque es **la lengua paterna** ¹

R: muy bien, y tú?

S2: yo con el castellano, porque **es la que hablo normalmente con los amigos, y con todos no?** ²

In this first extract, we see that S1 is more comfortable using Catalan and explains this by saying that it is the “father tongue” [1]. It is not clear whether this language is specifically the one that S1’s father uses, but we can assume that it refers to the language of the home environment and the emotional language for S1. On the contrary, S2 feels more comfortable with Spanish, stating “it’s the one I speak with my friends”; we believe that this is an indication of youth language socialisation processes. Interestingly, S2 then concludes “and with everyone, right?” [2], the way that this is framed as a question means that S2 is seeking confirmation of what was said. It indicates sensitivity to language prestige; for S2, it is not Catalan, but Spanish

which is the obvious linguistic choice, and due to the prestige of Spanish this opinion is *obviously* shared by everyone.

Extract 2 (C2 I6 E3-4):

S1: castellano

S2: inglés

S3: castellano

R: ((to S2)) inglés? por qué?

S2: **porque me gusta mucho el inglés** ³

R: ah, muy bien, te hace sentir más cómoda que el castellano?

S2: sí

Here, S2 reports feeling more comfortable using English, when asked why S2 responds “because I really like English” [3]. The researcher asks if S2 is more comfortable in English than in Spanish to which S2 replies yes. This shows an interaction within attitudes themselves, one positive attitude building on the other, because S2 likes English she feels comfortable using it as well. This reciprocal relationship really is the crux of language attitudes in terms of their applicability to language learning, it is something that scholars on attitudes and motivation have been saying for decades (Spolsky, 1989; Baker, 1992; Lasagabaster, 2005), and it justifies the need to engender positive attitudes from a young age and to maintain them throughout the language learning process (Huguet, 2007).

Extract 3 (C2 I19 E3-4):

S1: con el español

S2: con el español porque **es el idioma que más dominamos** ⁴

S3: con el castellano que **es el idioma de donde yo vivo** ⁵

In this extract, S2 feels more comfortable in Spanish because “it’s the language we are most fluent in” [4]; here, in line with previous research (Lasagabaster, 2005, 2007 Loredó Gutiérrez *et al.*, 2007; Safont-Jordà, 2007), proficiency is linked to feeling positive about a language. Alternatively, S3 reports feeling more comfortable with Spanish because “it’s the language of where I live” [5]. Again this shows that these young people are sensitive to the sociolinguistic situation and the perceived language hierarchy. It should also be noted that the extract is from Spanish-dominant Centre 2, as schools are, by default, arenas of socialisation this undoubtedly affects the way in which the sociolinguistic situation is perceived.

Extract 4 (C1 I3 E1):

S1: jo en valencià

S2: en valencià

R: per què?

S1: perquè **es la meua llengua** i que es **la que més conec** ⁶

S2: perquè **es la llengua que sempre he estudiat** ⁷

This extract was taken from Catalan-dominant Centre 1 and we can see that both students report feeling more comfortable in Catalan, when asked why S1 replies “it’s my language ... the one I know best” [6] and S2 replies “it’s the language I have always studied” [7]. Both students indicate that familiarity is what makes them feel most comfortable with Catalan, while S1 connects to the language on a deeply personal level (*la meua llengua* = my language), S2 indicates the importance of the school vehicular language in the formation of language attitudes. That the vehicular language of education should affect language attitudes is in line with previous research at the university level (Portolés, 2014).

Extract 5 (C1 I13 E3):

S2: con cualquiera

R: ah sí?

S2: con **cualquiera que conozca**

R: y cuántas lenguas conoces?

S2: **ruso, ucraniano, español, valenciano, inglés, y aprendiendo japonés, francés y alemán** ⁸

R: madre mía ((laughs)), bueno muy bien

We finish the current section about this question with an interesting comment from S2 in the above extract. Apart from the fact that this student was the only one to greet the researcher in English at the beginning of the interview, saying ‘hello’ instead of the usual *hola* or *buenas*, she also commented on feeling comfortable using “whichever language I know”. The researcher asks her how many languages she knows, to which she replies “Russian, Ukrainian, Spanish, Catalan, and English”, and that she is also learning “Japanese, French, and German” [8]. We can interpret this in terms of the M-factor (Herdina & Jessner, 2002), S2 claims to already speak five languages and to be learning three more, this clearly shows a high degree of multilingualism. We remember from chapter 1 that the M-factor summarises the emergent qualities which multilinguals develop as a result of increased language contact (such as metalinguistic and metacognitive awareness). In this vein, Jessner (2006) pointed out that the most characteristic cognitive ability of multilinguals is linguistic objectivation, or the ability to take a step back from language at the utterance level in order to think about it abstractly.

However, where Herdina and Jessner (2002) and Jessner (2006) are mainly concerned with the psycholinguistic implications of the M-factor and only really give a passing mention to attitudes, we propose that, in line with the ‘complete connectedness’ (van Geert, 1994) of multilingual systems, this ‘objectivation’ must also have implications in the affective domain. For this reason, we do not find it surprising that holistic language attitudes would be related to an individual’s degree of multilingualism and, in line with the DMM, we posit that the effects of interaction between an individual’s language systems will be cumulative. We propose that such relationships should be subject to further research in the future, especially with the aim of exploring how they develop over time.

Now that we have examined some of the comments about which language is the most comfortable for the students, we will continue by looking in more detail at how using different languages makes them feel.

Question 2: How do you feel when speaking in Catalan / English / Spanish?

This question aimed at ascertaining more detail about the emotional side of language use. Many of the interviewees said that they felt comfortable – or simply ‘normal’ – using either Spanish or Catalan or both. We have to recognise that it was probably quite hard for them to answer this question; we do not usually stop to think about how using our L1 makes us feel as speaking in a first language is a very natural and normalised process. In spite of this, where languages which do not share equal prestige are in contact, such as the case of Catalan and Spanish, the comments from the students may reveal interesting aspects about their sensitivity to the sociolinguistic situation. Regarding the use of English, a common response was to report feeling uncomfortable, strange, or ashamed. This was principally due to a lack of fluency or command of the language; a further indication of the reciprocal relationship between attitudes and perceived competence. In spite of these feelings, most students reported liking English and wanting to use it. On the one hand, this is not surprising given the prestige and widely recognised instrumental value of the language but, on the other, it highlights a kind of cognitive

dissonance as many students fail to realise an ‘ought to’ L2-self (Dörnyei, 2005). The following extracts exemplify these typical responses:

Extract 6 (C2 I1 E1-2):

S2: en castellano cómoda, en valenciano también, inglés pues **cuando me sale, bien, y cuando no, más incómoda**⁹

R: y tú?

S3: yo, en castellano muy cómoda y en valenciano no tan cómoda

R: no tan cómoda, y en inglés?

S3: en inglés rara, **me siento rara hablando**¹⁰

In extract 6, S2 reports feeling comfortable in both Spanish and Catalan but regarding English she says “when it comes out, good, and when it doesn’t, more uncomfortable” [9], and S3 also reports feeling comfortable in both Spanish and Catalan but regarding English she says “I feel strange when I speak” [10].

Extract 7 (C2 I2 E1-2):

S3: pues, valenciano y castellano, pues normal e inglés, no sé, **me cuesta más hablar**¹¹

R: te cuesta- pero cómo te hace sentir? incómodo o vergonzoso, o que

S3: [bueno] vergonzoso

R: [sí]

S3: [me da] vergüenza

Extract 8 (C2 I3 E1-2):

S2: a mí en castellano y valenciano bien, pero en inglés me siento un poco incomoda porque **no sé hablar muy bien**¹²

R: y tú?

S3: pues en castellano valenciano bien, y en inglés un poco de vergüenza porque **no sé hablarlo muy bien**¹³

In extracts 7 and 8, the students all report feeling good or ‘normal’ when speaking Spanish or Catalan but report *vergüenza* (embarrassment) when speaking English because, as S3 in extract 7 says, “I find it more difficult to speak” [11], or, as both students in extract 8 explain, “I don’t know how to speak it well” [12, 13]. This perceived lack of ability likely attacks the language-ego of the user (Guiora, 1972) affecting self-esteem and thus suppressing positive emotions (Brown, 1987; Clyne, 2001). Aside from embarrassment, one student even reported being a little afraid to use English:

Extract 9 (C2 I12 E3-4):

S2: yo el castellano bien **porque la domino**¹⁴ y eso, pero [xxx] el inglés pues me cuesta un poco y al hablar a veces me pongo pues me da vergüenza, y pues el valenciano no lo hablo mucho pero cuando lo hablo estoy bien

R: y tú?

S3: el castellano **es mi idioma natal**¹⁵ así que lo hablo bien, el valenciano si hay que hablarlo, por ejemplo si te vas a valencia o un sitio donde hablan valenciano, normal, yo no tengo miedo pero el

inglés tengo un poco de miedo, es un poco difícil **hay que pensar lo que dices**¹⁶ pero más o menos bien

In this extract, both students are comfortable using Spanish because, as S2 says, “I’m fluent in it” [14] and, as S3 comments, “it’s my birth language” [15]. They also feel fine using Catalan but not so much using English. S2 clearly relates her proficiency with how she feels about languages. She feels fine speaking in Spanish and in Catalan because she sees herself as proficient but she feels embarrassed speaking English because she finds this language more difficult. S3 says “I’m a little scared of English” because he finds it difficult and “you have to think about what you say” [16].

A number of the students who indicated feeling embarrassed when speaking English put this down to difficulties or insecurities with pronunciation. In many of the interviews this was a recurring theme; the following two extracts exemplify the issue:

Extract 10 (C2 I15 E3-4):

S3: yo en castellano cómoda, en valenciano me cuesta un poco, y **en inglés me da vergüenza**¹⁷

R: vale ok

S3: o sea me gusta pero no sé

R: vale, y qué parte es? que te da vergüenza?

S3: **no sé, la pronunciación y eso**¹⁸

R: vale, ok

Extract 11 (C2 I17 E3-4):

R: y lo de vergüenza en inglés, es por-

S3: **la pronunciación**¹⁹

Ss: sí ((laugh))

R: vale, todo el mundo dice lo mismo

Ss: sí

In extract 10, S3 reports “[speaking] in English makes me feel embarrassed” [17]. She says that she likes the language but indicates that there is something which makes her feel unsure. The researcher asks her what it could be that makes her feel like this and she replies “I’m not sure, the pronunciation and that” [18]. In extract 11, when the researcher asks the reason behind the embarrassment caused by speaking English, S3 does not hesitate in saying “the pronunciation” [19], the other students agree with a semi-nervous laugh. When the researcher tells them that everyone says the same thing the students all agree as this seems to reflect their own feelings.

However, not everyone felt embarrassed or uncomfortable speaking English, as the following extracts attest:

Extract 12 (C2 I11 E3-4):

S1: el castellano cómodo, **agradable**, el valenciano **se me hace pesado**, y el inglés, **comunicativo** ²⁰

R: comunicativo, vale, y el árabe?

S1: el árabe bien también, como el castellano

S1 also speaks Arabic as the home language. He says that Spanish and Arabic are comfortable and “nice” to speak. Catalan is more difficult for him, he says “it’s a bit of a drag”, but, in contrast, English makes him feel “communicative” [20]. It seems that this student has an instrumental orientation towards the foreign and minority languages, thus English provides another possibility of communicating internationally but he doesn’t really see the point of Catalan and feels no emotional attachment to it.

Extract 13 (C1 I3 E1):

R: quan parreu per exemple anglès com vos sentiu?

S1: jo estic un poc demés aixina que es més difícil

S2: important

R: et sents important?

S2: sí

R: sí, [per què?]

S2: [perquè] **és una llengua que sempre he volgut aprendre** ²¹

R: i com ho portes, bé o què?

S2: bé

Here, while S1 expresses that English is difficult, S2 reports feeling important when speaking English, stating “it’s a language I have always wanted to learn” [21]. The researcher then asks S2 how his English is progressing, and S2 indicates that it is going well. This would indicate that rising to the challenge of learning a foreign language and feeling that this process is going well has improved attitudes towards it; further evidence of reciprocal causality (Baker, 1992; Lasagabaster, 2005).

Extract 14 (C2 I5 E1-2):

S1: inglés más o menos, **las cosas básicas las tengo controladas**

R: y eso cómo te hace sentir, controlar el inglés?

S1: pues, **mejor**, porque es una lengua también muy hablada, y también **me fui de viaje de fin de curso a Londres y me ayudó bastante** ²²

Extract 15 (C1 I14 E3):

S1: con el inglés depende porque **he ido a veces a Inglaterra y entonces si lo hablo con ellos bien pero si hablas con gente que habla castellano pues te cuesta más** ²³ porque no sé, a mí me cuesta más hablar con gente que habla castellano

R: es como tener un **contexto auténtico** ²⁴ no?

S1: sí

In extract 14, S1 comments “[in English] I control the basic things”, when the researcher asks him how this control makes him feel, he says “better” and talks about how he used English in an authentic situation (a trip to London) and how this helped him orient himself and thus feel more comfortable with the language [22]. In extract 15, S1 also mentions using the language in context, she says “on occasions I’ve been to England and if I speak with [English people] I feel fine but if you speak [in English] with people who speak Spanish it’s more difficult” [23]. S1 agrees with the researcher that this constitutes an “authentic context” [24] in which to speak the language. These comments are in line with previous research which indicated the attitudinal effects of visiting or staying in an FL speaking country (Yager, 1998; Fisher & Evans, 2000; Lasagabaster & Huguet, 2007; Nightingale, 2012).

A number of students, especially from Spanish-dominant Centre 2, expressed negative opinions about Catalan, as the following extracts illustrate:

Extract 16 (C2 I7 E1-2):

S3: en valenciano incómodo

R: incómodo

S3: en castellano normal, en inglés normal

R: normal, en valenciano incómodo, por qué?

S3: **porque no me gusta**²⁵

In this extract, S3 reports feeling uncomfortable speaking Catalan, when the researcher asks why this is the case, S3’s answer is very succinct, he simply says “because I don’t like it” [25]. This type of comment also shows reciprocity between proficiency, motivation, and attitudes. S3 is probably uncomfortable with Catalan because he does not use it enough to be proficient; this in turn results in less favourable attitudes and less motivation to use the language. The comment also illustrates how affective and contextual factors interact and are sensitive to initial conditions. That is, S3’s negative attitude to the minority language is probably a reflection of its social prestige and its social prestige is, in turn, affected negatively by negative attitudes to the minority language.

Extract 17 (C2 I13 E3-4):

R: si tenéis que hablar valenciano cómo os hace sentir?

S1: yo no me siento bien, **me siento raro** o sea **lo que quiero decir no me sale me quedo allí atrapado**²⁶

R: y tú?

S2: a mí no me gusta mucho pero lo hablo, **lo hablo sólo aquí**²⁷

R: ok, y tú?

S3: yo incómodo porque **no me puedo expresar igual que en castellano, y me trabo más al hablar el idioma**²⁸

Here, all students display quite negative feelings about Catalan. S1 reports not feeling comfortable using Catalan, he says “I feel strange [...] what I want to say doesn’t come out right, I get stuck there, trapped” [26]. S2 reports speaking Catalan but not liking it, stating “I only speak it here” [27], where ‘here’ refers to ‘at school’. S3 also feels uncomfortable using Catalan, he says “I can’t express myself as well as I can in Spanish, I get more tongue-tied when I speak the language” [28].

Extract 18 (C2 I18 E3-4):

S1: pues, con el castellano bien yo **creo que te aceptan y me siento bien**

R: y con el valenciano?

S1: con el valenciano no tanto, yo creo que **te pueden rechazar algunas personas**²⁹

In this extract, referring to Spanish, S1 says “I think people accept you and I feel good”, by contrast, he is less sure about Catalan because “some people may reject you” [29] for using this language. We can relate this to the results from the attitude statement “knowing [Language] makes me feel accepted” that we saw in hypothesis 2.

Extract 19 (C2 I21 E3-4):

S1: (about Spanish) yo seguro, sé muy bien lo que voy a decir, y no sé, **no tengo dudas a la hora de hablar**

R: vale y en valenciano?

S1: un poco más incómodo, porque **como no tengo todo el vocabulario que me gustaría pues muchas veces me quedo trabado sin saber que decir**

R: y en inglés?

S1: en inglés igual que el valenciano pero igual **un poco más valiente** porque me gustaría aprenderlo más, entonces **me arriesgo más**³⁰

In this extract, S1 reports feeling confident speaking Spanish, stating “I have no doubts when speaking”. However, he is less comfortable speaking Catalan, reporting “as I don’t have all the vocabulary I’d like, I often end up tongue-tied, not knowing what to say”. Although S1 is not very confident speaking English, he reports feeling “a little braver” because he wants to learn the language so he is prepared to “take more risks” [30].

Extract 20 (C2 I22 E3-4):

S1: (about Catalan) con los amigos y la familia y eso cómodo, pero con ciertas personas y eso un poco, raro, porque el valenciano **no es por costumbre es algo familiar**, también debería, llevarse a otros ámbitos pero, **me siento extraño hablando valenciano en contexto castellano**³¹

In extract 20, S1 says that speaking Catalan is something he does with his friends and family but with certain other people he feels strange because the use of Catalan is not habitual, rather “it’s a family (closer) thing”. He also recognises that although he should be able to transfer his use of Catalan to other environments he feels strange using the language in what he perceives to be a “Spanish context” [31]. S1’s comments show that adolescents are sensitive to the sociolinguistic situation of contact with a minority language, which we propose reflects Pujolar’s (2008) ‘incipiently politicised discourse’, and further highlights the diglossic situation of the Valencian Community (see: chapter 5).

Extract 21 (C2 I20 E3-4)

S3: yo pues el castellano la lengua más cómoda porque **es la que utilizamos siempre**, el inglés pues, no sé, soy- también, no soy malo, y me gusta y también es cómodo si puedo hablar con alguien en inglés, y el valenciano pues no me gusta ni hablarlo **tampoco lo sé demasiado pero no me gusta hablarlo y no me siento cómodo tampoco hablando**³²

In this extract, S3 is originally from Madrid rather than the Valencian Community, which as we can see from his comments negatively affects his attitudes towards Catalan. S3 reports feeling comfortable using Spanish because “it’s the language we always use” and he says that he feels comfortable when he has to speak to someone in English. However, this is not the case in Catalan about which he says “I don’t really know it that much but I don’t like speaking it and I don’t feel comfortable speaking it either” [32].

Extract 22 (C2 I8 E1-2):

S2: yo en castellano y valenciano bien porque **los hablo continuamente en casa y en el colegio**³³ y eso

In the last comment from this question, contrary to extract 21, the student in extract 22 feels equally comfortable with Spanish and Catalan because “I constantly speak them at home and at school” [33]. This indicates that when both majority and minority languages are continuously present in family and educational environments attitudes will be better towards them (Loredo Gutiérrez *et al.*, 2007; Mettewie & Janssens, 2007; Portolés, 2014).

After these comments about how using each language makes the students feel, we will continue by beginning to look in more detail at their multilingual and multimodal practices and thus begin to address interconnectivity between system subcomponents.

Question 3: Which languages do you like to read in?

This is the first question specifically aimed at out-of-school language contact through popular media. In general, from Centre 1, we found that 66% of the sample who participated in the interviews reported reading in Spanish, 6% in Catalan, and 28% in both languages. Additionally, 25% reported reading in another language (English, and one student in Arabic). On the contrary, from Centre 2, we found that 75% of the sample who participated in the interviews reported reading in Spanish, 3% in Catalan, and 22% in both languages. Additionally, 23% also reported reading in English. These figures can be seen in graphical form in figure 40 below.

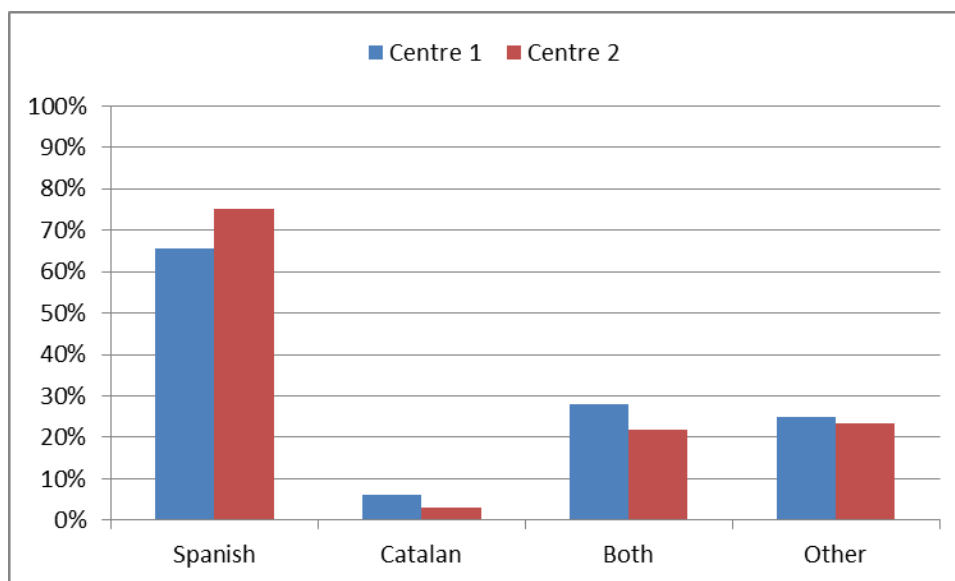


Figure 40: Quantitative responses to 'which languages do you like to read in?'

The following student responses to this question give us an insight into their perspectives on reading in their different languages. It should be noted that, in many cases, they do not seem to distinguish between reading on paper and reading online. Furthermore, as reading books is such a common approach to traditional learning it is also possible that some

students have not distinguished between in-school and out-of-school contexts. However, in spite of any possible confusion, the students make a range of interesting comments when it comes to the languages they like to read in and why, as the following extracts attest:

Extract 23 (C2 I15 E3-4)

S1: en castellano, bueno también leo en inglés páginas webs y cosas así, libros no, no leo ninguno en inglés y bueno libros en valenciano **porque me hacen leerlos** pero-

R: y leer las páginas webs en inglés te gusta?

S1: sí, hay cosas que no entiendo y- bueno **uso un traductor de vez en cuando para, palabras que no entiendo y frases y expresiones**³⁴ pero sí

In this extract, S1 indicates that his preference is reading in Spanish but he also enjoys reading online in English. However, he says that he only reads books in Catalan “because [the teachers] make me read them” so this is clearly something he only does when he is obliged to for school work. He says that he does not read books in English at all. S1 also comments on his use of English to read online, stating “sometimes I use a translator for words, phrases and expressions I don’t know” [34]. This ability to instantly look up words and phrases in another language is an interesting example of language-user agency and new multilingual literacies (Harrison & Thomas, 2009) that would not be possible unless mediated through technology.

Extract 24 (C2 I22 E3-4):

S1: a mí me resulta indiferente **para disfrutar como lectura** leo en castellano y valenciano y sobre informática me gusta mucho leer en inglés porque la mayor parte de la información está en inglés, que es **más detallada**³⁵

In this extract, S1 says that “for the enjoyment of reading” it makes no difference if he reads in Spanish or Catalan. However, he likes to read about information technology in English because he says that most literature on this subject is in English and, in this language, the information is “more detailed” [35]. This student is very clear why and in which contexts he uses the foreign language to read, in this case, to find more information about a specific personal interest. We propose that this constitutes an example of interaction between linguistic, affective, and behavioural subsystems, and also dependency within the behavioural subsystem because one type of behaviour (personal interest) leads to another (language choice).

Extract 25 (C2 I20 E3-4):

S1: prefiero leer antes en inglés que en castellano, porque en castellano **me aburre muchísimo** y hace poco nos mandó un trabajo en inglés y, como **es algo diferente es algo nuevo**³⁶ me gusta más leerlo que en castellano

In this extract, S1 reports preferring to read in English because, in his words, reading in Spanish “really bores me”. He goes on to say that after being given a school project which involved reading in English he began to prefer this activity in English rather than Spanish because “it’s something different, it’s something new” [36]. This can be interpreted as an example of dynamic interaction between subsystems; a small change in this student’s educational context (in this case, a project being set) has led to a larger and more unpredictable change in attitudes (changing the language of preference when it comes to reading). This is a change caused by interaction with the environment which leads to internal systemic reorganisation (de Bot & Larsen-Freeman, 2011).

Extract 26 (C1 I5 E3):

S1: yo creo que valenciano

R: tú el valenciano por qué?

S1: **porque mi madre es profesora de valenciano**³⁷ y

R: ah, tu madre es profesora de valenciano de instituto

S1: sí

R: entonces claro **al ser tu madre profesora de valenciano pues tiene una influencia, no?**³⁸

S1: sí

In this extract, S1 indicates that linguistic preferences of parents can be an influential factor. She reports preferring to read in Catalan and when the researcher asks why, she says “because my mum is a Valencian teacher” [37]. The researcher asks “the fact that your mum is a Valencian teacher has an influence, right?” [38] to which S1 agrees. What is more interesting about this comment is that S1 later states that her personal preference for speaking is actually Spanish. This is in line with the influence of parents and socialisation practices on language choice, language attitudes, and motivation which has been well documented in earlier research (Young, 1994; Chambers, 1999; Lamb, 2004a; Bertram, 2006).

Extract 27 (C1 I6 E3):

S1: sí, en castellano porque los libros de normal en valenciano, es catalán y entonces **me lio un poco más**

R: cómo, cómo? entonces por qué? el ser catalán?

S1: en **catalán** es que **no es lo mismo que hablar valenciano**

R: entonces te lías, o qué?

S1: sí, hay palabras raras

R: prefieres castellano? el catalán no te gusta o cómo?

S1: **sí, lo único es que a veces tiene palabras raras**³⁹

R: y para vosotros es una lengua diferente catalán y valenciano?

Ss: no

R: o sea, es la misma?
 Ss: sí
 R: pero con palabras diferentes o cómo?
 S1: sí, es igual pero hay palabras que son diferentes y entonces pues al cambiarlas-
 R: te lías
 S1: sí

Extract 28 (C1 I7 E4):
 S2: ((about Catalan)) no es musical
 R: no?
 S2: le falta musicalidad, valenciano
 R: ah sí? le falta musicalidad
 S2: sí, **tienes que leer muy lento porque no sé está más enrevesado** ⁴⁰

In these two extracts the students express some negative feelings about reading in Catalan. In extract 27, S1 says that he prefers to read in Spanish because the books that are in Valencian are actually in Catalan, he says “I get a bit more confused” because “Catalan [...] is not the same as speaking Valencian”. In order to confirm, the researcher asks S1 if he likes Catalan, to which S1 replies “yes, the only thing is that sometimes there are strange words” [39]. The researcher asks the students if they see Valencian as a different language to Catalan to which they reply no but that there are differences in vocabulary which can lead to confusion. In extract 28, S2 makes the comment that Catalan is not ‘musical’. For him, Catalan seems to lack that musical quality of tone and rhythm which seems to make languages flow, for this reason he says “you have to read really slowly because [...] it’s more inaccessible” [40]. This comment is interesting in terms of the connections between music and language and the effect sensitivity to music and musical ability have on reading fluency and foreign language competence (Stansell, 2005; Wandell *et al.*, 2008; Petitto, 2008; Patel, 2012).

The final extract for this question gives the perspective of an ‘other’ L1 speaker; in this case the language is Arabic:

Extract 29 (C1 I15 E4):
 R: te gusta leer en árabe? porque tiene una letra distinta [también es-]
 S2: [sí, sí] siempre he tenido esa emoción de leer en árabe, **sé leer un poco me han enseñado un poco** ⁴¹ pero no llego mucho mucho pero sí, sé escribir un poco y leer, porque me gusta saber escribirla
 R: y te anima no, al leerla?
 S2: sí, me gusta porque **sé que es mi lengua** ⁴²[...] **lo principal es escribir mi lengua y leerla** ⁴³

In this extract, S2 comments that she has always felt passionate about being able to read and write in Arabic because “I know it’s my language” [42]. She admits that her competence in Arabic is limited but that “I know how to read a little, they have taught me a little” [41]; we can assume that ‘they’ refers to members of her family. This comment is interesting because it is a clear example of language socialisation within the family unit; the maintenance of a heritage language through literacy assures the intergenerational transmission of family and cultural values. The researcher asks S2 if reading in Arabic is something that motivates her, she replies that it does, because it is ‘her language’, and therefore “the main thing is [to be able to] read and write it” [43]. It is clear that she feels a deep personal bond with Arabic which forms part of her bicultural identity and mediates the way in which she communicates with her family and, especially given the value she assigns to literacy practices, maintains links with her cultural heritage.

Following these comments about multilingual reading practices, we will continue by exploring comments about out-of-school use of new media, specifically speaking and messaging using mobile technology.

Question 4: Which languages do you use to communicate with on your mobile phone?

In this question the students were asked which languages they communicate with on their mobile devices. Taking into account that current mobile phone contracts offer access to the internet as standard and almost all adolescents have internet-enabled devices and a range of applications which take advantage of that connectivity, we are likely to see a variety of comments in their responses regarding the use of social networks. The reader will also notice that another recurring theme is translanguaging; the students often report using words from other languages especially in their messaging activities. In general, from Centre 1, we found that 44% of the sample who participated in the interviews reported using their mobile phones only in Spanish, 0% reported using only Catalan but 56% used both languages. Additionally, 34% reported using another language. Alternatively, from Centre 2, we found that 48% of the sample who participated in the interviews reported using their mobile phones only in Spanish, 3% only

in Catalan, and 49% in both languages. Additionally, 35% also reported using their mobile phone in another language. The additional languages reported included English, French, German, and Rumanian. These figures can be seen in graphical form in figure 41 below.

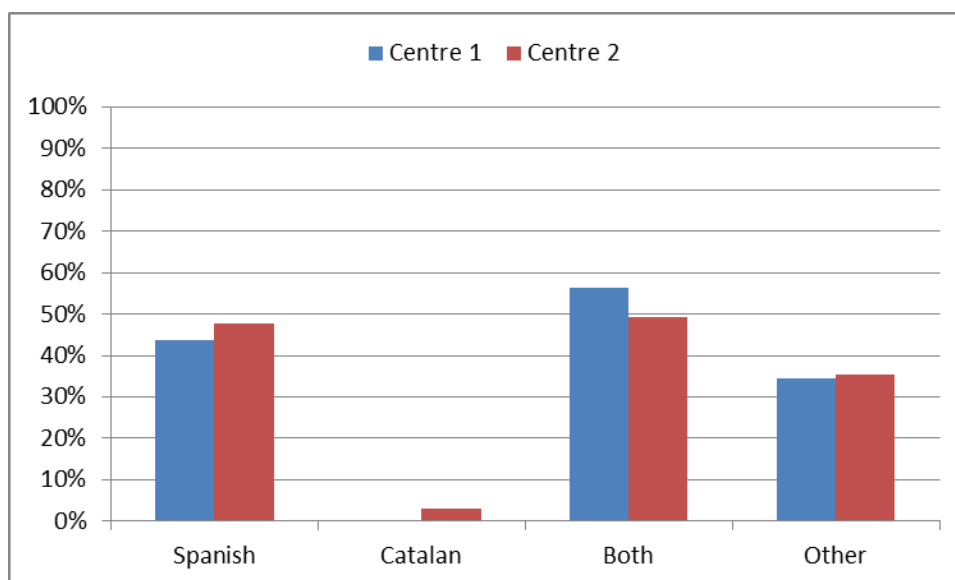


Figure 41: Quantitative responses to 'which languages do you use to communicate with on your mobile phone?'

First, we can see a number of comments where the students report using an additional language on their mobile phones in order to communicate with people in other countries or people who do not share the same native languages as them. We will see some examples of this in the following extracts:

Extract 30 (C2 I8 E1-2):

S1: sí, y alguna vez en francés [...] con una amiga mía

R. con una amiga concreta no? porque habla francés?

S1: sí

R: y no habla castellano?

S1: no

R: y por tanto comunicas en su idioma

S1: sí

R: y cómo te hace sentir eso?

S1: pues **bien porque como no la veo, como vive en Francia pues, con ella pues me puedo comunicar, en francés** ⁴⁴

Extract 31 (C2 I11 E3-4):

S1: castellano e inglés

R castellano e inglés, y valenciano no?

S1: y **francés también [...] con la gente de marruecos** ⁴⁵

S3: yo en castellano pero a veces en valenciano, con él ((referring to S2)), y en francés con amigos de [xxx]

R: se supone que es un amigo que no sabe castellano

S3: sí, bueno muy poco

R: por eso es más fácil hablar en francés, no?
S3: sí

Extract 32 (C1 I2 E2):

R: en inglés?

S1: no

S2: a no ser que sea con mi alumno de intercambio

S1: yo igual

R: ay! y por móvil habláis con él, con el alumno de intercambio?

Ss: sí

R: y de dónde es él?

S2: de Alemania

R: y os enviáis whatsapps?

Ss: sí

R: y cómo habláis con él? en alemán [o en inglés]?

S1: [sí]

S2: [o en inglés]

R: en alemán también?

Ss: sí

R: y cuando habláis con él [...] **lo escribís parte en alemán y parte en inglés?** ⁴⁶

S2: a veces

S1: sí, depende

R: es una mezcla de lenguas en el whatsapp?

S2: sí

R: por qué mezcláis las lenguas?

S2: **para que nos entendamos los dos** ⁴⁷, o sea como él tampoco entiende mucho español y yo no entiendo mucho alemán-

R: español también pones en el whatsapp

S2: sí

R: claro porque él también está aprendiendo castellano

S1: claro

S2: a veces nos hablamos en alemán y a veces en español

R: y os gusta la experiencia esta?

S2: **sí, ha estado muy bien** ⁴⁸

In extract 30, S1 uses her mobile to communicate in French with a friend who lives in France and doesn't speak Spanish. The researcher asks her how that makes her feel to which she replies "good because as I don't see her, as she lives in France, I'm able to communicate with her" [44]. In extract 31, S1, who speaks Arabic, also uses English on his mobile and reports communicating in this way in French in order to maintain contact with people he knows in Morocco [45]. While, S3 reports using French on his mobile in order to communicate with friends who speak very little Spanish. Finally, in extract 32, both students report using English and German to communicate with a German friend they made during a student exchange trip. The researcher asks them if they write partly in German and partly in English [46]. S2 confirms that he does use this translanguaging strategy "so that we both understand each other" [47]. The students indicate that they also communicate with their German friend in Spanish because he is

trying to learn this language. The researcher asks them if they enjoy this experience to which S2 replies “yes, it’s been really good” [48]. These examples not only illustrate how the students maintain long-distance, trans-border friendships but we could also argue indicate a way in which they realise themselves as ‘ideal’ language users (Dörnyei, 2005) and project themselves into imagined language communities (Norton, 2013) in order to maintain ties with other cultures.

The students also made some comments which indicated their (albeit unconscious) sensitivity to the sociolinguistic context of the community, specifically the situation of diglossia which exists in the Valencian Community, as the following extracts attest:

Extract 33 (C2 I19 E1-2):

S3: yo en castellano **con mis amigos**⁴⁹ y en valenciano con mi familia

Extract 34 (C2 I21 E1-2):

S2: yo, castellano **con mis amigos**⁵⁰ y valenciano si hablo con me hermana o con mi madre

R: vale entonces tienes entornos distintos no?

S2: sí

R: para cada uno

The students in extracts 33 and 34 both mention using Spanish with their friends [49, 50] but changing to Catalan with family members. These comments illustrate that the diglossic situation regarding Catalan and Spanish also extends to mobile communication. In the more traditional sphere of the family Catalan is more frequently used but in the wider social sphere of their friends both students use Spanish; it may be influential that both students are from the Spanish-dominant Centre 2 and the main socialisation practices of this centre will be in Spanish. This is in line with previous attitudinal research in the Spanish context which indicates that minority languages are used more in the home environment (Huguet, 2007; Loredó Gutiérrez *et al.*, 2007) and research on social networking in minority languages which indicates that offline language socialisation behaviour tends to be maintained in online practices as well (cf. Cunliffe, Morris & Prys, 2013). Another interesting example of how offline language socialisation behaviour is maintained online comes from this Rumanian student:

Extract 35 (C1 I7 E4):

R: y rumano?

S1: rumano con mis padres [...] **aunque con mis amigos rumanos hablo castellano**

R: sí?

S1: porque **la mayoría llevan aquí mucho tiempo** entonces

R: entre vosotros no habléis en rumano sólo habléis en castellano, y eso por qué?

S1: no sé, **nos hemos acostumbrado así**⁵¹

R: y por qué nunca empezasteis a hablar en rumano?

S1: no lo sé ((laughs)), de niñas llevamos hablando así

This student uses Rumanian on her mobile when speaking with her parents. Surprisingly, she says “although with my Rumanian friends I speak Spanish” because “most of them have been here for a long time”. The researcher clarifies that they only speak Spanish on their mobiles and asks why this is the case, to which S1 replies “we got used to it that way [...] we’ve been speaking like that since we were little girls” [51]. This is an interesting comment as it shows that Rumanian has very little prestige in the sociolinguistic context, because of this these girls have socialized themselves into choosing the majority language over their mother tongue and family language.

The students’ comments did not just reveal evidence of language choice in response to the perceived sociolinguistic situation, but also translanguaging practices in their mobile communications. The following extracts highlight some examples of this:

Extract 36 (C2 I12 E3-4):

S3: en todas

R: en todas? en inglés también?

S3: sí

R: explícame un poco de eso

S3: no sé, con los amigos [...] **para gastar bromas**⁵² y eso

Extract 37 (C2 I19 E1-2):

S1: principalmente castellano pero algunas veces **cuando haces bromas**⁵³ y eso en inglés

In the extracts above, both students report using English on their mobiles when they are joking around [52, 53]. These are not isolated comments, other students also mentioned using English or English words in order to have fun or joke around when communicating with their friends on their mobile phones; ‘injecting humour’ by codeswitching has been recognised in previous research (Baker, 2001). We may understand that there is a type of affective, and even pragmatic, motivation for their codeswitching in these cases. In fact, Dewaele (2010) includes switching

languages for comic effect as one of a range of affective functions of translanguaging practices. Furthermore, this is also in line with Cenoz and Gorter (2011a: 340) who point out that ‘bilingual and multilingual speakers of a language can also manifest creativity and language playfulness’ owing to their ‘richer experience with languages’. The following extract indicates that as the use of majority and minority languages are so normalised, codeswitching between them is not always a conscious choice:

Extract 38 (C1 I6 E3):

S1: sí, mucho

R: y por qué, cambiáis de lengua?

S1: no sé, hay veces que te mareas tú sólo, dices-

S2: que **te mareas** y ya está

S1: sí

R: porque te mareas y lo pones, alguna razón más?

Ss: no ((laugh))

R: simplemente porque sale así?

S1: **es que hay amigos que siempre estás hablando en valenciano y ortos que siempre los hablas en castellano** y si están los dos **mezclados**⁵⁴ haces-

R: es un remix, sí

S1: sí, haces una cosa rara

The researcher asks if these students switch between Spanish and Catalan on their mobiles and they reply that they do this frequently. The researcher then asks why, to which both students agree that sometimes “you get muddled up”. The researcher presses them for any other reason they can think of and S1 replies “it’s because there are some friends you always talk to in Catalan and others you always talk to in Spanish” and when these two groups are “mixed” [54] (as many instant messaging applications facilitate group conversations) it is common to do, what the researcher dubs, a ‘remix’ of the languages.

The final comment from this question reveals another interesting way in which adolescents are using languages on their mobile phones:

Extract 39 (C2 I9 E1-2):

S2: yo hace poco me he puesto el móvil en inglés, **para así aprender un poco más**

R: y te parece una buena forma de aprender?

S2: **sí porque hay cosas que no sé cómo se dice e intento averiguar lo que significa**⁵⁵

This girl in this extract comments that she has set the user interface language of her mobile to English “in order to, in that way, learn a little more”. The researcher asks her if she thinks it is a good way to learn, to which she replies “yes because there are things I don’t know how to say

and I try to guess what they mean” [55]. Once again, this highlights how putting language learning into practice in a meaningful and user-controlled way engenders motivation, positive attitudes, and autonomy. Furthermore, it provides another illustration of subcomponent interconnectivity.

This section has explored some of the students’ comments on multilingual practices regarding the use of mobile technology. The next section extends the scope of the discussion by asking about the languages the students use on the internet.

Question 5: Which languages do you use on the internet?

This question asked students to think about the languages in which they use the internet. From the responses we can see that influential factors for them are having the obligation to complete a school project, the language settings of an application or the language preferences of a website, playing online videogames, and strategic language use on social networks. In general, from Centre 1, we found that 57% of the sample who participated in the interviews reported using the internet only in Spanish, 0% reported using only Catalan but 43% used both languages. Additionally, 67% reported using another language. By contrast, from Centre 2, we found that 47% of the sample who participated in the interviews reported using the internet only in Spanish, 2% only in Catalan, and 51% in both languages. Additionally, 81% also reported using another language. While the participants also reported using the internet in French and Rumanian, the most salient additional language was English which, given the plethora of English-language resources on the internet, is hardly surprising. These figures can be seen in graphical form in figure 42 below.

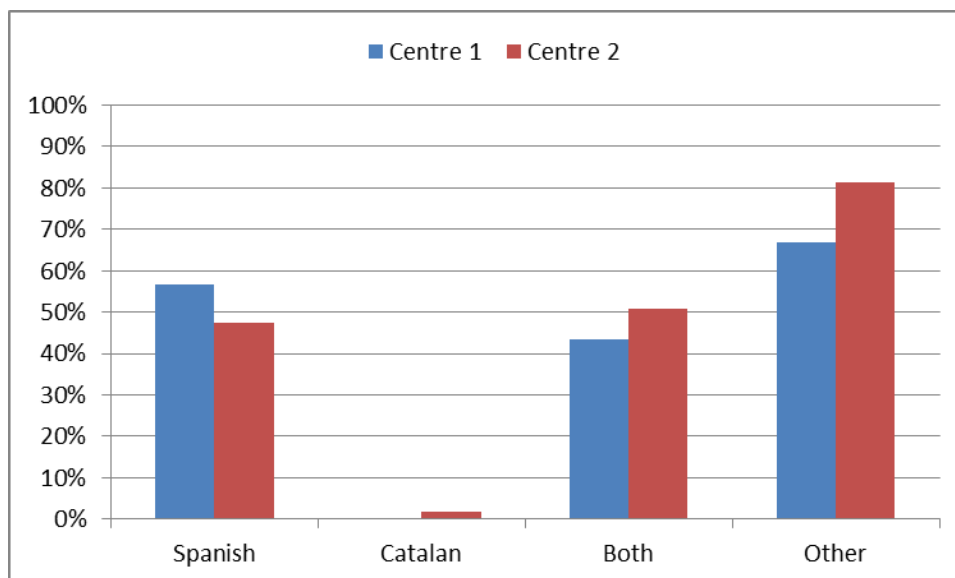


Figure 42: Quantitative responses to 'which languages do you use on the internet?'

Some students reported a perceived obligation to use certain languages according to the types of school projects they were given, as the following extracts attest:

Extract 40 (C2 I1 E1-2):

S1: valenciano y en castellano

R: [mmm]

S1: [bueno] **en inglés si tengo que buscar información sobre algo en inglés** ⁵⁶

As we can see, in extract 40, S1 mainly uses the internet in Spanish and Catalan but also says “in English if I have to look for information about something in English” [56]. This is just one example of a very common response from the participants about the use of English on the internet. We should note here that due to the ever increasing use of social networking and the ubiquitous access to the internet afforded by mobile devices, it is possible that many adolescents perceive using ‘the internet’, especially on a laptop or desktop computer, as a rather formal activity principally aimed at data retrieval and that in other activities such as playing videogames or using communication applications, such as Skype, the fact that they are online is not the main focus of the activity. This is just a speculation, but the reason for making this comment is that during the interviews the students had to be reminded on a number of occasions that social networking, communication, and gaming were also online activities, and that they should also be considered in their responses to the question.

Extract 41 (C2 I9 E1-2):

R: en valenciano buscáis cosas por internet?

Ss: también, sí, sí

R: también

S3: **sí para unos trabajos que nos dan en valenciano** ⁵⁷, los buscamos

R: pero hay otros usos del valenciano que no sean trabajos o::

Ss: no

Extract 42 (C2 I17 E3-4):

S1: en castellano, y **si hay que buscar algo** ⁵⁸, en valenciano

S2: yo igual

S3: sí eso

R: sí

S4: castellano

R: alguna vez en inglés

Ss: no

These extracts deal with the use of Catalan on the internet. In extract 41, the researcher asks if the students use Catalan on the internet, S3 replies “yes for some projects they give us in Valencian” [57]. The researcher then asks if there are other uses of Catalan that are not projects and all the students say no. Likewise, in extract 42, S1 claims to use Catalan “if it’s necessary to search for something” [58], S2 and S3 both agree with this. The researcher asks the students if they ever use English on the internet and they all say no. These students indicate that they only use Catalan on the internet if it is an obligation such as data retrieval for a school project; it may be relevant that these comments come from students of Spanish-dominant Centre 2.

Another area which affects language use on the internet is the language of applications and websites. The students are clearly influenced by this, although some of them are not able to articulate why, as we will see in the following extracts:

Extract 43 (C2 I1 E1-2):

S2: **según sea la aplicación** ⁵⁹ pues en algunas valenciano y en otras inglés

R: explícame un poco más de cuando lo usas en inglés?

S2: pues, por ejemplo en el Instagram uso el inglés

R: pero es que la otra gente habla en inglés?

S2: no sé

R: simplemente en inglés no? porque te gusta?

S2: sí

Extract 44 (C2 I8 E1-2):

S1: en inglés y en castellano, **porque hay redes que no se puede utilizar en castellano** ⁶⁰, normalmente se utiliza en inglés

Extract 45 (C1 I8 E4):

S2: català i castellà

R: català i castellà? en quin context cada una?

S2: pues, jo és que normalment per exemple **el tablet està en català aixina que tot el que busque apareix en català**

R: o siga, el google ho tens ficat en [xxx] en català, molt bé, i el castellà?

S2: **el castellà, en el ordenador**

R: en ordenador

S2: **tinc aplicacions que no apareix en català** ⁶¹

R: molt bé

In extract 43, S2 indicates changing between Catalan and English “depending on how the application is” [59]. The researcher asks for an example of using English and S2 mentions the popular application Instagram. The researcher asks if this choice is because other Instagram users speak in English, but S2 does not know what to say. The researcher asks if this choice is simply because S2 likes English, to which she agrees. From this exchange we can see that young adolescents are not always able to explain their attitudinal preferences, although the fact that there is a clear preference is evidenced by the behavioural choices they make. In extract 44, S1 shows sensitivity to the group language on social networking sites. She uses both English and Spanish on the internet “because there are networks that you can’t use in Spanish” [60] and normally English is used. The fact that she is flexible to the primary language of a social network and changes to the majority language shows an example of the effects of language socialisation in virtual communities. Finally, in extract 45, S2 reports using both Spanish and Catalan on the internet. The researcher asks in which context each language is used and S2 answers “my tablet is in Catalan so everything I search for appears in Catalan”. The researcher asks about Spanish and S2 replies “Spanish, on my computer [...] I have applications that don’t appear in Catalan” [61]. From these comments we can see that the language settings of S2’s tablet and desktop computers affect the languages she uses on the internet. It is interesting to note that the language settings on modern computers automatically affect the language settings in popular search engines, such as *Google*, it is not clear whether or not S2 makes this connection but the reason that her search results appear in Catalan is because her tablet is set to that language. In a similar vein to Cameron and Larsen-Freeman’s (2007) observation about text messaging, we propose that this illustrates complex interplay between language attitudes, language choice, and external communications technology.

A very common way for adolescents to use the internet is by playing online, multiplayer videogames. Given the fact that most of these videogames feature inter-player communication as a standard aspect of gameplay, the use of language is very pertinent.

Extract 46 (C2 I15 E1-2):

S1: me gustan bastante los [...] videojuegos multijugador

R: son estos que se puede jugar online no?

S1: sí

R: y estás hablando mientras juegas

S1: sí

R: te parece una buena forma de aprender idiomas?

S1: **sí, yo he aprendido bastante así, sobre todo vocabulario** ⁶² [...] porque los videojuegos no suelen poner en inglés y-

R: y además me imagino que es en directo no? [hablan]

S1: [sí]

R: y así que es como, formas parte de una comunidad

S1: hm mm ((agrees))

Extract 47 (C2 I19 E1-2): (about using English in online multiplayer)

R: qué me podáis contar de estos grupos de vuestro uso del inglés en esos contextos

S1: pues que **es difícil adaptarse** ⁶³ pero

S2: **te cuesta** ⁶⁴

S1: **consigues comunicarte con ellos y eso es bueno** ⁶⁵

R: pero bueno al final es algo que podáis conseguir no?

Ss: sí

R: y eso cómo os hace sentir?

S2: bien

S1: a gusto

S3: **porque dominas un idioma y eso es bueno** ⁶⁶

In extract 46, S1 says that he really likes playing online multiplayer videogames. Asked if he communicates online while playing, S1 says that he does. The researcher asks if S1 thinks this is a good way to learn languages and S1 replies “yes, I’ve learnt quite a lot like that, above all vocabulary” [62] and then mentions that in offline contexts the videogames are not usually in English. The researcher asks if communicating during gameplay makes S1 feel like he belongs to the online virtual community of the game but S1 only implicitly agrees that this activity is like forming part of a community. We propose that he doesn’t agree directly because maybe he has never thought about the activity in those terms before and almost certainly does not realise the significance of the activity in a sociolinguistic sense. Alternatively it is possible that, due to limitations caused by his language proficiency, he does not feel like a fully inducted member of the virtual community. Difficulty in realising oneself as a fully-fledged member of an online virtual community is also expressed by the students in extract 47. They comment “it’s hard to

adapt” [63], and “you find it difficult” [64]. However, S1 also comments “you manage to make them understand you and that’s good” [65], the researcher asks how this makes them feel and they all reply that it is a positive feeling, S3 also adds “because you have command of a language and that’s good” [66]. For these students it seems that being able to take part in an online community in this way makes them feel good and comfortable as they are able to realise themselves as multilingual communicators in the context of an affinity group.

Extract 48 (C2 I13 E3-4):

S2: yo la mayoría inglés, **me parece más, no sé, más natural** ⁶⁷, pero castellano lo uso y rumano también para hablar, por Skype con mi familia y tal

The student in extract 48 also speaks Rumanian as a mother tongue, she reports using English, Spanish and Rumanian on the internet. She says that English is the language she uses most on the internet because “it seems more natural” [67]; this perception of English as the *sine qua non* language of social networking and information technology in general has been reported in previous research (Cunliffe, Morris & Prys, 2013). The student also uses Rumanian but seems to restrict this to using the videoconferencing program Skype in order to speak to her family. It is not clear whether she is referring to family in Romania or in Spain, however, this is a case of a heritage language being used on the internet to maintain family relationships and cultural connections, and thus constitutes a socialisation practice.

Extract 49 (C2 I15 E3-4):

S1: sí, yo uso internet en los tres idiomas, castellano más, **en inglés redes sociales porque sigo gente inglesa, y también videos en Youtube** también

R: ah en Youtube también?

S1: sí, y series subtituladas también suelo ver [...] **las traducciones no suelen ser muy buenas**

R: qué opinas de los programas doblados?

S1: los programas doblados, depende de como esté doblado pero normalmente las series que veo, si son así anime o algo así, **están bastante mal dobladas** ⁶⁸ y las veo en inglés subtituladas o algo así

Finally, in extract 49, the student comments “in English, social networks because I ‘follow’ English people, and also videos in Youtube”. The website *Youtube* is highly popular among adolescents and for this student it is a useful way for him to access original version television shows and series which he reports to watch regularly. He mentions subtitled programmes and comments that “the translations are often not very good” and he says that the

dubbed versions “are dubbed quite badly” [68] so he frequently watches original versions with subtitles in Spanish. We propose that it is only through access to the original versions, facilitated by the internet, and this student’s burgeoning multilingual capacities that he is able to make metalinguistic comparisons and realise that the dubbed versions are not as good as the original language; and then opt to use the original language resource (a multilingual behavioural choice).

This section has explored the languages that multilingual adolescents use to navigate the internet; it has also inevitably shed some light on the type of multilingual practices they engage in online. The following section will attempt to bridge these linguistic and behavioural choices with the affective domain by asking the students how they feel when using their languages on the internet.

Question 6: How do you feel when using Catalan / English / Spanish on the internet?

This question aimed at ascertaining more detail about the emotional side of online language use. Salient themes in the students’ comments were related to self-evaluation and self-affirmation, empowerment and autonomy, forming part of a wider community, and comparisons with offline communicative contexts. We also see some indication of reciprocal relationships between competence and attitudes. First, we will look at some comments in which the students indicate a re-evaluation of the self and thus use of the internet as a self-affirming activity.

Extract 50 (C2 I5 E1-2):

S1: pues, **las tres lenguas son bastante importantes**, me siento **más inteligente** ⁶⁹

Extract 51(C1 I15 E4):

S1: **culto** ⁷⁰, sabes más idiomas

S2: sí

R: culto no? ah, buena respuesta

S1: **inteligente** ⁷¹ también

Extract 52 (C1 I9 E2):

S1: pues bien porque, **me siento bien sabiendo que pone** ⁷² y eso

R: muy bien

S2: **estás contenta y orgullosa de poder entender lo que pone otra gente** que a lo mejor puede ser de estados unidos o inglaterra y **te hace sentir bien poder saber lo que dicen** ⁷³

In extract 50, the student considers all languages holistically, commenting “all three languages are quite important”, and goes on to say that being able to use them on the internet makes him feel “more intelligent” [69]. In extract 51, both students agree that knowing more languages and being able to use them on the internet makes them feel “cultured” [70], S1 also adds that this multilingual use of the internet makes him feel “intelligent” [71]. Finally, in extract 52, S1 comments about reading English online, saying “I feel good knowing what is written” [72], while S2 says “you’re happy and proud that you can understand what other people have written”, she specifically mentions people from the United States and England and goes on to comment “it makes you feel good to be able to know what they say” [73]. What all these comments have in common is that the use of multiple languages on the internet results in positive self-conceptualisation, specifically feeling happy, proud, cultured, and intelligent for being able to control multiple linguistic resources and for being capable of orienting oneself in the seemingly limitless virtual landscape, where, of course, these adolescents often have to negotiate their identity in the face of unclear or unknown linguistic, pragmatic, and cultural norms.

Another very interesting comment mentioned feelings of future orientation, as we can see in this example:

Extract 53 (C1 I15 E4):

R: y cuando te toca usar inglés en internet?

S2: a mí me gusta, me gusta porque yo además lo pongo, lo quiero utilizar en inglés porque **lo que quiero es aprender inglés de mayor**

R: ah, tú pones el ordenador en inglés también?

S2: sí, algunas cosas las pongo por ejemplo, yo que sé, alguna aplicación, la pongo en inglés para aprender algo de inglés, es que **yo de mayor quiero hablar inglés**⁷⁴

R: y una pregunta para ti entonces, en qué lengua tienes el móvil?

S2: el móvil? el móvil lo tengo en inglés ((laughs))

In this extract, S2, who also speaks Arabic as an L1, comments that she likes using English online because “what I want is to learn English when I’m older”. She says that, in order to achieve her goal of learning English, apart from trying to use the language online she also sets the language settings to English for certain applications and programs on her computer, again here she reiterates that this is because “when I’m older I want to speak English” [74]. The

researcher asks her which language she has set her mobile phone to, she replies that her mobile is also set to English and laughs. In this sense, S2 uses English on the internet to project into imagined language communities and conceptualise a possible future ‘ideal self’ as a speaker of another language (Dörnyei, 2005; Norton, 2001, 2013).

The self-affirmation we have seen in the examples above can be linked to, on the one hand, heightened communicative ability, and on the other, the empowerment and autonomy it engenders. We can see some examples of this in the following two extracts:

Extract 54 (C2 I18 E3-4):

S1: si por ejemplo en Twitter que es bastante famosa la red social si sigues personas por cualquier cosa que hablan otro idioma y eso también te motiva a ti para empezar a leer en ese idioma no? de cierta manera es **llevar a uno mismo a utilizar más un idioma**⁷⁵ para aprenderlo más

Extract 55 (C2 I20 E1-2):

R: cómo te hace sentir poder usar el inglés en internet?

S1: me hace sentir muy bien porque, había veces antes cuando no lo utilizaba cuando no sabía tanto que hablaban y yo no me entro de lo que decían y te sientes como **sin poder aportar**, estando **fuera de la conversación**, y **ahora sabiendo inglés puedes aportar y puedes ayudar** o puedes comunicarte con otros porque en internet **no siempre te comunicas alguien que es español**, si te comunicas con alguien alemán o de otro idioma que no sabes en inglés **es como unir a todos**⁷⁶

In extract 54, S1 says that ‘following’ speakers of other languages on the social networking application Twitter can motivate a desire to read in their languages. He proposes that it is also a way to make oneself use a language more in order to learn it better. The student specifically uses the phrase “lead oneself to use a language more” [75] which, in this context, connects the ideas of authenticity (the use of an authentic online ‘text’ such as Twitter), empowerment (the ability to ‘follow’ users who speak other languages), and autonomy (the self-motivation to improve language competence). In extract 55, S1 talks about using English online and mentions a feeling of powerlessness, commenting that before he knew English he did not really understand what the other internet users were saying which made him feel “unable to contribute” and “removed from/outside the conversation”. In this sense, S1 is referring to feeling powerless and isolated by not sharing the group language. The student goes on to comment “now knowing English you can contribute and you can help”. This comment is interesting from a sociolinguistic perspective because not only does it refer to empowerment, it

is also clear from using words like ‘contribute’ and ‘help’ that S1 feels like he belongs to a community of practice with which he wishes to share knowledge, experiences, and information. S1 also makes the observation that “on the internet you don’t always communicate with someone who’s Spanish” and for that reason English “is a way to unite everyone” [76]. He clearly sees English as the online *lingua franca* and the use of the word ‘unite’ again indicates a sense of community.

In fact, the notion of ‘community’ is a crucial factor in terms of online multilingual communication, and is specifically referred to when students talk about their experiences with multiplayer videogames and social networking sites and applications, as the following extracts will attest:

Extract 56 (C2 I18 E3-4):

S3: cuando juegas online y eso hay muchas veces que **pueden hablar en inglés la mayoría** ⁷⁷

R: tú juegas online en grupos de habla inglesa, no?

S3: sí alguna vez sí

R: y qué reacción tienes cuando juegas esos videojuegos?

S3: hombre pues, intentas aprender el idioma para así comunicarte mejor

R: puedes identificarte con el grupo?

S3: sí

Extract 57 (C2 I2 E1-2):

S1: y en inglés como que me gusta más escribir con **los de rol** ⁷⁸

Extract 58 (C2 I5 E1-2):

R: y el uso del inglés en internet?-

S1: porque, **las redes sociales suelen haber más internautas ingleses** y también **es muy importante para eso** ⁷⁹

Extract 59 (C2 I21 E1-2):

R: me puedes hablar un poco de los videojuegos?

S1: por ejemplo **te explican, cosas sobre un personaje entonces lo tienes que leer y bueno supongo que con eso aprendes bastante como vocabulario y tal**

R: juegas a estos videojuegos multiplayer online?

S1: sí, sí, en línea sólo puedes hablar en inglés [...] entonces para comunicarte con tu equipo digamos sólo se puede utilizar el inglés porque más que nada porque no lo entendería **tu equipo, tus aliados**

R: y no tienes ningún problema en meterte en el grupo

S1: no no porque **te haces con el rollo de hablar y entiendes todo y va bien** ⁸⁰

The student in extract 56 mentions that when playing online multiplayer videogames “the majority [of players] speak in English” [77], he says that he reacts to this by trying to learn more English so that he can communicate better with the other players. The researcher asks if the

student feels he can identify with the group and he agrees that he can. In extract 57, the student reports using English on the internet because he likes to communicate with other players in the role-playing games; the word ‘rol’ [78] here is a type of loanword translation indicating *role-play*. In extract 58, when asked about online use of English, the student comments “social networks usually have more English internauts [...] it’s very important for that” [79]; when the student says ‘*para eso*’ he is referring to using English to communicate with the English-speaking ‘internauts’ and join their virtual communities. Finally, in extract 59, when asked to talk about language use in online multiplayer videogames, the student points out that other members of the gaming community “explain things about a character to you”, he continues “so you have to read and, well, I suppose with that you learn quite a lot, like vocabulary and stuff”. The student goes on to explain that in online gaming you can only speak English because this is the way to communicate with “your team, your allies”. The researcher asks if the student has any problems getting involved with the groups of gamers, the student answers that he doesn’t because “you get used to speaking, you understand everything, and it all goes well” [80]. This student’s comment on other role-players explaining things about the game is indicative of a socialisation practice in the sense that more experienced members of the community help to integrate newer members (Ochs, 2000).

Another interesting issue to emerge from this interview question was the students’ use of language on the internet as a reflection of, or reaction to, their offline linguistic environment.

We can see how this is indicated in the following extracts:

Extract 60 (C2 I19 E1-2):

S2: a mí me hace sentirme mejor al utilizar el inglés y el valenciano porque castellano **como se habla de siempre y es algo que utilizas día a día es más fácil** ⁸¹ que usar el inglés o el valenciano

Extract 61 (C2 I17 E3-4):

S3: para mí es más fácil el castellano

R: el castellano?

S3: **hablamos con más personas en castellano** ⁸²

Extract 62 (C1 I9 E2):

R: y en inglés alguna vez? cómo os hace sentir?

S1: de buscar información?

R: sí, de buscar información o incluso jugar un videojuego o algo así

S2: si es eso, a mí cómodo
 R: cómodo no?
 S2: sí
 S1: **cómodo** porque nadie te está-
 S2: no sé
 S1: **nadie te está-**
 S2: [mirándote]
 S1: [**escuchándote**] **ni mirándote**⁸³ entonces sí que lo entiendo y bien, es cómodo también

In extract 60, the student says that he feels better using English and Catalan online because he uses them less in his offline environment. Speaking about Spanish he says that “as you always speak it and it’s something you use on a daily basis it’s easier” [81], we propose that what the student means is that it’s more challenging for him to use English and Catalan and therefore using them successfully online allows him to satisfactorily fulfil his communicative potential and realise his multilingual identity. Extract 61 shows another example of how offline sociolinguistic practices extend to online language use (Cunliffe, Morris & Prys, 2013). The student mentions that it is easier for him to use Spanish online because “we speak to more people in Spanish” [82]; in other words, the easiest and most comfortable thing for this student to do is continue with established offline linguistic practices in his online practices. In extract 62, the researcher asks how the students feel using English online. S1 replies that he feels “comfortable” using search engines and playing online videogames, both students agree that this is because “nobody is listening to you or looking at you” [83]. This is an interesting comment given the (at least superficial) anonymity of being online, what the students are saying here is that the internet gives them a safe place to experiment with social interactions using a foreign language (Elias & Lemish, 2010), to experiment with their identity as multilinguals without feeling the pressures of the offline community where their identity could be known. Perhaps, for these adolescents, the internet allows them to experiment with a prestige language without the fear of a negative evaluation from their peers for any mistakes they might make. It is likely here that perceived competence has an effect on language attitudes (Lasagabaster, 2005, 2007; Loredó Gutiérrez *et al.*, 2007; Safont Jordà, 2007), we shall now explore indications of a more reciprocal relationship between competence, motivation, and attitudes.

In line with earlier attitudinal research (Baker, 1992; Lasagabaster, 2005), the following extracts indicate a reciprocal relationship between linguistic competence, motivation to learn, and language attitudes:

Extract 63(C2 I8 E1-2):

S2: yo bien porque, aunque el castellano y el valenciano lo controle más, pues el inglés también **así aprende y eso y que me gusta**⁸⁴

Extract 64 (C2 I9 E1-2):

S1: si lo entiendo bien, si no lo entiendo me siento **patética**⁸⁵ ((laughs))

S2: yo si lo entiendo bien, y si no lo entiendo, pues un [poco]

S1: [nerviosa]

S2: **nerviosa**⁸⁶, sí

R: vale, y tú?

S3: yo, si entiendo el inglés bien, pero si no lo entiendo, me siento **muy incómoda** y si tengo que explicar algo en inglés me siento **insegura**⁸⁷ [a describirlo]

R: [ok, vale], es lo mismo no?

Ss: sí

R: y- y-

S4: pues si busco y encuentro lo que quiero bien pero se no pues, [xxx] me pongo **nerviosa**⁸⁸

R: vale, un poco frustrante, no?

S4: sí

In extract 63, the student reports feeling good using all three languages online, she says that, although she has greater control over Spanish and Catalan, she also uses English because “in that way I learn and I like that” [84]. For this student using the internet in English allows her to learn more about that language and then feel good about using it. We propose that this is evidence of a reciprocal link between language competence, language attitudes, and modes of language use; furthermore, as attitudes and motivation are so closely entwined, the experience described by this girl is likely to have a motivating effect. In extract 64, the students say that if they understand English on line they feel good, but when they do not understand S1 reports feeling “pathetic” [85], S2 says she feels “anxious” [86], and S3 says she feels “very uncomfortable” and especially if she has to use English to explain something she feels “insecure” [87]. This last comment by S3 relates to ideas of language ego (Guioria, 1972) and narcissistic injury (Cline, 2001) which we also saw reflected in hypothesis 2 (‘Knowing [language] makes me feel intelligent’); the age of these adolescents makes them particularly sensitive to negative peer evaluation (Walqui, 2000). S4 makes that comment that when she

uses English to search for something on the internet and is not successful she also feels “anxious” [88] and agrees with the researcher that it is a frustrating experience. Basically, the students agree that if they use English successfully on the internet (i.e.: understand something or find what they are looking for) they feel good; this would indicate empowerment and feelings of self-efficacy from having carried out an authentic language task. However, if they are not successful a range of negative emotions seem to appear; they mention: anxiety, frustration, insecurity, and negative self-evaluation (feeling pathetic). Again, we put these comments forward as evidence of reciprocity between competence and attitudes when language use is mediated through the internet and we interpret this as a further illustration of subcomponent interconnectivity.

This section has explored some of the ways in which linguistic and behavioural choices interact with the affective domain. The following section will further explore online multilingual practices with a focus on a very specific and uniquely multilingual language practice, namely, translanguaging.

Question 7: Do you mix languages on social network sites?

This question asked the students to consider incidences of codeswitching, or the wider term ‘translanguaging’, when they used their languages on social networking websites and applications. Cenoz and Gorter (2011a) consider translanguaging to be an important multilingual practice which shows creative and strategic interaction among language systems, and, of course, heightened metalinguistic awareness. Furthermore, Li Wei (2011b) considers that translanguaging not only involves the transmission of information but also the representation of relationships, identities, and values. Additionally, Paolillo (2011) argues that translanguaging in computer-mediated communication establishes cultural authenticity within the shared cultural and linguistic contexts necessary for the practice to take place. Bearing this in mind, salient themes in the students’ comments were related to, *inter alia*: metalinguistic awareness, socialisation practices and the perceived social situation, perceived characteristics of

the languages, and what we will call, for the purposes of this study, ‘pragmatic codeswitching’; that is, language-switch motivations that are consciously targeted at producing a specific effect.

First, we will look at metalinguistic awareness. We should remind ourselves that metalinguistic awareness consists of being conscious that language goes beyond simple meaning, language is malleable, and words and referents can be separated. For Jessner (2008b), the integration and/or separation of linguistic resources, balancing those resources with perceived or real requirements, and the conscious manipulation of and reflection on linguistic rules, constitute defining features of multilingual speakers. It is not difficult to see how all of these use and management skills are embodied in online translanguaging practices.

Extract 65 (C1 I15 E4):

R: y las abreviaturas? por ejemplo poner una k en vez de que

S2: eso no lo hago yo

R: tú no? por qué

S2: porque no me gusta

R: no te gusta?

S2: **si vas a escribir algo lo escribes bien** ⁸⁹

R: vale, y tú?

S1: ah pues yo sí lo utilizo mucho

R: y por qué lo usas?

S1: porque como hablo en diferentes idiomas, por whatsapp por donde sea, pues **la misma letra te sirve para todos los idiomas**, porque en rumano el que se escribe con c h y la e aquí se escribe q y en cualquier otro idioma con k, entonces, ponerlo con k me resulta un poquito más fácil, **así lo entiende cualquiera** ⁹⁰

In this extract, the researcher asks if the students use the type of abbreviations common on social networks and mobile devices, also known to form a part of what Crystal (2001) calls ‘netspeak’. The example given by the researcher is abbreviating the Spanish/Catalan conjunction *que* to the letter K. S2 says that she does not use abbreviations because she does not like them, when pushed a little further she explains “if you’re going to write something, you write it correctly” [89]. This indicates metalinguistic awareness in that the student not only considers language as a channel of communication but also abstracts it as a system which is subject to socially imposed constraints (i.e.: what is considered ‘correct’); Jessner (2006) argues that this ‘linguistic objectivation’ is a characteristic of the multilingual speaker. On the contrary, S1, who is also a Rumanian speaker, says that she frequently engages in the practice of

abbreviating words in computer-mediated communication. What is interesting about her comments is not the fact that she uses abbreviations but the way she rationalises this practice. She says “you can use the same letter for all the languages”, she goes on to explicitly explain that in Rumanian the conjunction is *ce* /tʃe/ while in Spanish it is *que* /ke/ and for this reason using the letter k is easier for her because “like that anyone can understand it” [90]. We propose that this illustrates new multilingual digital literacy. Such a strategy could only come from contact with multiple languages and the heightened metalinguistic awareness it engenders due to interaction between language systems.

Extract 66 (C2 I13 E3-4):

S2: **el valenciano y el rumano se parecen bastante** mucho y para mí **es fácil hablar valenciano porque me ayuda por el rumano**⁹¹, pero se mezclan unas cosas son muy muy [xxx]

In this extract we can see another clear example of metalinguistic awareness. The student says “Valencian and Rumanian are quite similar [...] it’s easy to speak Valencian because Rumanian helps me” [91]. She indicates that switching between Catalan and Rumanian is common for her because there are many similarities between the languages. She also says that her knowledge of Rumanian helps her to use Catalan. Again, this indicates a move beyond the simple symbolic potential of language (i.e.: meaning) to an objectivation which affords the realisation that one system may facilitate another. As a related thought, this could have interesting implications for the promotion of Catalan among first or second generation immigrant children from Rumania (the largest immigrant group in Castellón province), as Gorter and Cenoz (2011) point out, strategic training in one language can be transferred to another and the closer these languages are to each other increases the potential benefit.

Extract 67 (C2 I19 E3-4):

S2: sobre todo el castellano y el inglés, a lo mejor alguna palabra en inglés que no lo sabe pues **ponerla entrecomillado en castellano**⁹²
S3: sí, **eso lo hacemos habitualmente**⁹³

This last extract indicates metalinguistic awareness in the sense of multilingual literacy practices. S2 comments on switching between English and Spanish, saying that if you don’t know a word in English you can “put it between speech marks in Spanish” [92]. S3 agrees, saying “we do this all the time” [93]. Placing a word in Spanish in a sentence written in English

is, in this example, a strategy designed to overcome a vocabulary deficit. However, code switches generally only take place at certain points of congruence between languages (i.e.: syntactical, lexical, or morphological), thus knowing how to do this correctly to maintain communication displays heightened metalinguistic awareness and highlights the fluidity between language systems while treating them as a single integrated whole. Furthermore, we propose putting the switch-word between speech marks is a *supralinguistic* act, it indicates that the switch is a conscious and explicit strategy designed to cover a vocabulary gap rather than a simple slip.

Another salient theme in the students' comments was socialisation and perception of the social situation, which often includes being aware of the language preferences and choices of others.

Extract 68 (C2 I14 E3-4):

R: vale, puedes cambiar entre castellano y valenciano, y con qué motivo, por qué cambias?

S1: porque **suelo hablar en valenciano con mis amigos entonces hay uno que habla en castellano y tenemos que hablar en castellano**⁹⁴, lo que pasa es que como estoy hablando en valenciano todo el rato me escapa alguna

R: pero una palabra suelta también puede ser, como hablando en castellano y de repente pones **mone** o algo así? o **i avant?**⁹⁵

S1: sí, así

R: sí, eso es lo que quiero saber, por qué puede salir una frase en valenciano al final de una conversación en castellano?

S1: porque, o sea, la utilizamos mucho y eso

R: vale, puede ser una forma de decir soy de aquí?

S1: bueno, **no soy de aquí pero llevo bastante aquí y se me queda alguna palabra**⁹⁶

In this extract, the researcher asks the students to give reasons why they switch between Catalan and Spanish. S1 comments “I usually speak Valencian with my friends, then there’s one who speaks in Spanish and we have to change to Spanish” [94]. This comment is very interesting in the context of the Valencian Community because it is indicative of the difference in prestige between Catalan and Spanish. S1 is basically saying that although the main language of his social group is Catalan, all group members will switch to Spanish to accommodate a Spanish speaking friend. This has a great deal to do with the sociolinguistic situation of the community (see: chapter 5) and, due to the higher prestige of Spanish, it is unlikely that the same kind of

accommodation would be made the other way round. The researcher then asks about intra-sentential switches from the majority to the minority language, offering the examples *i avant* (that's it) and *mone* (let's go – from the Catalan *anem-nos-en*) [95] which are both common colloquialisms specific to Castelló. S1 confirms that this kind of switch happens frequently. The researcher asks S1 if this could be a way of stating that he is 'from here'. S1 responds "I'm not from here but I've been living here for quite a long time and I've picked up some words" [96]. Although we do not actually know where S1 is from, his comments imply that he is from another Catalan speaking area, the fact that he has picked up some colloquial phrases from conversations with his friends which he now uses as switches in computer-mediated communication is indicative of language socialisation processes, such as status and identity marking (Duff & Talmy, 2011).

Extract 69 (C2 I10 E3-4):

S1: en valenciano

R: en valenciano?, me podéis explicar, sobre todo tú como andaluza, por qué usas una palabra en valenciano, en [plena frase]?

S1: **[porque estoy] acostumbrada de tanto oírlo, entonces ya me sale** ⁹⁷

R: ya te sale no? así que puedes escribir una frase en castellano y de repente sale, no sé, i avant o [algo así no]?

S1: [sí pero, por ejemp-] sí, eso sí

R: eso sí, no?

S1: y el otro de ara

R: ara también

S1: sí

Extract 70 (C2 I13 E3-4):

S3: yo sí he estado hablando con un amigo o algo y utilizo expresiones como please o seriously pues sí

R: mm, pero por qué dices please en vez de por favor?

S3: **no lo sé, porque, me lo ha pegado a mí o algo** ⁹⁸

R: ah ah, vale ok, bueno entonces es **la influencia de los amigos** ⁹⁹ no?

S3: sí

In extract 69, S1 is from Andalucía, earlier in the interview she claimed to feel uncomfortable using Catalan. However, here she reports codeswitching from Spanish to Catalan on social networks. When the researcher asks her why, she says "because I'm used to hearing it so much, so I just do it" [97]. Again the researcher offers the colloquial example *i avant* which S1 recognised using, she also adds the more formal Catalan word *ara* (now), which is a common

switch-word probably for its closeness to its Spanish counterpart, *ahora*. This could indicate a case of language socialisation in school which spreads to media use out of school; indeed, another example of offline practices being carried online (Cunliffe, Morris & Prys, 2013). Perhaps social networking provides S1 with a safe space to experiment with and express a satisfactory bilingual identity within the context of the host culture (Thorne *et al.*, 2009; Elias & Lemish, 2010); this may explain why she feels uncomfortable using the language but this feeling is diminished in the ‘safe zone’ of internet communication. In extract 70, S3 comments that when communicating with friends he uses English expressions such as ‘please’ or ‘seriously’ in the middle of a conversation in Spanish. The researcher asks him why he uses please instead of the Spanish *por favor*, S3 replies “I’m not sure, because it rubbed off on me or something” [98]. The researcher asks if this is “the influence of his friends” [99] to which S3 agrees. Once again we propose that this is a socialisation practice in the sense of status marking within the group of friends.

Extract 71 (C2 I15 E3-4):

S1: yo, lo primero lo de estar hablando con gente de distintos- y esto sí que lo hago, lo de Skype que te decía antes que, estar hablando con un español y un inglés- bueno el español- los otros españoles- bueno no es español es mejicano, bueno, **sabe más inglés que yo** y eso **y cuando hay cosas que no entiendo yo se lo pregunto a él y me lo dice**¹⁰⁰ y:: esas cosas, y lo otro de utilizar palabras sí porque:: en los videojuegos que suelo jugar en inglés, hay, palabras que son cosas del juego que bueno también tiene su traducción en español pero ellos **lo juegan en ingles también**¹⁰¹, y estoy hablando en castellano y, si es algo lo digo en inglés, la palabra, aunque no la conversación entera pero la palabra sí

In this final extract related to socialisation, S1 mentions using the videoconference program Skype and playing online multiplayer. Regarding his use of Skype, he says that he sometimes talks online with an English-speaker and a Spanish-speaker at the same time (he does not specify if the conversations are separate or not). He says that the Spanish-speaker (a Mexican) “knows more English than me [...] and when there are things I don’t understand I ask him and he tells me” [100]. S1 then mentions his interactions in English-language online gaming environments, he says that there are various words which form part of the game and although these words have a Spanish translation the other players “play the game in English as well” [101], so S1 uses the English words even if the rest of the exchange is in Spanish. We can see

two different translanguaging practices at play here: 1) switching between languages in two simultaneous conversations; and 2) intra-sentential switching in the gaming environment. Both of these practices are related to language socialisation. In the Skype example S1 is relying on the greater linguistic experience of his Mexican friend who seems eager to help him; this is an example of an organized interaction where less and more experienced persons come together in the structuring of knowledge (Ochs, 2000). The fact that S1 actively seeks out the help of his friend (“I ask him and he tells me”) also indicates that this ‘novice’ shows agency in the socialisation process (Bayley & Schecter, 2003). In the online multiplayer example, the use of the foreign language marks insider status within the gaming circle which we propose ties into previous theory regarding Discourses and social languages (Gee, 1996; Knobel & Lankshear, 2015), status marking (Duff & Talmy, 2011), and, in terms of translanguaging, indexing alignment (Androutsopoulos, 2012).

In the following extracts the students indicate that it is not only the social situation but also empathy with their interlocutor that may affect their language choice or suppress codeswitches.

Extract 72 (C1 I12 E1):

S1: demà sí

R: demà sí? Y por qué dices demà en vez de mañana?

S1: no sé, es que me sale así

R: te sale así no? pero eso depende de con quién hablas?

S1: sí

R: hay un momento es que no vas a cambiar [...] con quién hablarías?

S1: pues **con la gente que habla en castellano sólo entonces sólo hablo en castellano**¹⁰² y a veces inglés porque esas palabras como please y eso

R: **entonces la persona influye el cambio de castellano valenciano pero no influye tanto el cambio de castellano inglés**¹⁰³, no?

Extract 73 (C1 I4 E1):

S1: (about Whatsapp) sí, i per exemple, si parles les dos llengües (1.0) no ho sé, pues a vegades vas canviant un poc

R: i per què canvies?

S1: pues, per **si la altra persona**, penses que **està més còmoda en l'altra llengua**¹⁰⁴

R: per la comoditat de la altra persona, per a acomodar-se un poc a lo que veus que està més a gust?

S1: sí

In extract 72, S1 mentions switching from Spanish to the Catalan word *demà* (tomorrow), when asked if there is any situation in which she would not use such switches she says “with people who only speak Spanish then I only speak Spanish” [102]. She goes on to mention that she may still use very well-known English words such as ‘please’ and the researcher responds to this by concluding “so the person influences a change from Spanish to Catalan but not so much from Spanish to English” [103]. Alternatively, in extract 73, S1 says that she usually uses Catalan when talking to friends on Whatsapp but she will sometimes change to Spanish if she senses that “the other person is more comfortable using the other language” [104]. She agrees with the researcher that she does this in order to accommodate the interlocutor and make them feel more comfortable. Both extracts show examples of language-prestige inequality. Catalan is local and perceived as unimportant whereas English should be known by everybody, and Catalan speakers are more inclined to accommodate Spanish speakers than the other way round.

Another common and very interesting theme in the students’ comments was related to codeswitching based on the perceived characteristics of the language.

Extract 74 (C2 I6 E1-2):

R: escribir en castellano y cambiar a valenciano, eso también [lo hacéis], no?

Ss: [también] sí ((laugh))

R: y cuál es el motivo de cambiar?

S1: que **si lo pones todo igual es un poco más aburrido**¹⁰⁵

R: aah, muy bien, así que es más interesante mezclar no?

Ss: sí

R: y tú lo que has dicho es súper interesante has dicho que a veces te gusta más una palabra

S2: sí

R: sí sí, claro es como, **hay algunas palabras que os molan más**¹⁰⁶

Ss: [sí] ((laugh))

Extract 75 (C2 I9 E1-2):

Sx: [el please] es más corto [que el]

R: [más corto]

Sx: por favor y tardas menos en decirlo

R: sí eso también me han dicho que es más corto

S3: **suenamuy americano y lo americano mola**¹⁰⁷

R: me ha parecido muy interesante, lo de suena más americano

S3: es que me gusta, me gusta lo americano, pero es que me parece [muy difícil]

S2: [suena] suena muy bien o sea, interesante no?

S3: sí

S2: **escuchas una palabra y dices qué es esto voy a buscarlo, y si te gusta pues lo dices y te parece muy interesante**¹⁰⁸

R: ah

S2: lo comentas y muchas cosas

In extract 74, the students talk about codeswitching from Spanish to Catalan. The researcher asks why they do this and S1 replies “if everything you put is the same it’s a little boring” [105]. The researcher asks if it is more interesting to mix languages and the students agree. Finally, the researcher makes the comment “there are some words which you think are cooler” [106], the students agree and laugh. In extract 75, the researcher and the students are talking about using some English words in Spanish sentences. S3 says that using an English word like ‘please’ “sounds very American and American things are cool” [107]. This is likely a projection, through language, into an imagined community (Norton, 2013). Although S3 may have visited America, it is more likely that this attitude has been shaped by language exposure through television media and the internet. The protagonists of American media products such as films and TV series permeate into the lives of young people in unexpected ways (Eken, 2003) and undoubtedly have a notable influence on their perceptions of English. The other students agree that Americanisms sound good and seem interesting to them. S2 comments that when she hears a word in American English she says to herself “what’s this? I’m going to search for it” (she undoubtedly means by looking on the Internet). She concludes by saying that “if you like the word you use it and it seems interesting to you” [108].

Extract 76 (C2 I7 E1-2):

S3: **para cambiar un poco**¹⁰⁹

R: para cambiar un poco no? er, me puedes dar un ejemplo de que haces, er, como cambias, o qué palabra sueles poner?

S3: pues, please

R: please, no? es que **antes alguien ha dicho que suena más cariñoso**¹¹⁰ incluso, es que, claro, cada persona tiene sus motivos

S2: es que por favor, no sé

S1: **por favor suena muy- ((serious tone of voice))**¹¹¹

S2: [please] ((sweeter tone of voice))¹¹²

S1: muy serio, no?

R: muy serio, y please suena menos serio?

S1: sí

R: ahh, muy bien, y alguna abreviatura?

S3: umm, hello

R: hello también, pero empieces con hello y luego en castellano?

S3: sí?

R: y por qué decís hello?

S2 no sé, **porque hola es muy repetitivo**¹¹³, no sé

R: ahh, ok, vale, así que es algo diferente no? decir hello?

S1: sí

In this extract, S3 comments that switching to English words is “to mix it up a little” [109], the example he gives is the word ‘please’. In an attempt to solicit their motivation for switching, the researcher comments that earlier a student had said that ‘please’ sounded “more affectionate” [110], S1 and S2 respond by explaining, using their tone of voice (as can be seen in the extract [111, 112]), that the Spanish *por favor* sounds really serious while the English ‘please’ sounds much sweeter. For these students, codeswitching to certain expressions in English on social networks sounds less serious than only using Spanish; previous research has already recognised the use of codeswitching to ease tension in a conversation (Baker, 2001). Finally, the students mention using the English greeting ‘hello’, when the researcher asks why they do this S2 replies “because *hola* is very repetitive” [113]. In this sense, codeswitching to English on social networks helps to break the monotony of everyday conversations.

Extract 77 (C2 I1 E1-2):

R: me podéis explicar un momento en que eso ha pasado? es como cambiar idiomas en una sola frase? por ejemplo

S1: pues una palabra, a lo mejor **si estás más acostumbrada decirla en un idioma pues, te viene así**¹¹⁴, por ejemplo si estoy hablando en castellano y me sale una palabra en valenciano

Ss: sí

R : y [tú]?

S3: [a mi] también

S2: pues también

R: lo mismo, ok, lo que te sale del alma, no?

Ss: ((laughs))

S2: y a veces también cuando eso que **pa que quede más bonito a una palabra la dices en inglés**¹¹⁵

Extract 78 (C2 I18 E3-4):

R: y usas alguna vez el inglés en el Whatsapp?

S2: sí a veces sí **alguna palabrita suelta** como please como has dicho tú

R: como please

S2: sí sí

R: y me puedes explicar por qué please, por qué no por favor?

S2: **suená mejor**¹¹⁶

R: suena mejor?

S2: sí suena no sé, es una sensación, bueno [una sensación-]

S3: **sientes anglosajón**¹¹⁷

In extract 77, S1 talks about mixing between Catalan and Spanish and says “if you are more used to saying a word in a language, well, it comes to you like that” [114]. Alternatively, S2 comments on switching to English saying “to make a word more beautiful you say it in English” [115]. In extract 78, S2 reports using “loose little words” like ‘please’ because “it sounds better” [116]. When asked to explain this further he does not really know what to say, describing it as a kind of sensation, at which point S3 interjects saying that it makes “you feel Anglo-Saxon” [117]. We propose that this constitutes evidence of projection into an imagined community with which the speaker does not have any real-life contact (Norton, 2013).

Perhaps one of the most interesting issues surrounding codeswitching on social networking media to come out of the students’ comments was the idea of switching for pragmatic reasons, which we referred to earlier as ‘pragmatic codeswitching’. We suggest that pragmatic codeswitching is even more indicative of metalinguistic awareness than codeswitching for communicative purposes because the students are actively aware that certain linguistic strategies are more likely to lead to a result they want or more likely to be appropriate according to specific sociopragmatic norms. We see this as a further level of linguistic objectivation in which linguistic resources are integrated to respond to perceived communicative requirements (Jessner, 2008b).

Extract 79 (C2 I5 E1-2):

S1: pues por ejemplo, a veces estoy hablando en castellano y suelto una expresión así en valenciano como por ejemplo i avant que es una expresión en valenciano y **cuando quiero pedir algo, para que me hagan un favor, pues sí lo digo en inglés**¹¹⁸, o please

Extract 80 (C2 I6 E1-2):

R: sí, y por qué pones please?

S2: porque es una palabra bastante habitual para hablar porque te **es más corta, más cómoda**¹¹⁹

R: sí

S3: parece que please es un poco- como **más cariñoso**

R: ah, sí más cariñoso

Ss: sí sí

S3: como si dices- **si usted dice por favor es como si se está dirigiendo a una persona que la tiene respeto, y mientras tanto si usted dice please, pues es como a los amigos, familiares**¹²⁰

R: ah sí sí, entonces queda más familiar

Ss: sí

Extract 81 (C2 I13 E3-4):

S1: por ejemplo cuando me pongo en Reddit con alguno o algo así o me hace algún favor **digo gracias y escribo I love you o algo así**¹²¹

R: sí? sí sí cuál es la motivación? por qué usas esas palabras o esas frases en inglés?

S1: por qué? no lo sé la verdad

In these extracts the students all mention using English expressions to either modify or react to the behaviour of others. In extract 79, S1 says “when I want something, so that they do me a favour, then yes I say it in English” [118]; S1 also mentions simply adding the word ‘please’ at the end of a request for the same reasons (an example of ‘tag-switching’). In extract 80, S2 suggests a utilitarian motive for using ‘please, that “it’s shorter, more comfortable” [119]. However, S3 suggests a more emotional motive, saying that ‘please’ seems “more affectionate”. S3 goes on to explain this, saying “if you say *por favor* it’s like addressing a person courteously, while if you say please it’s like addressing friends, or family members” [120]. In this way, S3 appears to be suggesting that the use of the English word ‘please’ is a conscious pragmalinguistic strategy to lessen social distance. Finally, in extract 81, S1 says when he goes into the popular message board Reddit and someone does him a favour “I say thanks and I write ‘I love you’ or something like that” [121]. The researcher asks what his motivation is for using the phrase in English but S1 says that he doesn’t know. We propose that this is another example of pragmatic codeswitching, even though the student is not able to explain it.

Extract 82 (C2 I14 E3-4):

S3: yo? er, el ok porque es más, rápido que decir vale, con eso y-

R: ok, el ok?

S3: y no sé, en vez de buenas noches, na nit¹²² porque es más corto

R: ah sí? más corto

S3: claro

R: pero es sólo porque es más corto? no- no

S3: porque es más rápido, sí, no sé

S1: más rápido sí

R: y no provoca ninguna ningún sentimiento decir mm, please en vez de por favor o decir hello en vez de hola

S3: please es como más (1.0) no sé, como **más cariñoso, para que te lo deje antes**¹²³

R: sí, más cariñoso erm, comparado con por favor?

S3: sí, no sé, suena mejor

Extract 83 (C2 I16 E3-4):

R: y te ha salido alguna vez un please o algo así al final de pedir algo?

S1: ((laughs))

R: sí?

S1: **muchas veces sobre todo cuando quiero algo mucho mucho**

R: por qué? por qué please en vez de por favor?

S1: porque please es como please me das esto? quiero eso pero **con muchas ganas** ¹²⁴

Extract 84 (C1 I13 E3):

S2: puede que sea **en vez de hacer pucheros** ¹²⁵ pues pongo ple:::ase, y cosas así

S1: suena mejor

S2: sí suena mejor, suena más agradable

In these extracts we can see a further three examples of pragmatic codeswitching; that is, the switches to English are strategies which are consciously aimed at specific purposes. First, in extract 82, S3 mentions using the phrase *na nit* [122] (a colloquial shortening of the Catalan *bona nit* meaning ‘good night’). She says that she uses this phrase because it is shorter and quicker than the Spanish equivalent, *buenas noches*, but it is likely to have an identificatory function as well (similar to the way many Spanish-dominant bilinguals in the community will often use Catalan salutations such as *bon dia* (good day) or *adéu* (goodbye) even though the rest of the interaction is in Spanish). Later in the same extract, the researcher asks S3 to comment on her use of the word ‘please’. She says that using ‘please’ to ask for things sounds “more affectionate” and then makes the interesting comment “so that they give it to you quicker” [123]. In extract 83, S1 also mentions using ‘please’ to request things. The researcher asks S1 if he does this often to which he laughs and replies “a lot especially when I really really want something”. When pressed to explain further, he says that using ‘please’ is like requesting something “very enthusiastically” [124]. Lastly, in extract 84, S2 reports using a stretched version of ‘please’ (something like pleeeeease) “instead of pouting” [125]. We propose that what she means here is that asking a favour using the word ‘please’ is equivalent to making cute faces by pouting so that she is more likely to get what she wants; in other words, saying the word in this way could be considered a ‘lexical pout’. It should be noted that in the interview S2 stretches the word ‘ple:::ase’ to make it sound more emphatic and give the idea of it

substituting a 'cute face'. That these students are conscious that a specific codeswitch will result in a request being attended to more quickly, or seen as a more enthusiastic, emphatic, or appealing way to ask for something, is a further example of codeswitching with a pragmatic purpose, and a clear example of metalinguistic awareness.

Another reason behind codeswitching choices, which became apparent from the interviews, was linguistic playfulness and creativity (Baker, 2001; Todeva & Cenoz, 2009; Cenoz & Gorter, 2011a; Dewaele, 2010), especially using another language jokingly. In fact, marking a move as jocular or serious has been listed as one of the more frequent functions of translanguaging in computer-mediated communication (Androutsopoulos, 2012). The following two extracts indicate this codeswitching purpose.

Extract 85 (C1 I10 E2):

S1: yo no suelo hacerlo, a veces, no sé, **en plan broma** o algo así pero de normal no

R: tú lo haces en plan broma? a veces cambias-

S1: sí, pero **con alguien de mucha confianza**¹²⁶

Extract 86 (C2 I18 E3-4):

S1: lo de mezclar frases y eso en escrito con el español no me suele pasar y con el valenciano pero por ejemplo hablando con amigos y eso sí que a lo mejor, entre español y valenciano no suele pero en inglés sí que sueltas una frase y eso por a lo mejor un videojuego que has jugado que todos han jugado o por una frase que han visto en algún video o algo sí que sueltas alguna frase así, **siempre en plan broma** y eso **pero al final lo estás usando**¹²⁷

S2: **porque quedas bien con el amigo, no es lo mismo decir ok que bien**¹²⁸ (1.0) porque digamos es más- es mejor, no sé

In extract 85, S1 admits to sometimes codeswitching online "as a joke". The researcher asks S1 to confirm this which he does, adding that the switches are "with someone he feels close to" [126]. In extract 86, S1 says that he often codeswitches into English among his group of friends because they have been influenced by playing videogames. They often use words and phrases in English from videogames or other videos that they have all experienced and, therefore, all understand. He says that the codeswitching is "always as a joke" and adds "but in the end you are using [the language]" [127]. S2 also gives his reason for this type of switching, "you make a good impression with your friend", adding "it's not the same saying 'ok' as saying *bien*" [128]. It is interesting that this external influence from a foreign language is used online to

maintain and reinforce relationships between a group of friends who share the same L1s. Furthermore, although the students recognise that their use of a foreign language is in this context is informal and not very serious, they realise that they are still benefiting by actually using the language; we can consider this an affordance to engage in multilingual practices that online technology provides.

The theme of affordance is maintained in the following examples. The students talk about how the nature of online communication technology plays an important role in their language choices. Here, the students all make reference to the popular photo-sharing, video-sharing, and social networking platform Instagram.

Extract 87 (C2 I20 E3-4):

S1: realmente en redes sociales sí que es verdad que cuando pones un hashtag o es un hashtag o sea que hay palabras que como las redes sociales ya te vienen en inglés te acostumbras a utilizarlas en inglés, y por ejemplo hashtag en castellano yo no sabría cómo ponerlo¹²⁹, porque estoy acostumbrado a hacerlo en inglés

Extract 88 (C2 I21 E3-4):

S1: y luego [xxx] las redes sociales, hay una cosa que se llama hashtag que, tú pones una palabra, como- con la almohadilla y te lleva a la dirección entonces **donde hay más direcciones allí es en inglés, entonces** muchas de las redes sociales, como el Instagram **cuando subes una foto los hashtags que pones son normalmente palabras en inglés**¹³⁰

Extract 89 (C1 I14 E3):

R: usáis Instagram también?

Ss: sí

R: y seguís gente de habla inglesa, en Instagram?

Ss: sí

S1: a mí por ejemplo en twitter, **un día de repente me salió por gustos**¹³¹ y eso me empezó a seguir una de Australia y muchos de estados unidos y hablan conmigo en inglés

S2: y además también nos siguen- a mí en Instagram **me siguen gente de intercambio de Alemania**¹³² que pues también hablan en otros idiomas, en inglés en alemán

In extract 87, S1 reports codeswitching to English on social media because he is accustomed to using certain terms in English. He gives the example of the term *hashtag* (a method of promoting Instagram posts), saying that “I wouldn’t know how to use it in Spanish” [129]. The hash symbol used to identify hashtags (#) does have a name in Spanish, *almohadilla* (and in Catalan, *coixinet* or *quadradet*), but it is not too hard to see why the English term is more catchy and fashionable for adolescents to use. S1 probably also means not only using the term

‘hashtag’ but using the actual hashtags themselves, which are usually a short phrase with no spaces prefixed by the hash symbol (i.e.: #justmyluck, #nofilterneeded, etc.). While it is possible to write a hashtag in any language English is by far the most popular choice, even for non-native users of English. This is illustrated by the student in extract 88 who explains that a clicking on hashtag sends the user a web-address, he comments “most of the web-addresses out there are in English so [...] when you upload a photo the hashtags you put are usually words in English” [130]. It seems that, for this student, using hashtags in English ensures reaching a wider audience; this is a pragmatic reason for codeswitching afforded by the technology of Instagram. Finally, in extract 89, the students all report to ‘follow’ English-speakers on Instagram. Regarding affordances, S1 makes the interesting comment that she started to follow an Australian girl because “one day suddenly she popped up because of my ‘likes’” [131] and that this has also happened with people from the United States all of whom speak to S1 in English. S2 backs this up by commenting that she has been followed by German exchange students who had participated in a school exchange program [132] and this gives her a chance to see how her online friends communicate in English and German. Thus, the way these online platforms are programmed gives them inherent features such as ‘likes’ and the ability to ‘follow’ other users which we can see provides young people with affordances to engage in multilingual practices.

We conclude this question with some miscellaneous comments about the students’ translanguaging practices. Some students reported feeling comfortable with the use of different linguistic codes online.

Extract 90 (C1 I7 E4):

R: eso lo hacéis, el cambio de código?

S2: sí

R: y por qué lo hacéis?

S2: por qué? porque **te sientes cómodo hablando los tres y si lo sabes decir bien** ¹³³ -

R: lo pones en esa lengua?

S2: lo pones escrito

Extract 91 (C1 I9 E2):

R: me interesa mucho la motivación, por qué lo hacéis?

S2: ((laughs)) no sé, **empezó [alguien]**

S1: [aguien] no sé, es porque ahora-
 S2: **a decirte eso**, sabes? [y tú]
 R: [y lo has cogido tú no?]
 S2: **lo has cogido y ahora es cómodo, es decir algo normal**¹³⁴

In extract 90, S2 explains that he changes linguistic codes because “you feel comfortable speaking the three [languages] and you know how to say [something] well” [133] so it is not a problem for him to write things in the three languages he knows. In extract 91, the students explain that “someone started [...] to say that to you”, meaning that some friend will have initiated a codeswitch for a certain term or situation, and “you have taken it and now it’s comfortable, I mean it’s something normal” [134]. We propose that the more normalised codeswitching becomes in these students’ linguistic exchanges, the more comfortable they feel about incorporating them into their multilingual practices.

Extract 92 (C2 I12 E3-4):
 S2: yo no, yo castellano
 R: alguna vez has mezclado el valenciano con el castellano en un mensaje o algo así?
 S2: sí porque por ejemplo algún trabajo es en valenciano por ejemplo **el posa’t a prova**¹³⁵, sabes? entonces pues le pongo tienes el posa’t a prova, y no sé qué, que no entiendo, entonces mezclo
 R: vale, y eso supongo que es porque ese concepto sale en valenciano
 S2: claro
 R: vale ok, y en inglés nada no? no has dicho hello o please
 S2: ((excited)) sí eso sí
 R: vale por eso digo
 S2: eso sí
 R: y a ver, qué? please por ejemplo?
 S2: sí, please sí
 R: y por qué pones please?
 S2: no sé, me gusta más ((laughs)) que por favor, me gusta más
 R: te gusta más, ok, y la diferencia entre por favor y please, qué te parece?
 S2: no sé, a mi es que please me gusta, es que por favor lo veo, no sé, lo veo muy normal, me gusta más please
 R: ah, vale, por favor es muy normal y please me imagino que no es muy normal
 S2: claro que no porque la gente- claro que decir por favor- si te vas por ejemplo a Londres, sabes? allí sí que te dicen please no sé qué tal, sabes, por qué? porque **hablan please**¹³⁶
 R: sí
 S2: aquí que hablan- que dicen por favor, entonces me gusta más please

The student in extract 92 indicates that she has different reasons for codeswitching according to the language. First she claims to only use social networking platforms in Spanish. Then, when pushed a little further, she reports using Catalan to talk about school projects that are in that language (she gives the example of *el posa’t a prova* [135] – which are online interactive tests

in Catalan). The researcher asks her if that type of codeswitch is because she has internalised that concept in Catalan to which she agrees. Finally, after more prompting, she also reports using some words in English, especially the word ‘please’; she even sounds quite excited about this fact. She says that she prefers ‘please’ to the Spanish equivalent *por favor*. To her *por favor* sounds normal and perhaps a bit mundane, whereas ‘please’ is, to her mind, what the people in London say. It’s less normal, it’s cooler, and, thus, she likes it more. She even says that the people in London “speak ‘please’” [136], using the word as a synecdoche for the English language. To this student, the word clearly has a symbolic cultural value (Bourdieu, 1977, 1986); therefore, we also see this comment as a case of projection into an imagined language community (Norton, 2013).

Extract 93 (C2 I8 E1-2):

S2: yo porque a mí como que me sale ya decirlo en ese idioma, por ejemplo vale, ya normalmente pongo ok, no pongo vale, porque no sé siempre me sale, esa, [no sé]

S1: [yo también] porque no sé **hay palabras en castellano que son más largas que en inglés**, entonces sale más rápido **pues lo escribes y pones directamente la palabra en inglés**, y ya está

R: me podéis dar un ejemplo de que tipo de palabra ponéis en inglés?

S1: por ejemplo por qué, pues, pones why o

S2: sí, o qué, o qué what

R: ok, o why, please alguna vez?

S1 S2: sí sí

R: sí muchas veces se usa please también, y alguna abreviatura o algo así?

S1 S2: no, no

R: no, eso no, nada de LOL y todo eso?

S2: no

R: no, no sueles ponerlo, ok muy bien, y aparte de ser más rápido o más fácil hay algún otro efecto que tiene poner please o hello o lo que sea?

S1: no

R: no?

S1: y también **si te acostumbras más a ponerlo, entonces después mentalmente ya te sale, y te aprendes más rápido**¹³⁷

R: vale

S2: sin pensar, luego lo pones y ya está

R: ah! sin pensarlo

In this last extract, the students show more utilitarian attitudes to online codeswitching. S1 comments “there are Spanish words which are longer than in English [...] so you write the word directly in English”. While this seems to be a more utilitarian motive for codeswitching as the words are shorter in English, it is also further evidence of language objectivation (Jessner,

2006). The researcher asks if, apart from being quicker and easier, there is any other effect of using these words in English. S1 responds by commenting “if you get more used to putting it, then later mentally it just comes, and you learn faster” [137]. In other words, when you get used to writing certain words in English these words subsequently occur in your internal dialogue in English which makes the task of language learning easier. We propose that this is an example of learning through praxis and also that the addition of another language changes the way one thinks about language and linguistic creativity.

This section has explored the very specific online multilingual practice of translanguaging in social networking sites. The final section focuses on a question which asks the students to reflect on the interaction of technology and their multilingual practices.

Question 8: Do you think technology changes the way you use your languages?

This final question asked students to consider if their multilingual practices were affected by computer and communications technology. In this sense, the question aimed to ascertain to what extent there was interaction and interdependence between behavioural and cognitive subcomponents of the multilingual system and what effect they might have on the affective subcomponent. The students’ comments revealed issues relating to motivation, metalinguistic awareness, new ways of learning (i.e.: autonomy and praxis), enhanced accessibility and linguistic contact, socialisation processes and communities of practice, and the inclusion of new terminology to their linguistic repertoires.

We will begin by looking at comments related to motivation. Students’ motivation to learn languages was included in Gardner’s (1985) *Socio-educational Model*. We remind ourselves that motivation and attitudes have traditionally been intertwined in SLA research (Gardner, 1979; Spolsky, 1989); in fact, the Socio-educational Model combined the two as a single principal factor in language acquisition. Conversely, other research (Baker, 1992; Lasagabaster, 2005) proposes that attitudes and motivation are separate constructs which form part of a reciprocal relationship with achievement. From a dynamic complexity perspective, motivation also forms part of the DMM (Herdina & Jessner, 2002) in which it classed as one of

the individual factors which comprise the multilingual system, and it has been the core affective factor in the recent work on motivational dynamics (Dörnyei, MacIntyre & Henry, 2014). With this in mind, we will now turn to some examples:

Extract 94 (C2 I6 E1-2):

S1: sí porque **la mayoría de cosas tecnológicas el idioma es inglés**¹³⁸, entonces deberías entenderlo más o menos lo básico [...] para entenderte un poco a la hora de utilizar cosas

R: mmm, **entonces te anima un poco**¹³⁹

Ss: sí

Extract 95 (C2 I8 E1-2):

S1: sí [...] porque, la tecnología pues hay muchas que son en inglés, entonces en inglés **nos ayuda a aprender más** de lo sabemos, entonces con estas tecnologías pues **cada vez aprendemos más cosas**¹⁴⁰

R: y os parece una buena forma de aprender idiomas?

Ss: sí

R: y por qué?

S1: porque **así lo manejas [...] con más fluidez y lo practicas más**¹⁴¹

In extract 94, S1 affirms that in “most technological things the language is English” [138], therefore he feels obliged to learn at least the basics of the language to be able to use technology more effectively. The researcher asks the students if this motivates them to use English [139] to which all students agree. In extract 95, the girls agree that the default language of most technology being English “helps us to learn more [...] we increasingly learn more things” [140]. The researcher asks if they think using technology is a good way to learn languages. They all agree and S1 adds “like that, you control the technologies [...] more fluidly and you practice more” [141]. The comments in these extracts indicate that the language of technology and the possibility it offers to frame language use in a meaningful way can be a motivational factor which encourages sustained language learning; this is just one way in which behavioural choices play a role in shaping the affective domain and cognitive processes.

Extract 96 (C2 I6 E1-2):

R: vale, entonces si tienes la opción de cambiar el idioma en un videojuego lo haces?

S2: o sea, lo utilizo en español porque claro lo entiendo más y eso pero **a veces cuando me aburro y días que quiero aprender [...] me lo pongo en inglés**

R: qué te parece esta manera de aprender?

S2: **es divertida porque a la vez que juegas aprendes**¹⁴²

Extract 97 (C1 I2 E2):

S1: pues cuando, por ejemplo en el twitter mucha gente es de diferentes países, entonces muchos hablan en un idioma y otros en otra, entonces si quieres entenderlo pues **te hace curiosidad [...] cuando hay un tuit que está en otra lengua, tú intentas [...] entenderlo**¹⁴³

R: que realmente es bueno no?

Ss: sí

R: para formar el multilingüismo, no? como si dijéramos

Ss: sí

In extract 96, S2 says that she usually plays videogames in Spanish because she understands them better, but “sometimes when I’m bored and days when I want to learn [...] I put it in English”. The researcher asks her if this is a good way to learn and she comments “it’s fun because you learn while you’re playing” [142]. This is similar to earlier attitudinal research in which a student relates something fun – music – with motivation to learn a language (Nightingale, 2012). In extract 97, S1 suggests that seeing ‘tweets’ on Twitter in various languages “makes you curious [...] when there is a tweet in another language, you try [...] to understand it” [142]. The girls agree with the researcher that this is a good way to learn a foreign language and to promote and develop multilingualism.

Extract 98 (C2 I7 E1-2):

S1: **si no hubiese internet o cosas así yo hablaría casi inglés, menos para las clases de inglés**

R: entonces el internet te hace utilizar más el inglés?

S1: sí

R: te anima utilizar el inglés o no?

S1: hombre, **si es algo que te interesa y quieres entenderlo [...] intentas saber lo que significa en inglés**¹⁴³

S2: **porque en la vida así normal no solemos hablar inglés**¹⁴⁴

Finally, in extract 98, S1 says “if it weren’t for the internet or things like that I’d hardly ever speak English except for in my English classes”. The researcher asks her if the internet makes her use English more to which she agrees. He then asks if the internet *encourages* her to use English, to which S1 replies “if it’s something that interests you and you want to understand it [...] you try to know what it means in English” [143], and S2 adds “because in normal life we don’t usually speak English” [144]. The students indicate that their interest in communicating through new technologies is a factor which encourages them to use English. This is in contrast to their ‘normal’ (i.e.: offline) lives, where they usually have little need to speak English or other foreign languages. We can see how the comments from all of the above extracts fit with

the Gardnerian concept of motivation, that is, ‘a goal, effortful behaviour, desire to attain the goal, and favourable attitudes to the activity in question’ (Gardner, 1985: 50), and also the more reciprocal concept proposed by Baker (1992). These comments also shed additional light on the results from the statement in hypothesis 2 (‘I’m sure about why I study [language]’) in which new media in general had a significant impact on attitudes towards foreign and minority languages.

Some students mentioned the use of abbreviations, as can be seen in the comments below:

Extract 99 (C2 I6 E1-2):

S1: yo creo que afecta pero al escribir porque **en las redes y eso pues hacen abreviaturas**¹⁴⁵, y pues-

R: ah, como decir q en vez de que?

Ss: sí

R: cosas así no? y sabéis algún ejemplo de eso en inglés? aparte de lol, claro

S1: de abreviatura?

R: sí

S1: what the fuck, no?

R: ((laughs))

Ss: ((laugh))

R: que es w t f, no? se pone eso

S1: sí

R: sí sí ((laughing)), bueno ((laughs))

S1: by the way, que es b t w

R: ah, sí sí, y esas abreviaturas las usáis?

Ss: a veces?

Extract 100 (C2 I3 E1-2):

S1: sí, porque hay gente que cuando hablan, las letras en vez de poner, la oración o la palabra entera pues pone, el que pone una q, y a lo mejor **eso puede hacer que no escribas bien**¹⁴⁶, pues en ese idioma

R: sí sí, muy bien muy bien, y tú?

S2: yo también como ella, hay gente que en vez de escribir toda la frase escribe, escribe mal ... entonces, **luego escribe mal**¹⁴⁷

R: vale, y tú?

S3: yo igual, porque **si no escribes bien** pues entonces **luego te puedes equivocar**¹⁴⁸

Extract 101 (C2 I8 E1-2):

R: no ponéis cosas como Q o K en vez de que

Ss: sí

S3: sí, por la X

R: la X sí pero eso nunca lo haríais en una redacción

Ss: no, no

S1: en la redacción se pone todo como tiene que ser ¹⁴⁹

S3: claro

In extract 99, S1 says that new technology affects language when it comes to writing because “abbreviations are used on social networks and that sort of thing” [145]. Thus, the students recognise that certain abbreviations come from internet use. They go on to explain to the researcher about the abbreviations they know and regularly use, specifically LOL (laughing out loud), WTF (what the fuck), and BTW (by the way). The fact that they know and use these abbreviations shows that technology affects their language use, even if they are not sure how to express it. That the abbreviations they use come from English is another illustration of the linguistic playfulness of multilinguals (Todeva & Cenoz, 2009; Cenoz & Gorter, 2011a; Dewaele, 2010). In extract 100, the students also recognise the wide use of abbreviations online. However, all students express concern at the effect this could have for future offline literacy, as we can see in the following comments: “this could mean that you don’t write well” [146], “later you write badly” [147], and “if you don’t write well [...] later you could make mistakes” [148]. This separation of online and offline literacy practices and the understanding that one might affect the other is a form of linguistic objectivation. Finally, in extract 101, the students echo the concern above. They admit to using abbreviations themselves, for example using a letter Q or K in place of the conjunction *que*. However, they recognise that this would not be appropriate in formal written work; S1 comments “in a written essay you put everything how it is supposed to be” [149]. We propose that these comments indicate an understanding of the malleability of language and the importance of context, and thus reflect management and use strategies dependant on perceived communicative need which are characteristic of multilinguals (Jessner, 2008b).

Another theme which came out of the students’ comments was related to new ways of learning languages through new technologies, especially the idea of autonomous learning.

Extract 102 (C2 I8 E1-2):

S2: yo el ordenador y el móvil nunca me lo pongo en valenciano porque a mí el valenciano me parece, igual que el inglés me parece que lo puedes hablar en todo el mundo, el valenciano es de la

comunidad valenciana y **nadie te entiende** [...] entonces **me lo pondría en inglés y el castellano para aprender**¹⁵⁰ pero el valenciano, no me lo pondría

Extract 103 (C2 I14 E3-4):

S1: en el ordenador muchas veces está en inglés, y hay juegos o hay programas que están en inglés y a veces no se traducen

R: y qué efecto tiene?

S1: pues, que **tienes que buscar a ver como se dice y traducirlo**¹⁵¹

R: sí, crees que de esa forma se puede aprender un idioma?

S1: **claro [...] quieres saber lo que pone**¹⁵²

R: vale vale entonces tienes más interés no? sí? no [es como un libro por ejemplo]

S1: [sí sí también también]

R: ok, y alguna otra manera

S2: sí que **nos ha hecho darnos cuenta de que el inglés nos es importante**

R: ok, vale

S2: que **le damos más importancia ahora**¹⁵²

In Extract 102, S2 says that while she uses English or Spanish as the languages of her mobile and computer user interfaces, she would never do the same with Catalan because it is merely the ‘community’ language and “nobody understands you”. She claims to have a didactic motive for setting her user interface to English and Spanish, commenting “I put it in English and Spanish to learn” [150], but this is not the case for her with Catalan. This provides another illustration of the difference in prestige between languages. S2 applies a monolingual perspective to her languages putting them in a hierarchy according to their perceived utility which affects her language-choice when interacting with technology; in other words, her attitude affects her language behaviour. In extract 103, S1 says that as many computers, programs, and games are only available in English “you have to search for how to say it and translate it” [151], the researcher asks him if this is a good way to learn and he replies “of course [...] you want to know what it says” [152]. In other words, language behaviour, and the strategies that may necessarily arise from the choices made, can engender positive attitudes towards autonomous language learning. Alternatively, S2 comments “it has made us realise that English is important for us [...] we give it more importance now” [152]. That is to say, the language contact that derives from behavioural choices can engender positive attitudes towards languages as the object of learning. From a systems perspective, we propose that all these comments constitute further examples of interaction between affective and behavioural subcomponents.

Extract 104 (C2 I17 E3-4):

R: y usáis Twitter o?

Ss: sí sí

R: y seguís gente de habla inglesa?

Ss: sí

S2: famosos

R: famosos no? y habéis hecho algún comentario en inglés?

Ss: sí

S1: alguno

R: sí? y te han contestado?

S1: sí

R: y qué?

S1: lo sigues hablando

R: sí? te parece bien?

S1: es interesante

R: interesante no? y os parece una buena forma de aprender inglés?

Ss: sí

S1: es más divertido

R: más divertido

S2: es que **si estudias inglés todo el rato no es tan divertido como si estás hablando con una persona**¹⁵³

S1: **aunque el inglés me parece divertido no me apetece la asignatura**¹⁵⁴

Ss: sí

R: puede que sea un uso más auténtico del idioma?

Ss: sí

Extract 105 (C1 I14 E3):

R: os parece una buena manera de aprender?

Ss: sí

R: sí, vale

S1: porque, como la genta usa más la tecnología, si lo ponen en inglés así como **lo intentan entender pues así se aprende más**¹⁵⁵ inglés

S2: y es más no sé, a mí utilizar tecnología con el inglés y eso **me parece menos aburrido que estar en clase que nos enseñan tanto inglés**¹⁵⁶

Extract 106 (C1 I8 E4):

R: o sea, realment el que s'utilitza més en les xarxes socials és el castellà o l'anglès, o sea que té una influencia molt forta realment no? la tecnologia en les llengües [...] i **vosaltres creeu que heu millorat el nostre nivell d'anglès mitjançant la tecnologia?**¹⁵⁷

Ss: sí sí

R: molt?

S2: sí, **perquè el practiques més**¹⁵⁸

Extract 107 (C2 I16 E3-4):

S2: mucho del inglés que se habla ahora lo ha aprendido en juegos, más que en clase, hoy por ejemplo de las historietas del juego muchas veces, cuando las traducen al otro idioma las voces cambian mucho, así que me recomiendan déjalo en inglés pero **lo lees subtitulada y claro muchas veces leyendo tú te enteras de lo que dicen vas traduciendo y al final vas aprendiendo**¹⁵⁹

R: vale vale porque estás escuchando y leyendo a la vez, no?

S2: claro

In extract 104, the students indicate that they follow English speakers (especially celebrities) on Twitter. They sometimes make comments in English and even receive some replies in English. The researcher asks if they think this is a good way to learn English to which they agree, commenting that it is more interesting, more fun, and more authentic. S2 comments “if you study English all the time it’s not as much fun as if you are speaking to a person” [153], and S1 adds “while I think English is fun I don’t really like the subject” [154]. Both of these comments reflect the language-learning benefits of material authenticity and engaging in meaningful practice. This is something that should be taken into consideration by educators, as these students will develop and maintain their multilingualism to the degree that they perceive a *real* need to use their languages (Jessner, 2008b). In extract 105, the students make similar comments. S1 says that if people use technology more in English “they try to understand it and like that they learn more” [155], and S2 comments that for her personally using technology in English “seems less boring than being in class where they teach you so much English” [156]. In extract 106, the researcher asks if the students think they have improved their level of English by using technology [157] to which the students agree. S2 explains that the reason for this is “because you practice it more” [158]. Finally, in extract 107, S2 explains that a lot of English can be learnt by playing videogames, more so than in language classes. He says that friends have recommended that he leave the narrative sections of the games in the original English version so as not to lose any of the quality. He comments, “you read it subtitled and often reading it you get what they are saying, you translate it and in the end you learn” [159]. The researcher asks if this is because he is listening and reading at the same time, to which he agrees. The comment on subtitling is in line with the research by d’Ydewalle and Van de Poel (1999) but applied to new media rather than traditional media. All these comments indicate that learning languages (especially English) through technology is more enjoyable than learning in class; this is probably because the students are more in control of their learning which is framed in a more authentic and self-affirming context (Henry, 2013).

Extract 108 (C2 I18 E3-4):

S1: sí yo creo que la tecnología igual que ha cambiado, la forma a lo mejor de concebir la vida, respecto a los idiomas ha cambiado muchísimo a la forma de utilizarlo y a lo mejor a la forma de aprenderlo porque, sí que es verdad que antes a lo mejor **sólo podías aprender un idioma abriendo un libro** y ahora como hemos dicho antes entras en internet y tienes, todas las páginas a lo mejor que entras están en inglés, y sí que es cierto que está a lo mejor el traductor de [xxx] y el traductor de Google y lo traduce todo pero también está la posibilidad de empezar a leer tú en inglés y a través de eso empezar a **aprender por ti mismo**¹⁶⁰ no abriendo un libro sino estando en un ordenador en el móvil o en cualquier tipo de aparato

R: y estáis de acuerdo no?

S2 S3: muy de acuerdo

In this extract, S1 says that just as technology has changed the way we conceive our lives it has also changed the way we use and even learn languages. He says that before “you could only learn a language by opening a book”. Now, by contrast, most websites you visit are in English. Not only can you easily translate them with online translators like *Google* (which constitutes a new multilingual digital literacy), but you also feel encouraged to start reading and consequently “learn for yourself” [160]. S1 also indicates that a further advantage of new technology is that you are able to learn and engage with languages on various types of portable electronic devices, which constitutes autonomous learning. The researcher asks the other students if they agree, which they do wholeheartedly.

Extract 109 (C2 I17 E3-4):

R: creo que se trata un poco de una evolución no? los interrogantes ahora están desapareciendo no? porque pones uno al final y ya está no?

Ss: sí

S4: a veces en vez de por pongo una x

R: una x

S4: cuando voy de prisa y tengo que pedir algo rápido, si no escribo normal

S3: o en vez de que pones una k, o pones-

Ss: claro

S2: antes yo escribía mucho peor, al principio no lo entendía ni yo lo que escribía, yo decía uy qué es esto-

S3: yo escribo como hablo normalmente, lo que sí- los signos de interrogación y la puntuación y todo eso no porque es más rápido

S2: **lo que pasa es que ahora pones la primera palabra y ya [te sale]**¹⁶¹

Ss: [te sale] claro

S2: entonces da igual

R: es muy interesante porque yo creo que antes se escribía más como- menos comprensión, como en plan una x un número, no sé qué, por ejemplo en inglés un montón, como un código muy raro y hoy en día, como tú has dicho como ahora el móvil te lo pone

S2: te lo pone solo

S3: con el corrector es que es-

R: entonces puede que ser que ahora escribimos mejor
Ss: sí
S3: con acentos
S2: aprender y todo, digo mira esto no sabía que tenía acento
S3: claro

In extract 109, the students are talking about writing on mobile devices and how this practice has changed because of new technology. First, they are just talking about using abbreviations and replacing words with letters; re: Crystal's (2001) 'netspeak'. Then, S2 makes a very interesting comment, "the thing is, now you put the first word and it already appears" [161]. What she is referring to are the autocorrect and predictive text functions common on modern mobile devices which can actually help to improve spelling, word formation, and, in languages like Spanish and Catalan, also accent placement. The students and the researcher agree that the development of technology has possibly improved the way we write on mobile phones (Cameron & Larsen-Freeman, 2007). This kind of technological development means that we now use less of the heavily abbreviated textspeak that characterised early mobile text communication. The students suggest that this is yet another language learning tool.

Another theme in the students' comments was related to the affordances of online communication in terms of enhanced access, contact, and learning. Originally theorised in the psychology (Gibson, 1977), affordances have since been applied to computer-mediated communication (Wang & Vásquez, 2012; Barton & Lee, 2013), new literacy practices (Knobel & Lankshear, 2015) and multilingualism (Cenoz & Gorter, 2011; Aronin & Singleton, 2012). We will now explore what the students in our sample have to say on the subject.

Extract 110 (C2 I12 E3-4):

S3: no sé, porque con la tecnología puedes utilizar internet e **internet es contacto con todo el mundo**, en todo el mundo **hay un montón de idiomas**, y es **una fuente de cultura bastante grande**
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Extract 111 (C2 I19 E3-4):

S1: en realidad nos ayuda también a comunicarnos con gente, por ejemplo Facebook nos ayuda a comunicarnos con gente de otros idiomas y **podemos desarrollar idiomas nuestros**
S2: yo creo que sí que ha cambiado porque por el hecho de que por ejemplo cuando estás jugando online o algo, utilizas el inglés y entonces eso ya **hace salir del castellano y valenciano que usas día a día**¹⁶³, te hace cambiar
R: entonces aumenta las posibilidades de contacto no?

S2: claro, sí, **lo utilizas más y aprendes**¹⁶⁴

Extract 112 (C2 I13 E3-4):

S1: yo creo que sí porque hay mucha gente que no habla inglés y ahora habla perfectamente y tal porque ya hablar con gente de- inglés o algo así que viene pues ya sabes palabras y tal

R: ok ok, y tú?

S2: no sé yo de verdad es que **he aprendido bastante inglés**¹⁶⁵ de las redes sociales y cosas así, y música [...] he aprendido bastante

R: ok ok muy bien, y tú?

S3: sí porque ahora **lo tenemos más fácil hablar con una persona que hable inglés a través de internet y las redes sociales**¹⁶⁶ y eso

In extract 110, S1 comments that technology (and logically, language) allows us to use the internet and, as he puts it, “the internet equates to contact with the whole world”. He then goes on to explain that this global contact gives us access to “a large amount of languages” and “a wide range of cultural sources” [162]. In extract 111, S1 comments that Facebook affords us communication with people who speak other languages, and “we can develop our own languages”. In this last part of the comment it is not clear whether he is referring to further developing the foreign languages the students may know or to promoting their own native languages. Nevertheless, he is basically expressing that using social media may facilitate multilingual development which, we propose, is an example of interaction between behavioural and cognitive subcomponents of the multilingual system. Furthermore, S2 comments that playing online videogames means that you are using English and, therefore, “offers more variety than the Spanish and Catalan you use daily” [163]. He means that using English online pulls you away from your day-to-day use of community languages (a linguistic ‘comfort zone’) and gives you a reason to start using the foreign language; another affordance which connects behavioural and cognitive subcomponents. The researcher asks if this increases opportunities for contact to which S2 agrees, adding “you use it more and you learn” [164]. In extract 112, S1 suggests that previous access to English online makes it easier to have a conversation in real life when native speakers visit Spain. In other words, previous contact with English becomes the initial condition that future contact is based on. This iterative characteristic is a fundamental aspect of complex dynamic systems; a critical dependence of the present level on a previous level (van Geert, 1994; Larsen-Freeman, 1997; de Bot & Larsen-Freeman, 2011; de Bot *et al.*,

2013). S2 mentions online contact with social media and music, saying that “I’ve learnt quite a lot of English [in this way]” [165]. Music has been shown to be a very important factor in various areas of language development (Medina, 1993, 2002; Milton, 2009; Schwarz, 2012; Nightingale, 2012) and the internet now affords faster and easier contact with music than ever before. Finally, S3 comments “through the internet and social networks we have it easier to speak with someone who speaks English” [166]; in other words, social media and online technology makes it easier to practice foreign languages because they facilitate access to speakers of these languages.

Extract 113 (C2 I15 E3-4):

S1: yo creo que mucho porque **si no fuera por internet, las redes sociales videojuegos y esas cosas**, no sé, **como no viajes o algo lo único que usas otros idiomas es para dar clases y poco más**¹⁶⁷

R: entonces, es más real?

S1: sí, **es distinto**¹⁶⁸

S2: yo opino lo mismo, que **si no fuera por las redes sociales**, yo por ejemplo **no hubiera aprendido varias cosas**¹⁶⁹, otras cosas

R: ah, entonces pues sí que has aprendido bastante mediante las webs y cosas

S2: sí

R: muy bien, y tú también has dicho que sí?

S3: sí **porque te comunicas con gente de otros países entonces tienes que habar otro idioma**¹⁷⁰

R: se puede decir que hay más oportunidades de utilizar otros idiomas, no?

Ss: mm ((agree))

In this extract, S1 says “if it weren’t for the internet, social networks, videogames, and those things [...] unless you travel, you only use other languages in class and little else” [167]. The researcher asks him if this makes the use of foreign languages more real to which he agrees, adding “it’s different” [168]. S2 agrees, commenting “if it weren’t for social networks [...] there are various things I wouldn’t have learnt” [169]. Finally, S3 also agrees and says “because you communicate with people from other countries so you have to speak another language” [170]. The researcher asks them if technology provides more opportunities to use their languages to which they all agree. In all the comments above we can see that the choice to use online communication (behavioural system) is the driving factor behind learning and using languages other than the L1 (cognitive system).

Extract 114 (C1 I7 E4):

S2: **sin la tecnología el inglés no lo utilizaría mucho**¹⁷¹

S1: claro

S2: porque así, yo que sé, también escucho música y tampoco puedes ver películas en versión original así tan fácil

R: claro, por ejemplo las películas las veis en versión original a veces?

S2: **muchas, sí, en inglés sobre todo**¹⁷²

Extract 115 (C2 I20 E3-4):

S1: yo creo que sí porque **si la tecnología no existiera o no estuviera tan avanzada**, aquí el inglés no estaría tan desarrollado en- ves ese desarrollado no existe en castellano, desarrollado, no estará tan desarrollado porque **no tendríamos la necesidad de saber inglés**¹⁷³, pero para, redes sociales páginas web y todo eso necesitas saber algo de inglés para saber dónde te metes, si no no te enteras de nada

Extract 116 (C1 I8 E4):

S2: que des de que hi ha tecnologia escriba més i té **més oportunitats de controlar més idiomes**¹⁷⁴

In extract 114, S2 comments “without technology I wouldn’t use English much” [171] and specifically mentions listening to music online and that it is not so easy to watch original version films offline. The researcher asks him if he watched original version films to which he responds “a lot, yes, above all in English” [172]. In extract 115, S1 comments that “if the technology didn’t exist, or wasn’t so advanced, [...] we wouldn’t have the need to know English” [173]. He is making the point that the advanced state of modern communications technology means that English is more present in young people’s lives, quite simply because it gives them a necessity to know the language to be able to orient themselves online. Finally, in extract 116, S2 simply comments that due to new technology (young) people write more and this in turn gives “more opportunities to control more languages” [174]. This comment clearly relates to how new technology affords opportunities to engage in multilingual practices.

Some of the students’ comments also reflected language socialisation processes and their (albeit unconscious) engagement in virtual communities of practice.

Extract 117 (C1 I2 E2):

S1: sí, normalmente **si hablas con un compañero en**, o sea **en la vida real** digamos hablas con él **en valenciano**, pues **en el whatsapp también hablas con él en valenciano**¹⁷⁵

Extract 118 (C2 I16 E3-4):

R: crees que aumenta las posibilidades de contacto?

S2: sí, mucho [...] yo y mis amigos empezamos por los juegos online por internet, hemos conocido un montón de gente inglesa y **no sabemos ni dónde vive pero sólo hablamos inglés y nos caen genial** [...] **y siempre estamos hablando con ellos en el móvil con el Whatsapp**¹⁷⁶

Extract 119 (C2 I16 E3-4):

R: os hace sentir que formáis parte de un grupo? (1.0) jugando estos videojuegos?

S2: no sé

R: o alguna vez habéis sentido como fuera del grupo por el idioma?

S2: no

R: más inclusivo que exclusivo, no? (2.0) no? o nunca lo has pensado?

S2: no nunca me lo había pensado

R: bueno será buena idea pensarlo la próxima vez

S2: sí

R: y piensas hmmm, formo parte de este grupo o no

S2: hombre, pero siempre que hablas, si es en un grupo más o menos **cuando empiezas a hablar todos vais a hablar de lo mismo**, siempre hay que se entera menos que otro, o sea alguien que se entera menos pero a lo largo se entera de algo o **se lo explica alguien para que lo entienda**¹⁷⁷, no hay por qué- necesidad de sentir excluido, pero pides ayuda para entenderlo mejor y te lo explican

In extract 117, S1 explains that if you speak to a friend in Catalan in real life then this language choice will be continued in conversations on Whatsapp [175]. We put this forward as evidence of language socialisation; that is, offline sociolinguistic norms and conventions are carried onto online linguistic behaviour (Cunliffe, Morris & Prys, 2013). In extract 118, the researcher asks if new technology has increased opportunities for language contact. S2 agrees and mentions that he and his friends have met many English speakers through online multiplayer. He says “we don’t even know where they live but we only speak English and we get on really well with them”. He concludes by saying “we’re always talking with them using Whatsapp” [176]. In terms of socialisation, we propose that this is an example of interpersonal communication and relationship maintenance mediated by technology (Thorne *et al.*, 2009), and language use as a social action (Gee, 1996; Thorne, 2008; Knobel & Lankshear, 2015). In extract 119, the researcher asks the same students if playing online videogames makes them feel like they form part of a group (community of practice). S2 is not sure how to answer this so the researcher rephrases and asks if he has ever felt like an outsider because of issues with language. S2 responds that although the main language of online multiplayer is English, there is no need to feel excluded if you don’t fully control the language because “when we start to speak, we speak about the same things”. He explains that there is always someone who understands less than the others and what usually happens is “someone will explain it to them so that they understand” [177].

Extract 120 (C2 I20 E3-4):

S1: juego al League of Legends, y **al principio cuando eres niveles bajos, como si no te sientes suficiente al nivel para hablar**¹⁷⁸ pero ahora ya que llegas al máximo y a cada partida le pones qué prefieres coger este campeón, éste? pues mejor vete a la línea tal y lo haces todo en inglés, pones from y te dicen Alemania y- pero todo todo es inglés y luego me pongo yo a hablar en castellano y el otro se pone a hablar en alemán, **cuando ponemos a hablar en inglés como todos tenemos cierto nivel nos entendemos**¹⁷⁹

We can see another comment relating to scaffolding and affinity in extract 120. S1 is talking about online multiplayer and says that he plays the game League of Legends. He explains that “initially when you’re at low levels, it’s like you don’t feel good enough to speak” [178]. However, as you progress in the game other gamers will begin to advise you on strategies and what you should do to reach your goals in the game. S1 mentions using the term ‘from’ to ask another gamer’s nationality. He says that although German gamers may speak to each other in German and he speaks to other Spanish speakers in Spanish “when we start speaking to each other in English, as we all have some level, we understand each other” [179]. We propose that all these comments reflect ideas such as language socialisation (Ochs, 2000), affinity spaces (Gee, 2005), and social scaffolding (Vygotsky, 1978). Furthermore, they could shed additional light on the statement in hypothesis 2 (‘Knowing [language] makes me feel accepted’) in which online games was the most significant determining factor regarding attitudes towards English.

Extract 121 (C1 I3 E1):

S1: jo sí perquè **a lo millor te fa sentir que estàs apartat**

R: sí? a vore pues, explica-ho un moment- explica-me'l a que tu refereixes

S1: estàs a lo millor en la gent, ((clears throat)) la gent que parla en castellà i tu parles en valencià, **hi ha gent que** pues, no sé, **diuen que parles en castellà**¹⁸⁰ o coses així

R: o sea [xxx] te diuen, ostres no nos [cortes en] valencià si parlem castellà, i te pots sentir apartat?

However, not all online interactions are as positive. In extract 121, S1 says that speaking Catalan on mobiles or the internet “can maybe make you feel marginalised” because sometimes “there are people who [...] will tell you to speak Spanish” [180]. We propose this is a case of technology-mediated language socialisation where there is discrimination between two languages which do not share the same social prestige. Needless to say the effect on language attitudes for the Catalan-speaker would be very negative indeed.

In these final two extracts the students mention how new technology has brought new terminology into their everyday language use. As many students have already mentioned, English is the main language of technology so, needless to say, the new terminology comes from English.

Extract 122 (C2 I21 E3-4):

S1: y luego la introducción, en nuestro idioma por ejemplo de palabras como software o hardware que vienen de la tecnología que **se ha metido como un extranjerismo** no? **en nuestro idioma**¹⁸¹ de otras lenguas

S2: sí sí lo que ha dicho él, por la tecnología en todos los idiomas, el inglés a nuestro idioma, y **a lo mejor nuestro idioma también se puede conocer más en otras partes**¹⁸²

R: ah, también eso por supuesto pasaría con el castellano pero crees que eso puede pasar con el valenciano? que ahora más gente puede enterarse de ese idioma

S2: **si lo buscas mucho sí pero no creo no es tan fácil**¹⁸³

R: pero aumenta las posibilidades de contacto, no?

S2: sí

R: con los tres, no?

S2: mmm ((agrees))

Extract 123 (C2 I17 E3-4):

S1: todas las redes sociales están en inglés, entonces tú cuando- además **para decir el nombre tienes que decirlo en inglés, es que no hay opción**¹⁸⁴ [...] o la forma de usar- por ejemplo tú no dices- bueno sí lo dices ((laughs)) pero decir dejar de seguir, tú dices más dale unfollow,
Ss: claro, sí

In extract 122, S1 comments that you may find a term, like ‘software’ or ‘hardware’, which comes from technology and “has gone into our language as a foreign word” [181]. S2 agrees that technology has increased the penetration of English into Spanish, adding “and maybe our language can be more widely known in other places as well” [182]. The researcher agrees that this could happen with Spanish and asks the students if they think it could also be the case with Catalan, if now more people could discover that language. The students are not convinced by this, S2 comments “if you really look for it yes, but I doubt it, it’s not so easy” [183]. However, the researcher comments that technology could increase contact with all three languages to which the students indicate agreement. In extract 123, S1 says that as all the social networks are in English this makes you use English more because “to say the name [of the website/application] you have to say it in English, there is no other option” [184]. She continues by saying that certain terms have crossed over into everyday use. For example, on Twitter she is

more likely to say ‘unfollow’ than the Spanish equivalent *dejar de seguir*. We propose that this constitutes yet another example of behavioural and cognitive subcomponents interacting.

In conclusion, applying an emic focus and a qualitative perspective to our exploration of language attitudes among adolescent multilinguals has revealed detailed information about the interconnectivity of the multilingual psycho-sociolinguistic system. Exploring and interpreting the participants’ own subjective experiences of their multilingual and multimodal practices has given us a valuable insight into their metalinguistic awareness, linguistic flexibility, sociolinguistic sensitivity, multilingual identities, user agency, and language socialisation processes. In this way we hope to have contributed to answering the call made in earlier research (Franceschini, 2009; Gorter & Cenoz, 2011; Canagarajah & Wurr, 2011; Radein Initiative, 2011) to focus on a more comprehensive range of multilingual interactions and how they may be realised in a variety of cultural spaces.

CHAPTER 7. CONCLUSION

This final chapter will draw together the principal outcomes and comment on the contributions of this study to the field of multilingualism research. Section 7.1 focuses on a summary of the main results and will draw conclusions from each hypothesis. Section 7.2 justifies the relevance of the systems-approach which has guided the current study and explains how this is evidenced in the results from each hypothesis. Section 7.3 outlines some relevant implications for multilingualism research, linguistic planning, and, specifically, pedagogy. Finally, section 7.4 proposes possible avenues for further research.

7.1 Concluding remarks

The present study adds to and consolidates our understanding of multilingualism in the Valencian Community by focusing holistically on cognitive, affective, and behavioural factors regarding the multilingual and multimodal practices of adolescents. The complex and, in some cases, contradictory nature of the sociolinguistic situation in this autonomous community, constitutes a multilingual context which has been largely under-investigated. Furthermore, in line with the theoretical framework laid out in chapter 1, this study takes a complexity approach in order to explore multilingual phenomena from a truly multilingual perspective; that is, eschewing reductionism and embracing holism. In this way, we believe that the study provides important new insights into multilingualism and has covered the existing research gaps defined in chapter 4. That is, the need to: 1) approach multilingualism from a sociolinguistic perspective; 2) approach sociolinguistics from a multilingual perspective; 3) explore language attitudes using a mixed-method approach; 4) measure attitudinal change; 5) pay special attention to new media exposure in a situation of language contact; and 6) take a global approach which treats system subcomponents as a unified construct.

To remind the reader, the main objectives of this study are as follows: 1) to demonstrate a connection between multilingual language attitudes in adolescents and their language contact through popular media in out-of-school contexts; 2) to investigate variation in the effects that said language contact has on multilingual language attitudes; 3) to highlight the complex nature of the relationships between language contact, language attitudes, and language systems in multilingual contexts; 4) to explore the effects of out-of-school language contact on multilingual practices, the negotiation of multilingual identities, and multilingual socialization processes; and 5) to analyse the resulting data using both qualitative and quantitative methods.

The sample for the present study consists of 152 participants all of whom are ESO students aged between 12 and 17 years old. The focus on adolescents is important in the light of the attitudinal dip noted by Baker (1992) and the impact of sociopsychological factors noted by Walaqui (2000), both of which make adolescence a critical period for language attitudes especially when a minority language is involved. The study has taken a mixed-methods approach in order to collect complementary data which facilitate a better understanding of the findings in terms of processes, individual variation, and underlying complexity (Dörnyei, 2007; Komorowska, 2014; Wlosowicz, 2014). While the method of data collection has been quite simple – a questionnaire adapted from Baker (1992) and Lasagabaster and Huguet (2007) alongside semi-structured oral interviews – the method of data analysis has attempted to innovate using insights from complexity theories and holistic approaches. With the above in mind we will now summarise the main outcomes of each hypothesis.

The first hypothesis predicted that out-of-school language contact would lead to positive language attitudes (Lefever, 2010; Kuppens, 2010; Nightingale, 2012; Bunting & Lindström, 2013), and that this effect would be more notable as a result of engagement with new media (Gee, 2007; Harrison & Thomas, 2009; Thorne *et al.*, 2009; Thorne & Black, 2011; Lin & Warschauer, 2011; Henry, 2013). In this part of the study our goal was to obtain empirical evidence that contact with popular media in out-of-school contexts has a positive impact on language attitudes in multilingual contexts. Taking into consideration the results, we

may claim that the hypothesis is confirmed and that we have achieved our goal. We make this claim in light of the following outcomes: 1) the participants' language attitudes were consistently more positive when they had out-of-school media contact with minority and foreign languages; 2) in the statistical tests, engagement with new media showed the most significant associations and the greatest effect sizes, especially with regards to the foreign language; and 3) out-of-school media contact with minority and foreign languages also had a notable positive effect on holistic attitudes towards languages in contact. It must be noted that it was not possible to test for contact effects in the majority language (Spanish) because media contact in this language was a constant not a variable.

Initial results from the Mann-Whitney tests showed that attitudes towards the minority language (Catalan) were by far the most affected by out-of-school contact and engagement with popular media. Contact with audio-visual media, print media, and new media all show significant positive associations; this confirms the first part of the hypothesis regarding Catalan. In fact, the strongest association comes from engagement with new media; this contributes to confirming the second part of the hypothesis. These results are of great importance given the sociolinguistic situation because Catalan does not share the same level of prestige as English and Spanish. In general, Catalan displayed the lowest positive attitudes when no independent variable was considered and the sample generally reported lower levels of out-of-school contact with Catalan. This leads us to the conclusion that enhanced opportunities for extramural contact with Catalan could be a decisive factor in creating and maintaining positive language attitudes amongst adolescents, and consequently the promotion of Catalan in terms of its prestige and use in this same age group. The results also show that out-of-school language contact has a definite positive impact on attitudes towards the foreign language (English). Significant associations come from contact with audio-visual media and new media, and although contact with print media does not return a significant result the mean scores show that attitudes are actually more positive when there is contact with this media type; this confirms the first part of the hypothesis regarding English. In fact, engagement with new media had the greatest positive impact on

attitudes towards this language; this contributes to confirming the second part of the hypothesis. As new media provides a more interactive form of language contact, the message from this outcome is that learner-led, authentic engagement could be a fundamental factor in the promotion and maintenance of positive attitudes to English amongst adolescents.

To provide an additional layer of detail to these initial results, a second set of Mann-Whitney tests which explored individual media types were performed. Results from these tests reveal that positive attitudes towards English are significantly affected by contact with films and music from the audio-visual media group, and by contact with search engines, social networks, videogames, online videogames, and instant messaging from the new media group. There were no significant positive associations from any English-language print media type. Overall, the most powerful positive association for English comes from engagement with social networking platforms, which returned a result of $U = 1670.0$, $p = .000$, $r = .32$. Results also reveal that positive attitudes towards Catalan are significantly affected by contact with television, music, and radio from the audio-visual media group, by contact with books and magazines from the print media group, and by contact with search engines, social networks, videogames, and instant messaging from the new media group. Overall, the most powerful positive associations for Catalan come from engagement with social networking platforms, which returned a result of $U = 526.5$, $p = .000$, $r = .34$, and instant messaging, which returned a result of $U = 982.0$, $p = .000$, $r = .39$. These additional results are very useful because they pinpoint exactly which media types are most significant for each language.

Finally, the results from the first hypothesis also put in evidence two interesting phenomena related to the complete connectedness (van Geert, 1994) and complexity of multilingual systems. The first of these phenomena regards the attitudinal results when all languages were considered together (the holistic measure). It appears that contact and engagement with popular media engenders positive attitudes to multilingualism. In the initial Mann-Whitney tests we can see that, while Catalan-language media returns no significant associations, contact with English-language audio-visual media is significantly associated with

positive attitudes towards the holistic measure. Nevertheless, the second set of Mann-Whitney tests tell a slightly different story. On the one hand, we see that English-language music, films, and especially radio are the influential factors. On the other hand, contact with internet forums and especially search engines in Catalan emerge as significant influential factors even though, as a whole, the new media group is not significant. These results indicate that, in terms of positive attitudes towards multilingualism, the influential factor is contact with English, but with Catalan it is *engagement*. The second of these phenomena regards an inverse effect between minority language contact and foreign language attitudes, and *vice versa*. It appears that positive attitudes to individual languages only arise from out-of-school contact with those same languages; that is to say, when attitudes and contact are aligned (i.e.: Catalan/Catalan and English/English). When attitudes and contact between minority and foreign languages are crossed (i.e.: Catalan/English and English/Catalan) the opposite effect can be observed; that is to say, contact results in lower positive attitudes. This discovery is only statistically significant regarding the impact of Catalan-language print media on attitudes towards English. However, looking at the mean scores when contact and attitudes between foreign and minority languages are crossed we can see that this effect is consistent across a wide range of media types, thus indicating a definite trend. We consider that these results give an indication of emergent properties stemming from interaction between language systems which would simply not be possible in monolinguals or bilinguals. We propose that this constitutes the type of ‘qualitative change’ attributed to multilinguals in previous research (Herdina & Jessner, 2002; Jessner, 2006; Hufeisen & Marx, 2007; Kecskés, 2010).

Finally, there are few existing studies in the European context (i.e.: the ELLiE project – Enever 2011; Mettwie & Janssens, 2007) which consider the effect of out-of-school factors on language attitudes. In the Spanish context, to our knowledge, there is only one such study (Nightingale, 2012) and there is no existing work exploring the role of new media in multilingual language attitudes. Nevertheless, we consider that the current study is in line with, and extends, earlier SLA research on authentic materials (Baltova, 1994; Cortazzi & Jin, 1994;

Boggs, 1996; Guariento & Morley, 2001; McCoy, 2009), and work which implicates out-of-school factors in language proficiency (Sundqvist, 2009; Lefever, 2010; Kuppens, 2010; Bunting & Lindström, 2013). Moreover, the significant results we have seen from audio-visual media are in line with research relating film, television, and music to linguistic proficiency (d'Ydewalle & Van de Poel, 1999; Koolstra & Beentjes, 1999; Medina, 2002; Milton, 2008; Schwarz, 2012), and the age range of the sample provides an extension to earlier research on out-of-school factors and young learners (Muñoz & Lindgren, 2011; Lindgren & Muñoz, 2013). Regarding the autonomy promoting nature of new media, the current study is in line with earlier research (Gee, 2007; Harrison & Thomas, 2009; Thorne *et al.*, 2009; Thorne & Black, 2011; Lin & Warschauer, 2011; Henry, 2013), and corroborates existing bilingualism research highlighting the role of social networking sites in the formation of youth language attitudes (Cunliffe, Morris & Prys, 2013). Finally, we consider that these results may be related to research indicating youth agency in building media environments (Berns, de Bot & Hasebrink, 2007) and concepts of language socialisation (Bayley & Schechter, 2003; Duff & Talmy, 2011).

The second hypothesis predicted that we would observe variability in the relationships between languages, attitude statements, and media types (Larsen-Freeman, 1997; Herdina & Jessner, 2002; Jessner, 2008; Verspoor *et al.*, 2008; de Bot & Larsen-Freeman, 2011). In this part of the study our goal was to demonstrate and visualise variation in the interconnectivity between cognitive, behavioural, and affective system subcomponents, and to explore this variation within and between languages. Furthermore, we wanted to explore the notion of media contact as a system attractor and variability in its effect, direction, and strength. Taking into consideration the results, we consider that the hypothesis is confirmed and that we have achieved our goal. We make this claim due to the number of statistically significant associations between language attitudes and media contact and the high degree of variability between languages they clearly exhibit. From these results, it is evident that the same media type is capable of provoking different affective responses to different attitude statements in different languages. Moreover, in systems theory terms, media contact constitutes an attractor

phenomenon which interacts with the other subsystems and influences overall system behaviour in a way which is emergent and impossible to predict *a priori*.

In terms of individual languages, out-of-school media contact most affects attitudes towards the minority language (50 significant associations), then the foreign language (28 significant associations), but the effect on the majority language in this respect is negligible (8 significant associations, two of which are negative). This is evidenced by the amount of statistically significant associations detected for each language and their strength, which in our study is expressed by their *p* value. These results allow us to speculate that, in general, the majority language is too engrained in the sociolinguistic context for it to be affected by the pull of media contact as an attractor. However, this is not the case for the minority and foreign languages which are much more notably affected. In terms of systems-thinking, this indicates that the majority language is stable while the other two are more susceptible to external forces. Furthermore, a holistic approach to the results shows that media contact tends to bring attitudes towards the minority and foreign language into closer alignment. We consider this to be a very interesting result taking into account the notable differences in typology, social prestige, and ethnolinguistic vitality between these languages. Needless to say, taking a monolingual or one language only perspective would not have allowed us make this comparison.

In terms of individual attitude statements, media-contact shows the most powerful effect regarding speaking, identifying with, and being sure about studying the minority and foreign languages. Speaking Catalan or Spanish is most affected by using instant messaging and search engines, whereas speaking English is most affected by using social media and contact with films and music. Identifying with Catalan is most affected by using instant messaging and social media, identifying with Spanish is most affected by contact with films, music, and magazines, and identifying with English is most affected by using social media and contact with films. The greatest effect on being sure about studying Catalan is contact with music, for Spanish it is videogames, and for English it is online multiplayer videogames. Conversely, media contact seems to have the least effect on feeling intelligent for knowing a language. This attitude

statement shows the greatest amount of negative associations, most notably, books for Spanish, Comics for Catalan, and magazines for English. Analysing the data in this way has extended the results from the first hypothesis by not only exploring the different media types but also by looking at each attitude statement individually in all three languages; this has allowed us to gain a more detailed picture of all variables.

Further discussion of the results has also indicated that not all media types constitute attractors, some also act as repellers. To explore this we plotted the Phi effect size from our results onto a set of radar charts, allowing us to not only see the strength of each association but also its direction. Again we observe a wide range of variability in this regard and we are able to ascertain that within our sample the same media type can have either a positive or a negative influence, that is, either pull or push the system, dependent on the language and the type of attitude under question. The results show that there are very few negative associations for Catalan. The most notable attitude statement in this regard is “Knowing Catalan makes me feel intelligent” in which music, radio, comics, newspapers, search engines, social networks, and online videogames all appear to be repellers. In English we observe some negative associations in certain attitude statements. The repellers appear to be: newspapers in “I like how English sounds”; music in “English is very useful”; and radio in “I’m sure about why I study English”. However, other attitude statements showed a number of negative associations. The repellers here are mostly stronger and appear to be: television, comics, forums, online videogames, and instant messaging in “Everyone should know English”; magazines, comics, search engines, forums, and videogames in “Knowing English makes me feel intelligent”; and music, social networks, videogames, and online videogames in “It is worth learning English”. We can ascertain from this that, for certain attitude statements, repellers in the attitudinal system for English appear to derive more from engagement with new media than from contact with traditional media. Most notably, in Spanish we observe a number of negative associations in all attitude statements. To give just a few examples, some of the most extreme negative associations are: books, comics, videogames, and forums in “I identify with Spanish”; books

and videogames in “Everyone should know Spanish”; films, books, and instant messaging in “Knowing Spanish makes me feel intelligent”; films, music, and books in “Knowing Spanish makes me feel accepted”; magazines in “I’m sure why I study Spanish”; social networks in “It is worth learning Spanish”; and music, radio, books, and magazines in “I want my children to speak Spanish fluently”. As can be seen, the media type ‘books’ appears to be a consistent repellor; in fact, the only positive association is in “I’m sure about why I study Spanish” and even then it is barely notable.

In sum, these results show that we should not, and indeed, cannot, rely solely on statistically significant results to see what is happening in the system. It also illustrates just how divergent results can be from the same media type on the same attitude statement but in different languages. The results extend the results from the first hypothesis not only by considering each media type and each attitude statement individually but also by showing the following: 1) that there is wide variation in interconnectivity when we consider different configurations of linguistic, behavioural, and affective subcomponents; 2) that there are numerous points of congruence and diversity between languages; and 3) that out-of-school language contact may be considered an ‘attractor’ which influences systemic behaviour. The message from these results is that, due to the inherent complexity of multilingual language development, the effect of out-of-school media contact on language attitudes is far from invariable and there is no reason to suggest that the same behavioural conditions will lead to the same attitudinal outcomes.

Finally, the way in which we have obtained these results has been largely experimental and, to our knowledge, there has been no other study which has analysed this type of data using this method. This means that the results do not build on earlier studies but rather propose an alternative method for exploring multivariate language attitudes data; a method informed by previous research applying systems theory to applied linguistics and multilingualism (van Leir, 1996; Larsen-Freeman, 1997; Herdina & Jessner, 2002; Jessner, 2008; Verspoor *et al.*, 2008; de Bot & Larsen-Freeman, 2011; de Bot *et al.*, 2013; Dörnyei, 2014). Despite a lack of previous

research, we propose that the results are relevant in the light of a wide range of earlier work which explores issues such as: identity, language socialisation, and virtual communities (Gee, 1996; Duff & Talmy, 2011; Norton, 2013; Knobel & Lankshear, 2015), self-affirmation from control of authentic language use (Gee, 2007; Henry, 2013), new digital literacies (Harrison & Thomas, 2009), youth agency in building personal media environments (Berns, de Bot & Hasebrink, 2007), perceived differences between formal and informal learning (Bunting & Lindstrom, 2013), cultural capital (Bourdieu, 1977), social networks providing minority language platforms (Cunliffe, Morris & Prys, 2013), language use reflecting emotional resonance (Dewaele, 2010), protectionism of minority languages (Lasagabaster, 2003), language ego (Guioria, 1972; Brown, 1987; Cline, 2001), music as a self-affirming language activity (Medina, 2002; Milton, 2008; Schwartz, 2012; Nightingale, 2012), affinity spaces (Gee, 2005), and language as a trans-border cultural product (Lam, 2004).

The third hypothesis predicted that multilingual language attitudes would exhibit non-linear change over the age range of the sample (Larsen-Freeman, 1997; Herdina & Jessner, 2002; Jessner, 2006, 2008) and self-organise under the influence of attractor phenomena (Thelen & Smith, 2006; Cameron & Larsen-Freeman, 2007; Dörnyei, 2014). In this part of the study our goal was to demonstrate that language attitudes are not only nonlinear in the way they change at different ages but also that they are complex and dynamic in the sense that they are subject to internal reorganisation through interactions with external phenomena. Taking into consideration the results, we consider that the hypothesis is confirmed and that we have achieved our goal. We make this claim due to the observed fluctuations in the mean score for positive attitudes across the age range for all languages and the holistic measure; this was the case regardless of media contact. Furthermore, when media contact was reported the range of the mean scores was observed to be lower, indicating less variability; again, this was the case for all measures but was particularly notable for the minority language and the holistic measure. For the above reasons, we believe that the results make evident both nonlinearity and self-organisation in the integrated psycho-sociolinguistic multilingual system.

The initial results we obtained from the Spearman's correlation test were not statistically significant but they allowed us to identify general trends across the age range. That is, attitudes towards Spanish tend to become more positive, attitudes towards Catalan tend to become more negative, and attitudes towards English and the holistic measure tend to remain more or less the same. However, these general linear trends miss out the essential detail that there is fluctuation at different ages and, of course, do not contribute to the understanding of systemic self-organisation. A multiple cross-sectional exploration of mean scores across the age range contingent on the media contact of the participants has provided an indication of variability and nonlinearity in language attitudes. In the no media contact condition, the most notable fluctuation in the mean scores appears at different age ranges for the different measures, while in the media contact condition, the main fluctuation is at the same age range. Furthermore, measuring the range of the mean scores for both media contact and no media contact conditions shows that media contact results in a consistently lower range for all attitudinal measures, and this difference is particularly notable for the minority language and the holistic measure. From these results we are able to propose that out-of-school contact with minority-language and foreign-language media has an emergent stabilising effect on language attitudes in multilinguals.

The above results show that attitudes towards Spanish constitute the most stable measure across the age range. However, attitudes towards English and especially Catalan show a great deal more variability and are more dramatically affected by out-of-school media contact in these languages. In general, it appears that contact with popular media stabilises attitudes towards minority and foreign languages, and specifically in the case of the foreign language media contact appears to consistently increase positive attitudes. Moreover, we can observe this same stabilisation in the holistic measure which leads us to propose that contact with Catalan-language and English-language media also stabilises multilingual language attitudes.

Further examination of individual attitudinal measures and separate media types revealed some interesting additional details. Regarding attitudes towards Spanish across the age

range, all English-language media and Catalan-language traditional media has a positive influence on the system while the influence of Catalan-language new media is more negative. We put forward that this illustrates Van Geert's (1994) notion of 'complete connectedness' in that minority and foreign language contact in the social context impacts on the affective domain in terms of the majority language. Regarding attitudes towards Catalan across the age range, we observe an extreme attitudinal dip at ages 15 and 16 which appears to be remedied by the introduction of Catalan-language media. This is especially the case for interaction with new media, which corroborates the results from the first hypothesis. This observation leads us to the conclusion that adolescence may be a particularly volatile age for attitudes towards minority languages. Moreover, contact with English-language media seems to have a negative influence at ages 15 and 16 but is considerably more in line with the average at ages 12 to 14. This observation appears to contradict the results from the first hypothesis regarding the negative interaction between English and Catalan and leads us to the conclusion that this effect is actually time-sensitive. Regarding attitudes towards English across the age range, here we observe the most extreme example of self-organisation under the influence of attractors. Contact with English-language new media has a consistent positive impact on attitudes over the age range; we see the inverse effect where there is no contact. This leads us to conclude that the positive influence of English-language new media is not only strong but also highly consistent. Moreover, contrary to the results from the first hypothesis, contact with traditional media in Catalan has a positive impact on attitudes towards English at the later end of the age range. Again, this indicates time-sensitivity in the negative interaction between English and Catalan. Regarding attitudes towards the holistic measure across the age range, we can see very noticeable self-organisation. The first stand-out observation is that no contact with English-language new media results in a consistent decline in positive attitudes to multilingualism. However, when there is media contact the results change radically. Catalan-language new media results in higher than average positive attitudes over the first half of the age range while Catalan-language traditional media has this effect over the second half. On the contrary, all English-language media is considerably closer to the average and shows little variation. These

results lead us to conclude that additional minority-language media contact as well as the introduction of English-language media to an already bilingual context could be of great importance in terms of maintaining positive attitudes towards multilingualism.

In sum, hypothesis three further extends the results from the first two hypotheses by showing that there is also variability in attitudes when viewed cross-sectionally across a macro time period, but that stability emerges in the presence of attractor phenomena. The hypothesis also identifies a potential ‘critical period’ for language attitude maintenance in the sample as well as indicating that the negative cross-interaction effects between minority and foreign language may be time-sensitive. The message from these results is that language attitudes could be dynamically scaffolded and supported by encouraging different types of out-of-school media contact, and perhaps reinforcing this in class, at different ages throughout the period of secondary education. In a similar way to the second hypothesis, the method used here to explore the data has been largely experimental. Again, we know of no other study which has analysed language attitudes data using this method. Consequently, the results do not build on specific earlier studies but instead put forward an alternative method for exploring and comparing attitudinal change at different points on a macro timescale. This method has been inspired by previous applied linguistics and multilingualism research which explored specific aspects of systems theory such as nonlinearity, dependence on initial conditions, and self-organisation (van Geert, 1994, 2008; Larsen-Freeman, 1997; Herdina & Jessner, 2002; Jessner, 2006, 2008; Thelen & Smith, 2006; Cameron & Larsen-Freeman, 2007; de Bot & Larsen-Freeman, 2011; de Bot *et al.*, 2013; Dörnyei, 2014).

The fourth hypothesis predicted that qualitative analysis of language attitudes from an emic perspective would reveal complex interactions between online multilingual, multimodal, and identity/socialisation practices (Todeva & Cenoz, 2009; Gorter & Cenoz, 2011; Canagarajah & Wurr, 2011; Wlosowicz, 2014; Dörnyei, 2007, 2014; Chan, Dörnyei & Henry, 2014). In this part of the study our goal was twofold: 1) to explore the participants’ own perspectives on their language, multilingual identities, multimodal practices, user agency, and

language socialisation processes in online virtual communities, and then to frame this information within the subcomponents of the multilingual psycho-sociolinguistic system; and 2) to respond to calls in earlier research for additional focus on out-of-school multilingual and multimodal practices (Gorter & Cenoz, 2011), the manifestation and negotiation of multilingualism in computer mediated communication and online virtual communities (Radein Initiative, 2011), multilingual interactions in digital environments (Canagarajah & Wurr, 2011), and interaction between speakers with diverse language constellations, and unfocussed language acquisition among young multilinguals (Franceschini, 2009). Taking into consideration the results, we consider that the hypothesis is confirmed and that we have achieved our goal. We make this claim due to the fact that the participants' comments on the way they use their languages to navigate popular media and negotiate their multilingual identities through it, as well as how these practices make them feel, indicate interconnectivity between cognitive, behavioural, and affective subcomponents of the psycho-sociolinguistic system and provide qualitative support for the M-factor (Herdina & Jessner, 2002) in the sense of the enhanced metalinguistic awareness particular to multilinguals.

In general, the participants' comments revealed that they are sensitive to language socialisation and the sociolinguistic context. It would appear from our data that not only do adolescent multilingual identity and socialisation practices span a range of modalities and cover a variety of communicative purposes, but also that the influence of friends and family as well as the home and social environments are highly important factors in language attitudes, language use, and multilingual development. The comments also revealed that an individual's positive attitudes may be linked to their degree of multilingualism; that is, the more languages one knows and uses, the more positive one's attitude towards languages. Furthermore, there were a number of comments which indicated interconnectivity between perceived language ability, motivation, and self-evaluation (both positive and negative); for example, successful contextualised language use seems to boost self-efficacy and encourage the participants to continue learning, while unsuccessful use leads to a range of negative emotions (which are

connected to narcissistic injury or threats to self-image). In this sense, the data corroborate, on the one hand, the notion of reciprocity between competence, motivation, and attitude, while on the other, the systems-characteristic of sensitive dependence on initial conditions; that is, the emergent outcome of each successful or unsuccessful language encounter sets up the initial conditions for the psycho-sociolinguistic system in any subsequent encounter.

In addition to this, the comments revealed a number of interesting issues regarding the behavioural subcomponent; that is, the way in which the participants use their languages. This was especially notable when they reported interactions with technology and talked about their online leisure activities. The comments expressed aspects of language use such as: user-agency in multilingual literacy practices, terminological innovation in linguistic repertoires, the transmission and maintenance of cultural heritage, the maintenance of long-distance and trans-border relationships, strategic use of language on social networks, carrying offline socialisation practices into online environments, and socialisation processes within virtual communities of practice. In this sense, the data show that there is continuity between offline and online sociolinguistic practices, and that agency, autonomy, and especially empowerment are fundamental factors in online communicative contexts. We propose that in our sample these practices and factors are necessarily more complex due to the range of language choices available to multilinguals compounded by the dynamic decision making necessary to effectively deploy their language skills.

Another salient aspect of language use that was evidenced in the comments was translanguaging. The participants revealed that they were adept at switching languages in a number of contexts and for a variety of reasons. Language switches appear to arise from linguistic playfulness and creativity, the ongoing influence of socialisation and the result of prior socialisation, the perceived social context, and the perceived characteristics of specific languages (including sociolinguistic characteristics, particularly prestige). However, perhaps the most interesting revelations about translanguaging practices concerned consciously outcome-oriented language-switch motivations, which this study dubbed ‘pragmatic codeswitching’, and

switches which are contingent on technological affordances. We propose that the reported online translanguaging practices of our participants reveal a high degree of metalinguistic awareness.

Although this hypothesis is mainly based on qualitative, emic, and holistic approaches to data analysis, the responses also corroborate earlier research in a number of areas, particularly existing work exploring language attitudes. From our data, we have been able to identify seventeen fundamental factors affecting the language attitudes and multilingual practices of the sample. These factors are: the L1 (Lasagabaster & Huguet, 2007); the language of education (Portolés, 2014); the family language (Mettawie & Janssens, 2007); linguistic proficiency/competence (Lasagabaster, 2005, 2007; Loredó Gutiérrez *et al.*, 2007; Safont-Jordà, 2007); the reciprocal relationship between attitudes and perceived competence (Spolsky, 1989; Baker, 1992; Lasagabaster, 2005); the ideal L2-self (Dörnyei, 2005); a visit or stay abroad (Lasagabaster & Huguet, 2007); sensitivity to the socio-political linguistic context (Pujolar, 2008; Dewaele, 2005); language socialisation (Ochs, 2000; Thorne *et al.*, 2009; Duff & Talmy, 2011; Gee, 1996; Knobel & Lankshear, 2015); continuity between online and offline language behaviour (Cunliffe, Morris & Prys, 2013); (multilingual) digital literacies (Harrison & Thomas, 2009); translanguaging practices (Cenoz & Gorter, 2011a; Li Wei, 2011; Paolillo, 2011); projection into imagined/virtual communities (Norton, 2013); linguistic playfulness and creativity (Baker, 2001; Todeva & Cenoz, 2009; Dewaele, 2010); self-affirmation, control and autonomy (Henry, 2013); and language-Ego (Guioria, 1972; Brown, 1987; Cline, 2001) and peer-evaluation (Walqui, 2000). Moreover, in line with existing research by Larsen-Freeman (1997), Herdina and Jessner (2002), and de Bot and Larsen-Freeman (2011), our data paints a picture of an integrated psycho-sociolinguistic multilingual system which displays the following features complex characteristics: linguistic objectivation and generally enhanced metalinguistic awareness; sensitive dependence on both initial conditions and internal and external resources; environmental interaction and internal reorganization; and complete connectedness and emergence.

In sum, hypothesis four consolidates the results we have seen so far by adding an emic perspective and a qualitative approach which help to socially situate the preceding hypotheses and, thus, provide richer data on language attitudes, multilingual identities, and multilingual and multimodal online practices. Congruent with *Focus on Multilingualism* (Gorter & Cenoz, 2011; Cenoz, 2013), these results afford us a deeper understanding of contextualised and situated language practices from a holistic, multilingual perspective. The message from our results is that adolescents' out-of-school contact with popular media, especially new media, enhances in-class forms of language contact, presents new ways of learning, and boosts motivation both to learn and to use languages. Additionally, this contact heightens metalinguistic awareness, provides pre-existing networked communities for young people to project into and express their multilingual identities, and encourages their future orientation as language users.

Now that we have summarised the results from the four hypotheses, drawn some conclusion from them, and shown their relevance in relation to existing research, we will continue by commenting on the reason for choosing a complexity approach and then draw the study to a close by pointing out some of its implications and some future research directions.

7.2 Through the looking glass: why complexity?

“Now, *here*, you see, it takes all the running you can do, to keep in the same place”. Van Geert (2008) used this quote from the Red Queen in Lewis Carroll's *Through the Looking Glass* (1871) to illustrate how dynamic systems constantly adapt and evolve to maintain equilibrium in a symbiotic relationship with their environment. As stated throughout the current study, we have attempted to apply insights from dynamic systems and complexity theories in order to take a holistic and multilingual approach to the exploration of multilingual phenomena. In our opinion, the importance of these theories in multilingualism research is self-evident; that is, the user/learner and the contexts in which they are situated are both undeniably complex and dynamic. Although a systems-perspective considerably complicates the way in which we investigate and conduct research into multilingualism, rather than resulting in unusable or, as

some may claim, spurious data we believe that it avoids making inferences which may not stand up faced with the realities of situation and context. For example, situations in which similar sets of conditions lead to widely divergent outcomes which may dynamically change from time x to time y are not adequately covered by linear approaches. In short, a systems-perspective highlights context, connectivity, and nonlinearity, and gives individual variation an elevated level of importance. Finally, systems-thinking recognises the problematic nature of *a priori* predictions and resists the temptation to find one-size-fits-all applications for our research. This is especially relevant for minority languages which do not share the common (monolingual) context found in many traditional approaches to SLA/TLA research. Studies informed by systems-thinking show what happens on a case-by-case basis within specific samples. In fact, as van Geert (2008: 197) points out, ‘an understanding of dynamic systems is crucial if we want to go beyond the static or structural relationships between properties or variables and wish to understand the mechanism of development and learning as it applies to individuals’. The relevance this has for the application of our research is that, at all times, our methodologies need to be open to change based on particular individual and group dynamics as well as contextual specificities.

Bearing the above in mind, we believe that a systems-inspired approach may be evidenced in a number of ways throughout the interpretation of our results. In the first hypothesis, we have moved beyond a ‘one language only’ focus (Li Wei, 2011a; Cenoz, 2013) and have observed interactions between language systems such as the effect of foreign-language and minority-language media on holistic attitudes towards languages in contact, and also the negative influence of foreign language media on minority language attitudes and *vice versa*. In the second and third hypotheses, the more experimental approach to data interpretation has illustrated differences in attitudinal outcomes between languages, and that, in spite of their typological differences, the foreign and minority languages display commonality in a number of respects when we consider the effects of out-of-school media contact. Furthermore, the complexity approach of this study has avoided single summary attitudes scores and allowed us

to be sensitive to variation and change at different points within a macro time-scale and to make use of what, on the surface, may be considered ‘bad data’ (Verspoor *et al.*, 2008). Finally, the emic perspective of the fourth hypothesis has allowed us to examine situated multilingual practices (Todeva & Cenoz, 2009; Gorter & Cenoz, 2011; Canagarajah & Wurr, 2011) paying due attention to the social context (Jessner, 2013). Taking into consideration the social context in this way, the participants’ comments have given us insights into their metalinguistic and metacognitive abilities (especially linguistic objectivation) and, we believe, provide further, qualitative, support for the M-factor as explained in the DMM (Herdina & Jessner, 2002).

In sum, a traditional SLA/TLA approach would only have resulted in a partial account of the language attitudes and language practices of the adolescents in our study. In that sense, the results we have obtained corroborate the importance of adopting a multilingual approach to the study of multilingual development and are thus in line with earlier research which rejects a ‘monolingual bias’ (Cook, 1997). Such research includes complexity theory applied to SLA (Larsen-Freeman, 1997; de Bot & Larsen-Freeman, 2011), Herdina and Jessner’s (2002) *Dynamic Model of Multilingualism*, and Cenoz’s (2013) *Focus on Multilingualism*. Furthermore, we believe that analysing multilingualism in this way echoes some of the innovative recent approaches to sociolinguistics in SLA contexts in terms of dynamic systems (Dörnyei, 2009, 2014; MacIntyre & Legatto, 2011; Dörnyei, MacIntyre & Henry, 2014) and holistic qualitative approaches (Komoroska, 2014; Wlosowicz, 2014). For reasons laid out by a number of the scholars above, the complexity of multilingualism is difficult to demonstrate empirically. Nevertheless, we believe that our results and the way in which we have interpreted them are congruent with complexity theories in applied linguistics and paint a picture of an integrated psycho-sociolinguistic multilingual system which is sensitively dependant on initial conditions and internal and external resources, completely interconnected, and characterised by emergence, nonlinearity, variation, and internal reorganization.

7.3 Implications of the study

The results of this study have given us a number of insights which may be applied to future multilingualism research, linguistic policy, and pedagogy:

The results from the first hypothesis show that, on the one hand, out-of-school contact with popular media has a positive impact on language attitudes, and that this impact is greater with new media and most affects the minority language, and, on the other hand, foreign-language media contact has a negative impact on minority language attitudes and *vice versa*. These results may have some implications for language education planning and linguistic policy. First, educators should find ways in which to capitalize on the attitudinal impact of out-of-school media contact either in-class or as a supplement to class activities. However, and this is fundamental, they should attempt to do this in a way which *does not detract from the authenticity* of popular media in the out-of-school context. Second, if the challenge of implementing popular media in more formal educative contexts is met, it should be done in such a way as to promote autonomy and bottom-up control of the language learning process. We propose that one way to achieve this is to put a greater emphasis on the use of new media technologies in in-class activities and to encourage the development of multilingual digital literacy. Moreover, in terms of the linguistic policy of the Valencian Community, it seems clear that positive attitudes towards Catalan will be improved by continually increasing its visibility in popular media (especially television, literature, and social media) and doing as much as possible to facilitate contact with this language. This is especially pertinent in light of the age range of our sample, as it appears that adolescence could be a particularly volatile battleground when it comes to minority language attitudes.

The results from the second hypothesis show that the effect of out-of-school media contact on language attitudes is not invariable. In fact, different media types affect different attitude types in different languages and to different extents. The results from the third hypothesis show that the attitudinal system is sensitive to changes in initial conditions and the interaction of subcomponents causes self-organization and affects future developmental stability. These results show that the attitudinal system is subject to different phases of stability

and variability contingent on time, external contact conditions, and different languages. They may have some implications for multilingualism research in the sense that variability between system subcomponents reveals the inadequacy of generalising multilingual language attitudes using summary mean scores. These results may also have some pedagogical implications. For example, increased contact with popular media may be used as a complementary resource to ensure the maintenance of positive language attitudes throughout obligatory secondary education. Depending on the types of attitudes teachers may wish to develop, which in turn will depend on individual class dynamics, certain types of media contact could be strategically introduced to supplement class activities. Furthermore, in the light of observed phases of stability and variability and the effects of different media types in different languages, this attitude-maintenance resource could be applied at specific points across the age range, in different languages, and in variable amounts in order to dynamically respond to different attitudinal needs young learners may have as they pass through the psychosocial turbulence of early adolescence.

The fourth hypothesis shows that adolescents are far from passive in their approach to extramural language contact. In fact, they show considerable agency in creating, choosing, and maintaining their own personalised multilingual and multimodal media environments, and this can be highly empowering for them. Moreover, the comments in this section reveal that adolescents are indirectly or, in some cases, directly aware of interactivity between their languages, their language practices, and how this affects them emotionally and influences their self-image as future language users. These results may have some important implications both for pedagogy and for linguistic planning in secondary schools. Our results lead us to believe that it is essential to have an open and democratic dialogue with adolescents in order to encourage them to become responsible and autonomous language learners, and most importantly to empower them in their learning trajectories. It may seem obvious that adolescents actually have a lot to bring to the table in terms of ideas on how to learn, and that giving them a greater stake in their learning processes will have a positive impact; however, in reality, this is very scarcely

put into practice here in Spain. This can be seen in comments such as “while I think English is fun I don’t really like the subject” (see: page 318), and a number of other comments which imply that autonomous and meaningful language engagement constitutes a better way to learn than decontextualized school material. For this reason, we believe that language subjects planned in a way which directly involves adolescent students, addressing their needs and concerns and reflecting the reality of their personal experiences with language, will be considerably more engaging for them and, in the long run, more successful.

7.4 Future research directions

Future research in this direction should, on the one hand, attempt to follow on from the motivational dynamics project initiated by Dörnyei, MacIntyre, and Henry (2014) and the dynamic focus applied to WTC by MacIntyre and Leggatto (2011), and, on the other, to continue to integrate qualitative and quantitative data analysis using a mixed-methods approach (Dörnyei, 2007; Komorowska, 2014; Wlosowicz, 2014). In order to fruitfully build on this work, a focus must be placed on language attitudes in multilingual sociolinguistic contexts and the resulting data must be examined using a holistic multilingual perspective (Cenoz, 2013). Perhaps the greatest opportunity for future research lies in the experimental methods of the second and third hypotheses, below we will present three possibilities in this respect, along with a proposal for a mixed-methods study.

Firstly, the current study explores attitudinal change over a macro timescale using a multiple cross-sectional analysis. Subsequent work should be longitudinal in order to provide a truly diachronic exploration of the data. Therefore, future research in this vein needs to focus more closely on developmental change as well as intraindividual variation in nested timescales. This will require a new instrument with the capacity to measure attitudinal fluctuations on a micro timescale, and which also affords long-term tracking of individuals to measure attitudinal change on a macro timescale. Subsequent data analysis will require a method for integrating

both these timescales. It should be noted, however, that such an analysis may considerably reduce the number of participants in order to make it a workable approach (i.e.: case studies).

Secondly, the current study identifies interesting complex phenomena in the behaviour of the psycho-sociolinguistic multilingual system but it lacks the power to provide a fuller explanation of what contributes to these phenomena. Therefore, future research should continue to develop a more robust integration of qualitative and emic data analysis with the experimental complexity approaches we have attempted here. This may involve combining the type of approach applied in the second hypothesis with more targeted interview questions which have emerged from the participants' comments in the fourth hypothesis. Such questions may be along the lines of: do you look for opportunities to use Catalan/English online? Why?, or does using English online make you feel more or less positive about getting a job? Why?, among others.

Thirdly, the current study indicates that a psycho-sociolinguistic multilingual system is sensitively dependent on initial conditions as well as interactivity between internal and external factors. Future research should explore this idea further by employing focused experiments which investigate how different configurations of system subcomponents at one specified point in time interact to set up the initial conditions for a subsequent point in time, and then examine the emergent properties that arise from these interactions over time. This process is likely to be quite complicated and may be facilitated by the development of a complex online data gathering instrument.

Finally, the study touched on the ideas of agency, autonomy, and empowerment. A fruitful future research direction would be further mixed-methods studies which specifically elicit secondary-school students' 'bottom up' attitudes to the learning and use of multiple languages. For example, structured questions could be used in interviews to ask students about their attitudes to in-class language learning and related media contact. This information could be compared this with their reported out-of-school contact and what they perceive are the language learning benefits of these activities. Students could also be asked how they would attempt to

integrate in-class and out-of-school contact with media and technology and the potential this has for language learning. This would provide the qualitative aspect of the study, to integrate this with a quantitative aspect the interview questions could be reworded into similar statements with which students could indicate agreement using a Likert scale. The results from both the qualitative and quantitative aspects could be integrated to explore how students feel about their formal learning activities in relation to their informal learning activities.

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APPENDICIES

APPENDIX 1: Language attitudes questionnaire

Encuesta: actitudes lingüísticas de los alumnos adolescentes de la Comunidad Valenciana.

Nos gustaría contar con tu ayuda para contestar estas preguntas. No es ninguna prueba y por lo tanto no hay respuestas 'correctas' o 'incorrectas', ni siquiera tienes que escribir tu nombre. Lo que nos interesa es tu verdadera opinión. Por favor, danos las respuestas de forma sincera, es la única manera de garantizar el éxito de la investigación. Muchas gracias por tu ayuda.

Primera parte: información general.

- 1) Edad: ____
- 2) Sexo: Chico __ Chica __
- 3) Lengua materna: Castellano __ Valenciano __ Ambas __ Otra (indica) _____
- 4) ¿Cuántos años llevas estudiando inglés? ____

Segunda parte: contacto lingüístico.

IMPORTANTE: Esta parte se trata del contacto fuera del ámbito escolar.

- 5) ¿Das clases de inglés en una academia privada? Sí / No
- 6) ¿Das clases de inglés con un profesor particular? Sí / No
- 7) ¿En casa tus padres hablan en **valenciano** (sí / no) **castellano** (sí / no) **inglés** (sí / no)?
- 8) ¿En casa tus padres *te hablan* en **valenciano** (sí / no) **castellano** (sí / no) **inglés** (sí / no)?
- 9) ¿Utilizas o interactúas con los siguientes medios de comunicación **en los idiomas indicados**? Indícalo en la casilla que corresponda, si no lo usas déjala en blanco.

En...	valenciano	castellano	inglés
Veo la televisión			
Veo películas (en versión original)			
Escucho música			
Escucho la radio			
Leo libros			

Leo revistas			
Leo tebeos			
Leo periódicos			

En la tabla a continuación es importante sólo indicar si utilizas las siguientes tecnologías **en los idiomas indicados**. Por favor, en la última fila indica, más o menos (no tienes que ser exacto!!), cuantos años llevas usando tales tecnologías. Si sólo llevas meses o no las usas, no pongas nada.

En...	valenciano	castellano	inglés
Busco información (Google, etc.)			
Utilizo redes sociales (Facebook, Twitter, MySpace, Instagram, etc.)			
Utilizo foros específicos			
Juego videojuegos			
Juego videojuegos (en línea, multi-jugador)			
Utilizo IM / SMS / Whatsapp / Line, etc.			
Indica durante cuántos años has utilizado esta tecnología en los idiomas indicados . (No hace falta ser exacto, ni diferenciar entre los tipos de tecnología).	Años:	Años:	Años:

Tercera parte: actitudes lingüísticas.

10) Indica la importancia de saber cada lengua en:

	Castellano	Valenciano	Inglés
mi pueblo/ciudad	Sí / No	Sí / No	Sí / No
la Comunidad Valenciana	Sí / No	Sí / No	Sí / No
en España	Sí / No	Sí / No	Sí / No
en Europa	Sí / No	Sí / No	Sí / No
en el mundo	Sí / No	Sí / No	Sí / No

11) Lee las siguientes afirmaciones sobre el **castellano** e indica si estás de acuerdo o no. Por favor, da tu opinión sincera. No hay respuestas 'correctas' ni 'incorrectas'.

- | | | |
|----|---|----------------|
| a) | Me gusta cómo suena el castellano. | Sí / No |
| b) | Me gusta hablar castellano. | Sí / No |
| c) | La lengua castellana es muy útil. | Sí / No |
| d) | Me identifico con el castellano. | Sí / No |
| e) | Todo el mundo debería saber castellano. | Sí / No |

- | | | |
|----|---|----------------|
| f) | Saber castellano me hace sentir inteligente. | Sí / No |
| g) | Saber castellano me hace sentir aceptado/a. | Sí / No |
| h) | Tengo claro por qué estudiar castellano. | Sí / No |
| i) | Merece la pena aprender castellano. | Sí / No |
| j) | Quiero que mis hijos hablen castellano con fluidez. | Sí / No |

12) Lee las siguientes afirmaciones sobre el **valenciano** e indica si estás de acuerdo o no. Por favor, da tu opinión sincera. No hay respuestas ‘correctas’ ni ‘incorrectas’.

- | | | |
|----|--|----------------|
| a) | Me gusta cómo suena el valenciano. | Sí / No |
| b) | Me gusta hablar valenciano. | Sí / No |
| c) | La lengua valenciana es muy útil. | Sí / No |
| d) | Me identifico con el valenciano. | Sí / No |
| e) | Todo el mundo debería saber valenciano. | Sí / No |
| f) | Saber valenciano me hace sentir inteligente. | Sí / No |
| g) | Saber valenciano me hace sentir aceptado/a. | Sí / No |
| h) | Tengo claro por qué estudiar valenciano. | Sí / No |
| i) | Merece la pena aprender valenciano. | Sí / No |
| j) | Quiero que mis hijos hablen valenciano con fluidez . | Sí / No |

13) Lee las siguientes afirmaciones sobre el **inglés** e indica si estás de acuerdo o no. Por favor, da tu opinión sincera. No hay respuestas ‘correctas’ ni ‘incorrectas’.

- | | | |
|----|---|----------------|
| a) | Me gusta cómo suena el inglés. | Sí / No |
| b) | Me gusta hablar inglés. | Sí / No |
| c) | La lengua inglesa es muy útil. | Sí / No |
| d) | Me identifico con el inglés. | Sí / No |
| e) | Todo el mundo debería saber inglés. | Sí / No |
| f) | Saber inglés me hace sentir inteligente. | Sí / No |
| g) | Saber inglés me hace sentir aceptado/a. | Sí / No |
| h) | Tengo claro por qué estudiar inglés. | Sí / No |
| i) | Merece la pena aprender inglés. | Sí / No |
| j) | Quiero que mis hijos hablen inglés con fluidez. | Sí / No |

14) Lee las siguientes afirmaciones sobre las tres lenguas: **Castellano, Valenciano e Inglés**. En esta parte de la encuesta te pedimos que consideres las tres juntas, no separadas como en las tres preguntas anteriores. No hay respuestas ‘correctas’ ni ‘incorrectas’.

- | | | |
|----|--|----------------|
| a) | Saber las tres lenguas me abre la mente. | Sí / No |
| b) | Me gusta ver las tres lenguas escritas en mi entorno. | Sí / No |
| c) | Me gusta escuchar las tres lenguas. | Sí / No |
| d) | Usar las tres lenguas me da acceso a más información. | Sí / No |
| e) | Saber las tres lenguas me ayudará a conseguir trabajo. | Sí / No |
| f) | Quiero que mis hijos tengan dominio de las tres lenguas. | Sí / No |
| g) | Saber las tres lenguas me hace sentir más europeo. | Sí / No |

Gracias por tu colaboración en esta investigación.

APPENDIX 2: Extracts from oral interviews and transcription code

Code for transcriptions:

R	researcher
S1, 2, 3 etc.	individual student
Sx	undefined student
Ss	students speak together
:::	stretched sound
-	false start or word cut off
,	micro pause
(1.0)	longer pause, indicated in seconds
?	question or rising intonation
(())	metalinguistic information: laughs, tone of voice, addressee, etc.
[xxx]	unintelligible speech
[word/phrase]	speakers overlap
<u>please</u> (underlined word)	word in another language

Question 1: Which language are you most comfortable using?

C2 I2 E1-2:

S1: con el valenciano

R: con el valenciano? muy bien, y por qué?

S1: pues porque es la lengua paterna

R: [vale]

S1: [la lengua] (xxx)

R: muy bien, y tú?

S2: yo con el castellano::, porque:: es la que hablo normalmente con los amigos y:: con todos no?

C2 I5 E3-4:

S1: castellano

S2: inglés

S3: castellano

R: ((to S2)) inglés? por qué?

S2: porque me gusta mucho el inglés

R: ah, muy bien, te hace sentir más cómoda que el castellano?

S2: sí

R: sí? muy bien

C2 I19 E3-4:

S1: on el español

S2: con el español porque es el idioma que más dominamos

S3: con el castellano que es el idioma de donde yo vivo

C1 I3 E1:

S1: jo:: en valencià

S2: en valencià

R: per què?

S1: perquè es la meua llengua i que es la que més conec

S2: perquè es la llengua que sempre he estudiat

R: la que sempre heu estudiat? i quan parleu valencià com vos sentiu?

S2: parlant en la gent còmode
R: còmode en la gent, o sea et sents més a gust no? (1.0) i quant parleu per exemple anglès com vos sentiu?
S1: jo estic un poc demés aixina:: que es més difícil
S2: important
R: et sents important?
S2: sí
R: sí, [per què?]
S2: [perquè] és una llengua que sempre he volgut aprendre
R: i com lo portes, bé o què?
S2: bé
R: sí? i a on parleu anglès? a classe?
Ss: sí, classe
R: molt bé

C1 I13 E3:

S1: con castellano
R: castellano
S2: con cualquiera
R: ah sí?
S2: con cualquiera que conozca
R: ah, vale ok, y cuántas lenguas conoces?
S2: e::r ruso, ucraniano, español, valenciano, er inglés, y:: aprendiendo japonés, francés y alemán
R: madre mía ((laughs)), bueno muy bien

Question2: How do you feel when speaking in Catalan / English / Spanish?

C2 I1 E1-2:

R: sí, y en inglés?
S1: pues, no sé, intento hacer- no tan cómoda porque, no:: (se dan) bien pero, bueno, normal, [bien]
R: [vale], vale, muy bien, y tú?
S2: e::n castellano cómoda, en valenciano también, inglés::s (1.0) pues (1.0) cuando me sale, er, bien, y cuando no, má::s incomoda
R: vale, err, y tú?
S3: yo, en castellano co- muy cómoda y en valenciano no tan cómoda
R: no tan cómoda, pero, y en inglés?
S3: en inglés::s (2.0) rara, me siento rara hablando

C2 I2 E1-2:

S3: pue::s, valenciano y castellano, pues normal
R: mmm, [y]
S3: [y::] inglés, no sé, me cuesta más hablar-
R: te cuesta- pero cómo te hace sentir? es que- claro que- claro que os cuesta pero::- es incómodo o::, o::: vergonzoso, o que- [o:::]
S3: [bueno] vergonzoso
R: [sí]
S3: [me da] vergüenza

C2 I3 E1-2:

S2: a mí en castellano y valenciano, pues, u:::m, bien, pero en inglés me siento un poco incomoda porque no:: no sé hablar muy bien

R: vale, ok, y tú?

S3: pues en castellano valenciano bien, y::: en inglés un poco de vergüenza porque no sé hablarlo muy bien

C2 I5 E1-2:

S1: pues en castellano me resulta bastante fácil porque ya estoy acostumbrado a hablarlo, e::r valenciano es que me cuesta un poco más hablarlo, a la hora de es- de expresarme, y inglés::s más o menos, las cosas básicas las tengo controladas

R: mmm, vale, y::: y eso cómo te hace sentir, controlar el inglés?

S1: e::r pues, mejor, porque:: es una lengua también muy hablada, y::: también me fui de viaje de fin de curso a londres y me ayudó bastante

R: muy bien, y tú?

S2: e::r castellano pue::s, no sé, lo domino y l- lo sé hablar y todo porque soy de aquí, y va- valenciano, buf, me cuesta bastante porque::: porque n- no lo domino exactamente, y el inglés me cuesta, menos que el valenciano porque:: lo doy más que- que el valenciano

C2 I6 E1-2:

S2: pue:::s yo, con el castellano estoy cómoda, y me identifico más con el valenciano, y luego el inglés, me gusta darlo pero me cuesta

C2 I7 E1-2:

S3: en valenciano incómodo

R: incómodo

S3: en castellano normal, en inglés normal

R: normal, en valenciano incómodo, por qué?

S3: porque no me gusta

C2 I8 E1-2:

S2: yo:: en castellano y valenciano bien porque:: los hablo continuamente en casa y en el colegio y eso

R: mmm

S2: y el inglés también porque me gusta el inglés, y me gusta aprenderlo y eso

R: mmm, y te hacer sentir bien hablar inglés?

S2: sí

C2 I11 E3-4:

S1: em, el castellano (1.0) cómodo, agradable, el valenciano se me hace pesado

R: sí

S1: y el inglés, comunicativo

R: comunicativo, vale, y el árabe?

S1: el árabe:: bien también, como el castellano

C2 I12 E3-4:

S2: vale, yo el castellano bien porque la domino y:: eso, pero [xxx] el inglés pues me cuesta un poco y::: al hablar a veces me pongo pues me- me da vergüenza, y::: pues el valenciano no lo hablo mucho pero cuando lo hablo estoy bien

R: estás bien no? vale, y tú?

S3: e::r el castellano es mi idioma natal así que lo hablo bien, el valenciano si hay que hablarlo, por ejemplo si te vas a valencia o un sitio donde hablan valenciano, normal, yo no tengo miedo pero el

inglés tengo un poco de miedo, pero que pa:- es un poco difícil hay que pensar lo que dices pero:: más o menos bien

C2 I13 E3-4:

R: cómo os hace sentir hablar en castellano por ejemplo?

S1: y o cómodo

R: cómodo no?

S1: sí

S2: bien

R: bien

S3: sí [xxx] a gusto o-

R: a gusto ok

S3: [xxx] mejor

R: muy bien, cuando digo como:- si te hace sentir algo es eso no? cómodo a gusto o:: tal no? o

incómodo o lo que sea no? entonces valenciano? si tenéis que hablar valenciano cómo os hace sentir?

S1: yo:: no me siento bien, me siento raro no me sa- no:- o sea lo que quiero decir no me sale me quedo allí atrapado

R: vale vale y tú?

S2: a mí:: no me gusta mucho pero lo hablo, lo hablo sólo aquí

R: vale vale, sólo aquí no?

S2: pero no me gusta

R: ok, y tú?

S3: yo:: incómodo porque no me puedo expresar igual que en castellano, y me trago más al hablar el idioma

R: vale el ing- en inglés? qué?

S1: bien

S3: bien

R: bien?

S3: sí, suelo hablar en clase de idiomas y bien

R: ah, vale?

S2: inglés a mí me gusta

R: te gusta

S1: a mí también

C2 I15 E3-4:

S3: yo en castellano cómoda, en valenciano me cuesta un poco, y en inglés me da vergüenza

R: vale ok

S3: o sea me gusta pero:: no sé

R: vale, y qué parte es? que te- te da vergüenza?

S3: no sé, la pronunciación y eso

R: vale, ok

C2 I17 E3-4:

R: y:: lo de::: vergüenza en inglés, es po::r-

S3: la pronunciación

Ss: sí ((laugh))

R: vale, todo el mundo dice lo mismo

Ss: sí

C2 I18 E3-4:

S1: pues, con el castellano bien yo creo que te aceptan y me siento bien

R: y con el valenciano?

S1: con el valenciano no tanto, yo creo que:: te pueden rechazar algunas personas

R: ok, y:: cuando hablas inglés, cómo te hace sentir?

S1: er, in- yo creo que basta- que el inglés bastante bien

R: mm, cómodo o::?

S1: cómodo sí

R: sí? muy bien, vale

C2 I20 E3-4:

S1: en castellano me hace senti::r integrado me hace sentir uno más que [xxx] todos, en inglés me hace sentir cómodo porque es como he aprendido a hablar lo de otro idioma y si me fuera fuera tendría salidas porque el inglés es el idioma más conocido, y en valenciano es el idioma que sabemos por la tierra más que nada, que tampoco si no lo sabes tampoco influye demasiado

R: mm, y tú?

S2: yo en el castellano me siento cómodo porque::, es lo que siempre he hablado después en el inglés porque:: es una lengua que he aprendido nueva:: y::: sé utilizarla más o menos, y el valenciano es la lengua que:: se utiliza en bastantes sitios de la comunidad valenciana

R: mm, y usar el valenciano cómo te hace sentir?

S2: bastante bien

R: bastante bien no? ok, y tú?

S3 (from Madrid): yo pues el castellano la lengua más cómoda porque es la que utilizamos siempre, el inglés pues, no sé, soy- también, no soy malo, y:: me gusta y también es- es cómodo si puedo hablar con alguien en inglés, y el valenciano pues, buf, no me gusta ni hablarlo tampoco lo sé demasiado pero no me gusta hablarlo y no me siento cómodo tampoco hablando

C2 I21 E3-4:

S1: yo seguro (speaking about Spanish)

R: seguro no?

S1: sé muy lo que voy a decir, y no sé, no tengo dudas a la hora de hablar

R: vale y en valenciano?

S1: un poco más incómodo, porque como no:: tengo todo el vocabulario que me gustaría pues muchas veces me quedo trabado sin saber que decir

R: mm, y en inglés?

S1: en inglés igual que el valenciano pero igual un poco más valiente porque me gustaría aprenderlo más, entonces me arriesgo más

C2 I22 E3-4:

S1: (speaking about Catalan) e::r depende con los amigos y la familia y eso cómodo, pero hay ciert- con ciertas personas y eso un poco::, raro, porque el valenciano no- no:: es por costumbre es algo familiar, también debería, llevarse a otros ámbitos pero, me siento extraño hablando valenciano si fuera- en contexto castellano en valenciano

C1 I7 E4:

S1: el inglés sí que::: sí que hablo

R: sí?

S1: en varias ocasiones, yo hablo inglés

R: por ejemplo?

S1: pue::s, viaje mucho

R: ah sí, viajes muchos con tus padres

S1: viaje bastante, bueno yo soy de Rumania y paso por [xxx]

R: [ah, muy bien]

S1: nos paramos em, bastante

R: muy bien

S1: entonces todos los sitios que voy tengo-

R: tienes que [hablar inglés]

S1: [hablar inglés]

R: porque tus padres hablan inglés o qué?

S1 no:: rumano pero sí saben inglés

R: saben inglés ellos, y cuan- cuando viniste aquí a España?

S1: yo:: vine::: tengo trece años aquí

R: ah, o sea, has nacido aquí?

S1: no

R: has nacido allí?

S1: sí

R: y tu lengua materna, o sea tú hablas con tus padres en rumano?

S1: sí

R: o sea, tú sabes rumano, castellano, valenciano, inglés bien no?

S1: inglés, bueno sí

R: perfecto, y con qué lengua te sientes más a gusto de las cuatro?

S1: bueno, el rumano

R: tú con el rumano el que más te sientes no?

S1: sí

R: cómo te sientes cuando hablas rumano?

S1: es mi lengua materna

R: o sea, mucho mejor no?

S1: sí

C1 I11 E1:

S1: (about Spanish) libres

R: libres?

Ss: ((laugh))

R: ok

S2: libres también

R: y- y hablando valenciano? Lo mismo?

S1: más extraño

R: más extraño?

Ss: sí

S2: más extraño

R: ok, y en inglés?

S1: mejor, es entonces

R: mejor que el valenciano?

S1: sí

R: ok

S2: sí, puedes hablar con más gente, te sientes más- como:: con más poder para hablar con más gente

C1 I14 E3:

S1: (about English) con el inglés depende porque:: el inglés si lo hablo- he ido a- a veces a:: Inglaterra y entonces si lo hablo con ellos bien pero si hablas con gente que habla castellano pues te cuesta más porque::- no sé, a mí me cuesta más hablar con gente que habla castellano

R: es como tener un contexto autentico no?

S1: sí

Question3: Which languages do you like to read in?

C2 I15 E3-4:

S1: en castellano, bueno también leo en inglés páginas webs y cosas así, libros no, no leo ninguno en inglés y bueno libros en valenciano porque me hacen leerlos pero-

R: vale vale

S1: castellano

R: y leer las páginas webs en inglés te gusta?

S1: sí, hay cosas que no entiendo y- bueno uso un traductor de vez en cuando para, palabras que no entiendo y frases y expresiones pero sí

C2 I20 E3-4:

S1: en castella- prefiero leer antes en inglés que en castellano, porque en castellano me aburre muchísimo y hace poco nos mandó un trabajo en inglés y, como es algo diferente es algo nuevo me gusta más leerlo que en castellano

C2 I22 E3-4:

S1: a mí me resulta indiferente para disfrutar como lectura leo en castellano y valenciano y:: sobre informática me gusta mucho leer en inglés porque la mayor parte de la información está en inglés, que es más detallada

C1 I5 E3:

S1: yo creo que valenciano

R: tú el valenciano por qué?

S1: porque mi madre es profesora de valenciano y:::

R: ah, tu madre es profesora de valenciano de instituto::

S1: sí

R: entonces claro al ser tu madre profesora de valenciano pues tiene una influencia, no?

S1: sí

R: y qué lengua te gusta más a ti?

S1: a mí castellano

R: a ti castellano por qué? y tu madre no se enfada?

S1: no ((laughs))

R: no?

S1: no sé, mi padre habla castellano y mi madre valenciano

R: y en casa qué- ellos qué- con- qué lengua hablan?

S1: entre ellos castellano pero conmigo mi madre habla valenciano y yo con mi padre en castellano

R: ah, muy bien, y cómo te sientes cuando hablas cada lengua? o sea con tu padre, qué prefieres hablar con tu padre? o sea cómo te sientes más cómoda?

S1: con mi madre

R: valencià, más cómoda?

S1: sí

R: por qué? se te ocurra algo?

S1: ((laughs)) no

C1 I6 E3:

S1: sí, en castellano porque:: los libros de normal en valenciano , es catalán y entonces, me lio un poco más
R: cómo, cómo? entonces por qué? el ser catala::n?
S1: en catalán es que no es lo mismo que hablar valenciano, valenciano sino
R: entonces te lías, o qué?
S1: sí, hay palabras raras entonces pues
R: prefieres castellano? el catalán no te gusta o cómo?
S1: sí, lo único es que a veces tiene:: palabras raras, o:: que-
R: y para vosotros es una lengua diferente cas- catalán y valenciano?
Ss: no
R: o sea, es la misma?
Ss: sí
R: pero con palabras diferentes o cómo?
S1: sí, es la misma que es- bueno, es igual pero las pa- hay palabras que:: son diferentes y entonces pues al cambiarlas-
R: te lías
S1: sí

C1 I7 E4:

S2: ((about Catalan)) no es musical

R: no?

S2: le- le falta musicalidad, valenciano

R: ah sí? le falta musicalidad

S2: sí, tienes que leer muy lento porque:: no sé está más enrevesado

R: sí?

S2: sí

C1 I15 E4:

R: te gusta leer en árabe? porque tiene una letra distinta [también es-]

S2: [sí, sí] siempre me ha- he tenido esa::- esa emoción de leer en árabe, sé leer un poco me han enseñado un poco pero no llego mucho mucho pero sí, sé escribir un poco y leer, porque:: como sé que es mi lengua me gusta saber escribirla y::-

R: y te- te anima no, al leerla?

S2: sí, me gusta porque sé que es mi lengua y prefiero es- saber lo- lo principal es escribir mi lengua y leerla

Question 4: Which languages do you use to communicate with on your mobile phone?

C2 I4 E1-2:

R: me puedes explicar algún momento en el que has comunicado en inglés por el móvil?

S1: cuando::, por ejemplo, va uno, que no es de aquí, y hablo en inglés y (xxx) y tienes que hablar en inglés porque si no no te entiende

R: sí, y:::

S2: (xxx)

S3: yo cuando me aburro hablo inglés con la gente ((laughs))

R: y cuando te ha tocado hacer eso, e::r lo:::- has tenido éxito no? que te han entendido y:::

S1: sí

C2 I8 E1-2:

S1: sí, y alguna vez en francés

R: sí?

S1: con una amiga mía

R: ah, muy bien, con una amiga concreta no? porque habla- habla francés?

S1: sí

R: y no habla castellano?

S1: no

R: y por tanto comunicas en su idioma

S1: sí

R: ah! muy bien, y cómo te hace sentir eso?

S1: pues bien porque como no la veo, como vive en Francia pue::s, con ella pues me puedo comunicar, en francés

C2 I9 E1-2:

S2: yo hace poco me he puesto el móvil en inglés, para:: así aprender un poco más

R: ah sí? y te parece una buena forma de aprender?

S2: sí porque hay cosas que::: no sé cómo se dice y:: intento [averiguar??] lo que significa

C2 I11 E3-4:

S1: castellano e inglés

R castellano e inglés, y valenciano no?

S1: y francés también

R: y francés también, madre mía

S1: co- co::n la gente de marruecos

R: sí sí, eres multilingüe eh? ((laughs)) bueno

S2: yo en valenciano, y alguna vez en castellano pero muchas veces en valenciano, más

R: vale, y tú?

S3: yo en castellano pero::: much- a veces en valenciano, con él, y en francés con amigos de [xxx]

R: ah, vale en francés también, y se supone que es un amigo que no:: que no sabe castellano

S3: sí, bueno muy poco

R: muy poco, por eso es más fácil hablar en francés, no?

S3: sí

C2 I12 E3-4:

S3: en todas

R: en todas? en inglés también?

S3: sí

S1: ah, sí?

S3: sí

R: explícame un poco de eso, qué::-

S3: no sé, con los amigos

R: con los amigos

S3: para gastar bromas y eso

C2 I15 E1-2:

S1: yo, valenciano no pero inglés, por el móvil no pero, Skype cosas así con amigos

R: ah sí? muy bien, amigos que no hablan castellano

S1: sí, y:: videojuegos

R: videojuegos también, qué videojuegos?

S1: em, no sé, me gustan bastante los videojuegos

R: mm

S1: videojuegos multijugador
R: multijugador no?
S1: sí
R: vale, y- y son estos que- que se puede jugar online no?
S1: sí
R: y estás hablando mientras juegas
S1: sí
R: te parece una buena forma de aprender idiomas?
S1: sí, yo he aprendido bastante así, sobre todo vocabulario
R: sí, muy bien
S1: porque los videojuegos no suelen poner en inglés y:-
R: y además me imagino que es en directo no? [hablan]
S1: [sí]
R: y:: así que es como::, formas parte de una comunidad
S1: hm mm ((agrees))

C2 I19 E1-2:

S1: principalmente castellano pero algunas veces cuando haces bromas y eso en inglés
R: y tú?
S2: yo en las tres, en valenciano en inglés, y:: en castellano
S3: yo en castellano con mis amigos y gen- y:: en valenciano con mi familia

C2 I21 E1-2:

S1: por el móvi::l, ahora exactamente? en castellano, bueno castellano y francés inglés valenciano
R: bwah!
R1: pero porque:: es un tema de intercambio y tal
R: ah, vale vale, así que tienes un motivo no?
S1: sí, hay motivo para hablar así
R: ah, muy bien, muy bien muy bien
S2: yo, castellano co::n mis amigos y valenciano si hablo con me hermana:: o con mi madre
R: ah, vale entonces tienes en- entornos distintos no?
S2: sí
R: para cada uno

C1 I2 E2:

R: en inglés?
S1: no
S2: a no ser que sea con mi alumno de intercambio
S1: sí
R: ah, sí?
S1: yo igual
R: ay! y por móvil habláis con él, con el alumno de intercambio?
Ss: sí
R: que guay! y de dónde es él?
S2: de Alemania
R: que chuli, y os enviáis whatsapps?
Ss: sí
R: y cómo habláis con él? en alemán [o en inglés]?
S1: [sí]
S2: [o en inglés]
R: ay, en alemán también?
Ss: sí

R: guau! y cuando habláis con él hacéis, por ejemplo, lo escribís parte en alemán y parte en inglés?

S2: a veces

S1: sí, depende

R: es una mezcla de lenguas en el whatsapp?

S2: sí

R: y por qué lo hacéis eso? por qué mezcláis las lenguas?

S2: para:: que nos entendamos los dos, o sea:: como él tampoco entiende mucho español y yo no entiendo mucho alemán-

R: ay, español también pones en el whatsapp

S2: sí

R: ay claro porque él también está aprendiendo castellano

S1: claro

S2: a veces nos hablamos en alemán y a veces en español

R: que guay no? y os gusta la experiencia esta?

S2: sí, ha estado muy bien

C1 I6 E3:

S1: sí, mucho

R: y por qué, cambiáis de lengua?

S1: no sé, hay veces que:: t- te mareas tú sólo, dice::s-

S2: que te mareas y ya está

S1: sí

R: porque te mareas y lo pones, alguna razón más?

Ss: no ((laugh))

R: simplemente porque:: sale así?

S1: es que hay veces que cuan- que hay amigos que siempre estás hablando en valenciano y otros que siempre los hablas en castellano y si están los dos mezclados haces-

R: es un remix, sí

S1: sí, haces una cosa rara

C1 I7 E4:

R: y rumano?

S1: rumano con mis padres

R: pero-

S1: aun- aunque con mis amigos rumanos hablo castellano

R: sí?

S1: porque la mayoría llevan aquí mucho tiempo entonces-

R: o sea, entre vosotros no habléis en rumano sólo habléis en castellano, y eso por qué?

S1: no sé, nos hemos acostumbrado así

R: o sea y::- por qué nunca empezasteis a hablar en rumano?

S1: no lo sé ((laughs)), de niñas llevamos hablando así

R: ya ya, curioso

Question 5: Which languages do you use on the internet?

C2 I1 E1-2:

S1: e:::r valenciano y en castellano

R: [mmm]

S1: [bueno] en inglés si tengo que hacer una::- si tengo que buscar información sobre algo en inglés también en inglés [pero-]

C2 I1 E1-2:

S2: [yo::] según sea e:::l- la aplicación pues (1.0) en algunas valenciano y en otras inglés

R: ahh? vale? explícame un poco más de cuando lo usas en inglés?

S2: pues, por ejemplo en el instagram uso:: (4.0) no sé, el inglés?

R: pero es que la otra gente habla en inglés? (1.0) o:::-

S2: no sé?

R: simplemente en inglés no? porque:: te gusta?

S2: sí

C2 I8 E1-2:

S1: en inglés y en castellano, porque:: hay redes que no se puede utilizar en castellano o s- o er, normalmente se utiliza en inglés

C2 I9 E1-2:

R: ahh, muy bien, interesante, ok, u::::m, y:::: es lo mismo [xxx] que buscáis cosas en inglés si::: hay un motivo concreto no? como un proyecto o algo así, en valenciano buscáis cosas por internet?

Ss: también, sí, sí

R: también

S3: sí:: para unos trabajos que nos dan en valenciano, los buscamos

R: pero hay otros usos del valenciano que no sean trabajos o::

Ss: no

C2 I13 E3-4:

S2: yo:: la mayoría inglés, me parece más, no sé, más natural, pero castellano lo uso y romano también para hablar, por Skype con mi, familia y tal

C2 I15 E3-4:

S1: sí, yo uso internet e::n- en los tres idiomas, castellano más, en inglés redes sociales porque sigo gente inglesa, y- y también videos en Youtube también

R: ah en Youtube también?

S1: sí, y series subtituladas también suelo ver

R: ahh

S1: las traducciones no suelen ser muy buenas, y luego en valenciano cuando me hacen buscar algo de colegio en valenciano también pero bueno, no es la mayor

R: y una pregunta a parte, qué opinas de los e::r de las series um, las- los programas doblados

S1: los programas doblados, depende de:: de como esté doblado pero normalmente las series que veo, si son así anime o algo así, están bastante mal dobladas y las veo en inglés subtituladas o algo así

C2 I17 E3-4:

S1: en castellano, y si hay que buscar algo, en valenciano

S2: yo igual

S3: sí eso

R: sí

S4: castellano

R: alguna vez en inglés

Ss: no

C2 I19 E1-2: (about using English in online multiplayer)

R: qué me podáis contar de estos grupos de:: de vuestro uso del inglés en esos contextos

S1: pues que es difícil adaptarse pero::

S2: te cuesta

S1: consigues comunicarte con ellos y eso es bueno

R: pero bueno al final es algo que podáis conseguir no?

Ss: sí

R: y- y:: eso cómo os hace sentir?
S2: bien
R: bien no?
S1: a gusto
S3: porque dominas un idioma y eso es bueno

C1 I8 E4:
S2: català i castellà
R: català i castellà? en quin context cada una?
S2: pue::s, jo és que normalment (1.0) per exemple el tablet està en català aixina que tot el que busque apareix en català
R: o siga, el google ho tens ficat en:: [xxx] en català, molt bé, i el castellà?
S2: el castellà, en el ordenador
R: en ordenador
S2: tinc aplicacions que no apareix en català
R: molt bé

Question 6: How do you feel when using Catalan / English / Spanish on the internet?

C2 I1 E1-2:
R: pero en instagram que? instagram es? subir fotos no? y:: poner coment[arios]
S2: y eso de follow- seguir a la gen[te::]
R: [ah] sí? y sigues a la gente que:: de, de lengua inglesa, que, de habla inglesa digo
S2: a algunos sí
R: algunos sí, y lo entiendes verdad? sí, y:: (1.0) lo que quiero saber entonces es, es por qué alguna vez has escrito en inglés? cua- quién es la audiencia?
S2 porque::: no sé, si es en inglés parece má::s, como:: ((laugh)) no sé decirlo?
R: mmm
S2: sí, que en castellano ya::: como todos (xxx) en hablarlo queda ma::s (1.0) como::: copiado, como si hubiese visto antes, inglés suena diferente

C2 I2 E1-2:
S1: en valenciano pues cómodo porque es la lengua que utilizo normalmente, valenciano también, y en inglés como que me gusta más escribir con los de rol y-
R: y castellano también
S1: sí también

C2 I5 E1-2:
S1: pue::s:::, no sé me a- e::r como::: las tres lenguas son bastante importantes, pues, no sé me siento más inteligente
R: vale, y tú? (2.0)
S2: pues no sé si me siento inteligente o que (1.0) yo qu- yo creo que el valenciano es importante aquí pero::: en::: otros países no es tan importante
R: mmm, y el uso del inglés en internet?
S1: cómo?
R: y el uso del inglés en internet? porque has dicho que a veces-
S1: e:::r
R: pocas veces-
S1: porque, las redes sociales suelen, ser- o sea suelen haber más internautas ingleses y::: también es muy importante para eso

C2 I8 E1-2:

S2: yo bien porque, aunque el castellano y el valenciano lo controle más, pues el inglés también así aprende y eso y que me gusta

C2 I9 E1-2:

S1: si lo entiendo bien, si no lo entiendo me siento patética ((laughs))

S2: yo:: si lo entiendo bien, y si no lo entiendo, pues un [poco]

S1: [nerviosa]

S2: nerviosa::, sí

R: vale, y tú?

S3: yo, si en- si entiendo el inglés lo- e:m bien, pero si no lo entiendo, no::, me siento muy incómoda y al- si tengo que explicar algo en inglés me siento insegura [a describirlo]

R: [ok, vale], es- lo- lo mismo no?

Ss: sí

R: y- y-

S4: pue:::s si busco:: y encuentro lo que quiero bien pero se no pues, [xxx] me pongo nerviosa

R: vale, un poco frustrante, no?

S4: sí

C2 I15 E3-4:

R: por ejemplo, cuando tú juegas con los amigos en- en esas comunidades de los videojuegos, cómo te hace sentir hacer eso?

S1: mm, me gusta, me gusta hablar inglés y entenderles y eso , aunque bueno, hay cosas que no:: que no entiendo- que no sé decir pero:: sí me gusta

R: sí, y- y:: en Skype también?

S1: Skype no suelo- no suelo hablar mucho en inglés, alguna vez con algún amigo pero no::

R: vale, y si tienes una comunicación exitosa, qué?

S1: es que me cuesta bastante, tampoco hablamos tanto- son palabras que son siempre las mismas no:: es que tengamos una conversación muy variada

R: es practicar palabras?

S1: sí ((laughs))

Ss: ((laugh))

C2 I17 E3-4:

S3: para mí es más fácil el castellano

R: el castellano?

S3: llevamos menos- hablamos con más personas en castellano

C2 I18 E3-4:

S1: si por ejemplo en Twitter que es bastante famosa la red social si sigues personas por cualquier cosa que hablan otro idioma y eso también te motiva a ti para empezar a leer en ese- en ese idioma no? de cierta manera es llevarse- llevar a uno mismo a utilizar más un idioma para aprenderlo más

C2 I18 E3-4:

S3: cuando juegas online y eso hay muchas veces que:: pueden hablar en inglés much- la mayoría

R: mm, tú juegas online en grupos de habla inglesa, no?

S3: sí alguna vez sí

R: y:: y eso cómo- qué reacción tienes cuando juegas esos videojuegos?

S3: hombre pues, intentas aprender il- el idioma para así comunicarte mejor

R: mm, puedes i- identificarte con el grupo?

S3: sí

C2 I19 E1-2:

S2: a mí me hace sentirme mejor al utilizar el inglés y e::l va- valenciano porque castellano como se habla de siempre y es algo que utilizas día a día es más fácil que:: usar el inglés o el valenciano

C2 I20 E1-2:

R: cómo te hace sentir poder usar el inglés en internet?

S1: me hace sentir muy bien porque, había veces antes cuando no lo utilizaba cuando no sabía tanto que hablaban y yo no me entro de lo que decían y te sientes como:: sin poder aportar, si pue- estando fuera de la conversación, y ahora sabiendo inglés puedes aportar y puedes ayudar o puedes comunicarte con otros porque en internet no siempre te comunicas alguien que es español, si te comunicas con alguien alemán o de otro idioma que no sabes en inglés es como unir a todos

C2 I21 E1-2:

R: me puedes hablar un poco de los videojuegos?

S1: e::r, no sé, [xxx] por ejemplo te explica::n, cosas sobre un personaje entonces lo tienes que leer y bueno supongo que con eso aprendes bastante como vocabulario y tal

R: mm, y- y:: juegas a estos videojuegos multiplayer online?

S1: sí, sí, en línea sólo puedes hablar en inglés

R: sí

S1: entonces para::: comunicarte con tu equipo digamos sólo se puede utilizar el inglés porque:: más que nada porque no lo entendería tu equipo, tus aliados

R: y no tienes ningún problema en meterte en- en el grupo

S1: no no porque faci::l- te haces con el rollo de hablar y entiendes todo y va bien

C1 I9 E2:

R: y:: en inglés alguna vez? qué::- cómo os hace sentir?

S1: de buscar información?

R: sí, de buscar información o:: o incluso jugar u::n videojuego o algo así

S2: si es eso, a mí cómodo

R: cómodo no?

S2: sí

S1: cómodo porque nadie te está::-

S2: no sé

S1: nadie te está-

S2: [mirándote]

S1: [esculcándote] ni mirándote entonces sí que lo entiendo y:: bien, es cómodo también

C1 I9 E2:

S1: (about English) pues bien porque::, me siento bi::en er sabiendo que pone y eso

R: mm, muy bien

S2: estás contenta y orgullosa de poder entender lo que pone otra gente que a lo mejor puede ser de estados unidos o Inglaterra y te hace sentir bien poder saber lo que dicen

C1 I15 E4:

R: y cuando te toca usar in- inglés en internet?

S2: (L1 arabic) a- a mí me gusta, er me- me gusta porque er yo además lo pongo, lo quiero utilizar en inglés porque lo que quiero es aprender inglés de mayor

R: ah, tú pones el ordenador en inglés también?
S2: sí, algunas cosas las pongo por ejemplo, yo que sé, una- alguna aplicación, la pongo en inglés para aprender algo de inglés, es que yo de mayor quiero hablar inglés
R: y- y una pregunta para ti entonces, er, en qué lengua tienes el móvil?
S2: el móvil? el móvil lo tengo en inglés ((laughs))

C1 I15 E4:

S1: culto, sabes más idiomas
S2: sí
R: culto no? ah, buena respuesta
S1: inteligente también

Question 7: Do you mix languages on social network sites?

C2 I1 E1-2:

R: me- me podéis explicar un momento en que eso ha pasado?, utilizando- o:- es como ca:mbiar idiomas e::r en- en una sola frase? por ejemplo
S1: pues una palabra, a lo mejor e::r si estás más acostumbrada decirla en un idioma pues, te viene-
R: [mmm]
S1: [así], por ejemplo si estoy hablando en castellano y me sale una palabra en valenciano
R: mmm
Ss: sí
R : y [tú]?
S3: [a mi] también
S2: pue:::s también
R: lo mismo, ok (1.0) lo que te sale de- del alma, no?
Ss: ((laughs))
S2: y a veces también cuando eso que:: pa que quede más bonito a una palabra la dices en inglés

C2 I5 E1-2:

S1: pues por ejemplo::, a vece::s estoy hablando en castellano y suelto una expresión así en valenciano como por ejemplo i avant que es una expresión en valenciano
R: mmm
S1: y::: cuando quiero pedir algo, para que me hagan un favor, pues sí lo digo en inglés, o please o:::
R: mmm, y- y, por qué eliges cambiar lo- los idiomas? poner esas frases? [es qu-]
S1: [no es qu-] como también lo escucho, lo ves usando por la calle o:::, o que mis amigos lo dicen, pues ya me acostumbro

C2 I6 E1-2:

R: escribir en castellano y cambiar a valenciano, eso también [lo hacéis], no?
Ss: [también] sí ((laugh))
R: y- y cuál es el motivo de cambiar?
S3: sí (2.0)
S2: palabras
R: sí sí
S2: que nos gustan o los que- es que (xxx)?
R: que- ahh muy bien

S1: por ejemplo si lo pones todo junto es un poco más aburrido
R: cómo cómo, es-
S1: que si lo pones todo igual es- es un poco más aburrido
R: aah, muy bien, así que es más interesante mezclar no?
Ss: sí
R: y tú lo que has dicho es súper interesante lo de u::m e::r has dicho que a veces te gusta más una palabra
S2: sí
R: sí sí, y esto que- claro es como, hay algunas palabras que os molan más
Ss: [sí] ((laugh))

C2 I6 E1-2:

R: a::h, muy bien, que curioso, e:::r y::: eso que hemos dicho del uso de please, eso lo hacéis también?
Ss: sí
R: sí, y por qué, por qué pongáis please, por qué pones please?
S2: porque::: es una palabra bastante habitual para hablar porque te es más corta, e:::r um más cómada
R: sí
S3: parece que please es un poco- como más cariñoso
R: ah, sí más cariñoso
Ss: sí sí
R: ah, muy bien, bueno-
S3: como si dices- si usted dice por favor es como si se está dirigiendo a una persona que la tiene respeto, y mientras tanto si usted dice please, pues es como a los amigos, familiares [7.26]
R: ah sí sí, entonces queda más familiar
Ss: sí

C2 I7 E1-2:

R: eso es más lo que quiero saber, si hay un motivo porque siempre tenemos motivos
S3: para cambiar un poco
R: para cambiar un poco no? er, me puedes dar un ejemplo de que haces, er, como cambias, o qué palabra sueles poner?
S3: pues, please
R: please, no? es que antes alguien ha dicho que suena más cariñoso incluso, es que, claro, cada persona tiene sus motivos
S2: es que por favor, no sé
S1: por favor suena mu:y- ((serious tone of voice))
S2: [please] ((sweeter tone of voice))
S1: muy serio, no?
R: muy serio, y please suena menos serio?
S1: sí
R: ahh, muy bien, y::: alguna abreviatura?
S3: umm, hello
R: hello también, pero empieces con hello y luego en castellano?
S3: sí?
R: y- y::: por qué decís hello?
S2 no sé, porque hola es muy repetitivo, no sé
R: ahh, ok, vale, así que es algo diferente no? decir hello?
S1: sí

C2 I8 E1-2:

R: y- y con qué motivo? por qué::?

S2: yo porque a mí como que me sale ya:: decirlo en ese idioma, no- por ejemplo vale, ya:: normalmente pongo ok, no pongo vale, porque:: no sé siempre me sale, esa, [no sé]

S1: [yo también] porque:: no sé hay palabras en castellano que son más largas que en inglés, entonces sale más rápido pue::s lo escribes y pones directamente la palabra en inglés, y ya está

R: me podéis dar un ejemplo de que tipo de palabra ponéis en inglés?

S1: por ejemplo por qué, pues, pones why o::

S2: sí, o qué, o qué what

R: ok, o why, please alguna vez?

S1 S2: sí sí

R: sí:: muchas veces se usa please también, y alguna abreviatura o algo así?

S1 S2: no, no

R: no, eso no, nada de LOL y todo eso?

S2: no

R: no, no sueles ponerlo, ok muy bien, y::: aparte de ser más rápido o más fácil hay algún otro efecto que tiene poner e::r please o:: hello o::: lo que sea?

S1: no

R: no?

S1: y también si te acostumbras más a ponerlo, entonces e::r después mentalmente ya te sale, y::: te aprendes más rápido

R: vale

S2: sin pensar, luego:: lo pones y ya está

R: ah! sin pensarlo

C2 I9 E1-2:

Sx: [el please] es más corto [que el]

R: [más corto]

Sx: por favor y tardas menos en decirlo

R: sí eso también me han dicho que es más corto

S3: suena muy americano y lo americano mola

C2 I9 E1-2:

R: los efectos que- has- has dicho eso, que me ha parecido muy interesante, lo de::: suena más americano

S3: es que me gusta, me gusta lo americano, pero es que me parece [muy difícil]

S2: [suena::] suena muy bien o sea, interesante no?

S3: sí

S2: escuchas una palabra y dices qué es esto- qué::: voy a buscarlo, y:: si te gusta pue::s lo dices y::: te parece muy interesante

R: ah

S2: lo comentas y muchas cosas

C2 I10 E3-4:

S1: sí

R: pero cómo- explícame-

S1: en valenciano

R: en valenciano?, me podéis explicar- sobre todo tú como andaluza, por- por qué usas una palabra en valenciano, en [plena frase]?

S1: [porque estoy] acostumbrada de tanto oírlo, entonces ya me sale

R: ya te sale no? así que puedes escribir una frase en castellano y de repente sale, no sé, i avant o [algo así no]?

S1: [sí pero, por ejemp-] sí, eso sí

R: eso sí, no?

S1: y el otro de ara

R: ara también

S1: sí

C2 I12 E3-4:

S2: yo no, yo castellano, yo::

R: alguna vez has mezclado el valenciano con el castellano en un mensaje o algo así? en e::-

S2: sí porque por ejemplo algún trabajo es en valenciano por ejemplo el posa't a prova, sabes? entonces pues le pongo tienes el posa't a prova, y no sé qué, que no entiendo, entonces mezclo

R: vale, y- y eso supongo que es porque e::r ese concepto sale en valenciano

S2: claro

R: vale ok, y en inglés nada no? no has dicho hello o please, o::-

S2: ((excited)) sí:: eso sí

R: vale por eso digo

S2: eso sí

R: y- y:: a ver, qué? please por ejemplo?

S2: sí, please sí

R: y por qué pones please?

S2: no sé, me gusta más ((laughs)) que por favor, me gusta más

R: te gusta más, ok, y- y:: la diferencia entre por favor y please, qué::- qué te parece?

S2: no sé, a mi es que please me gusta, es que por favor lo veo, no sé, lo veo muy normal, me gusta más please

R: ah, vale, por favor es muy normal y please me imagino que no es muy normal

S2: claro que no porque la gente- claro que decir por favor- si te vas por ejemplo a Londres, sabes? allí sí que te dicen please no sé qué tal, sabes, por qué? porque hablan please

R: sí

S2: aquí que habla::n- que dicen por favor, entonces me gusta más please

C2 I12 E3-4:

S3: er, pues sí los utilizo los tres por ejemplo si hay algún trabajo los utilizo, castellano valenciano o inglés

R: vale, y::: pero lo de e:::rm de mezclar en una frase lo haces también? alguna vez has puesto bla bla bla i avant?

S3: pocas veces

R: no? pocas veces? mone tampoco?

S3: mone eso sí

S2: ((laughs))

R: ((laughs)) eso sí, no? si os doy ejemplos de repente dices ah eso sí eso sí

S2: sí, es verdad

R: y- y::: el mone por qué? porque mone ni- ni es valenciano, mone es de Castellón

S3: suena de pueblo

S2: ((laughs))

R: pero lo usas por algún motivo me imagino no?

S2: [xxx]

S3: para- para inspirar

R: para?

S3: inspirar

C2 I13 E3-4:

R: sí? y qué- explicame, e::r qué-

S1: por ejemplo cuando me pongo en Reddit con alguno o algo así o me hace algún favor digo gracias y escribo I love you o algo así

R: sí? sí sí y- y:: cuál es la motivación? por qué usas esas palabras o esas frases en inglés?

S1: por qué? no lo sé la verdad

C2 I13 E3-4:

S2: el valenciano y el rumano se parecen bastante mucho y para mí es fácil hablar valenciano porque me ayuda- me ayuda por el rumano, pero se mezclan unas cosas son muy muy [xxx]

R: me puedes dar un ejemplo de una mezcla que has hecho? o algo que sueles hacer?

S2: ahora mismo no sé pero sí que hay cosas que::-

C2 I13 E3-4: (refers to using English online)

S2: es muy divertido así aprendes

R: ah! ah, muy bien, es una buena forma de aprender inglés? a través de internet y-

S2: claro que sí

R: sí

S2: hablando con gente que no sabe y también hablando que gente que sabe

S1: ad- además también hablando con personas así inglés también te sirve

R: muy bien, mejor que los libros de las-

S1: sí sí

S2: ((laughs))

S1: a mí me parece más divertido hablarlo

R: sí, muy bien, y tú?

S3: yo:: sí he estado hablando con un amigo o algo y utilizo expresiones como please o seriously pues sí

R: mm, pero por qué dices please en vez de por favor?

S3: no lo sé, porque, me lo ha pegado a mí o algo

R: ah ah, vale ok, bueno entonces es influencia de amigos no?

S3: sí

C2 I14 E3-4:

R: vale, puedes cambiar entre castellano y valenciano, y con qué motivo, por qué cambias?

S1: porque suelo hablar en valenciano con mis amigos entonces hay uno que habla en castellano y tenemos que hablar en castellano, lo que pasa es que como estoy hablando en valenciano todo el rato me escapa:: alguna

R: mm, pero una palabra suelta también puede ser como hablando en val- en castellano y de repente pones mone o algo así? o:: avant? o:: o::

S1: sí, así

R: sí, eso es lo que quiero saber por qué::- por qué puede salir una frase en valenciano er, al final de un- de una:- una conversación en castellano?

S1: porque, o sea, la utilizamos mucho o::

R: mm

S1: y eso

R: vale, puede ser una forma de decir soy de aquí?

S1: bueno, no soy de aquí pero::

R: ah, bueno

S1: llevo bastante aquí:: y se me queda alguna palabra

R: vale, ok

C2 I14 E3-4:

S3: yo? er, el ok porque es má::s, rápido que decir vale, con eso y-

R: ok, el ok?

S3: y:: no sé, en vez de buenas noches, na nit porque es más corto

R: ah sí? más corto

S3: claro

R: pero es sólo porque es más corto? no- no::

S3: porque es más rápido, sí, no sé

S1: más rápido sí

R: y no provoca ninguna:: ningún sentimiento decir mm, please en vez de por favor o decir hello en vez de hola

S3: please es como má::s (1.0) no sé, como más cariñoso, para que te lo deje antes

R: sí, más cariñoso erm, comparado con por favor?

S3: sí, no sé, suena mejor

C2 I15 E3-4:

S1: yo, lo primero lo de estar hablando con gente de distintos- y esto sí que lo hago, lo de Skype que te decía antes que, estar hablando con un español y un inglés- bueno el español- los otros españoles- bueno no es español es mejicano, bueno, sabe- sabe-

Ss: ((laugh))

S1: sabe más inglés que yo y eso y cuando hay cosas que no entiendo yo se lo pregunto a él y- y me lo dice y:: esas cosas, y lo otro de utilizar palabras sí porque:: en los videojuegos que suelo jugar en inglés, hay, palabras que son cosas de- del juego que bueno también tiene su traducción en español pero ellos lo juegan en inglés también, y yo pued- estoy hablando en castellano y, si es algo lo di- lo digo en inglés, la palabra, aunque no la conversación entera pero la palabra sí

C2 I16 E3-4:

S1: a mí me sale muchas veces

R: sí? dame un ejemplo

S1: estoy hablando por ejemplo con mi madre, cuando voy a hablar con ella, pero también en persona

R: mm, en persona también?

S1: sí:: me sale- empiezo a hablar en castellano y a veces me sale francés y después inglés, son cosas muy raras

R: y::: por qué sale francés?

S1: por qué la novia de mi hermano es francesa

R: sí

S1: y con ella hablo francés

R: me imagino que es porque tienes contacto con el idioma no?

S1: sí

R: y:: te ha salido alguna vez un please o algo así al final de pedir algo?

S1: ((laughs))

R: sí?

S1: muchas veces sobre todo cuando quiero algo ma- mucho mucho

R: por- por qué? por qué please en vez de por favor?

S1: porque please es como:: please me das esto? quiero eso pero con muchas ganas

C2 I18 E3-4:

S1: lo de:: mezclar frases y eso en escrito con el español no me suele pasar y con el valenciano pero:: por ejemplo hablando con amigos y eso sí que:: a lo mejor, entre español y valenciano no- no suele pero en inglés sí que sueltas una frase y eso por- por a lo mejor un videojuego que has jugado que todos han jugado o por una frase que han visto en algún video o algo sí que sueltas alguna frase así, siempre en plan broma y eso pero al final lo estás usando

C2 I18 E3-4:

R: y usas alguna vez el inglés en el Whatsapp?

S2: sí a veces sí alguna palabrita suelta:: como please como has dicho tú

R: como please

S2: sí sí

R: y me puedes explicar por qué please, por qué no por favor?

S2: suena mejor

R: suena mejor?

S2: sí suena:: no sé, es una sensación, Bueno [una sensación-]

S3: sientes anglosajón

C2 I19 E3-4:

S2: so- sobre todo el castellano y el inglés, al- a lo mejor alguna palabra en inglés que no lo sabe pues ponerla entrecomillado en castellano

S3: sí, eso lo hacemos habitualmente

C2 I20 E3-4:

S1: realmente en redes sociales sí que es verdad que cuando pones un hashtag o:: es un hashtag o sea que hay palabras que como las redes sociales ya te vienen en inglés te acostumbras a utilizarlas en inglés, y por ejemplo hashtag en castellano yo no sabría cómo ponerlo, porque estoy acostumbrado a hacerlo en inglés

C2 I21 E3-4:

S1: y luego [xxx] las redes sociales, el tema de:::- hay una cosa que se llama hashtag que, tú pones una palabra, como- con la almohadilla y te lleva a la dirección entonces donde hay más direcciones allí es en inglés, entonces muchas de la las redes sociales, como el Instagram cuando subes una foto los hashtags que pones son normalmente palabras en inglés

C1 I4 E1:

S1: sí, i:: per exemple, si parlaves les dos llengües (1.0) no ho sé, pues a vegades vas canviant un poc

R: i- i per què canviés?

S1: pue::s, per si la altra persona, penses que està més còmoda en l'altra llengua

R: per la comoditat de la altra persona, per a acomodar-se un poc a lo que veus que està més a gust?

S1: sí

C1 I7 E4:

R: eso lo hacéis, el cambio de código?

S2: sí

R: y por qué lo hacéis?

S2: por qué? porque te sientes cómodo hablando los tres y si lo sabes decir bien-

R: lo pones en esa lengua?

S2: lo pones escrito

C1 I9 E2:

R: me interesa mucho la motivación, por qué lo hacéis?
S2: ((laughs)) no sé, er empeza- empezó::: [alguien]
S1: [alguien] no sé, es porque ahora-
S2: a decirte eso, sabes? [y tú]
R: [y lo has cogido tú no?]
S2: lo has cogido y ahora es cómodo, es decir algo normal

C1 I10 E2:

S1: yo no suelo hacerlo, a veces, no sé, en plan broma o algo así pero de normal no
R: tú lo haces en plan broma? a veces cambias-
S1: sí, pero con alguien de mucha confianza
R: vale, y tú?
S2: porque quedas bien con el amigo, no es lo mismo decir ok que bien (1.0) porque:: digamos es más-
es mejor, no sé

C1 I12 E1:

S1: demà sí
R: demà sí? Y por qué dices demà en vez de mañana?
S1: no sé, es que me sale así
R: te sale así no? pero eso depende de con quién hablas?
S1: sí
R: sí
S2: sí
R: hay un momento es que no vas a cambiar
Ss: sí
R: con quién hablarías-?
S1: pues con la gente que:: que- que habla en castellano sólo entonces sólo hablo en castellano y a veces inglés porque esas palabras que- como please y eso
R: entonces la persona em, influye el cambio de castellano valenciano pero no influye tanto el cambio de castellano inglés, no? es curioso

C1 I13 E3:

S1: (in general) en verdad no me gusta mezclarlas porque-
R: ah, por qué no te gusta mezclar?
S1: no sé, es como si hablaras mal

C1 I13 E3:

S2: puede que sea en plan hace::r- hacer puch- en vez de hacer pucheros pues pongo ple::::ase, y cosas así
S1: suena mejor
S2: sí suena mejor, suena más agradable

C1 I14 E3:

R: usáis instagram también?
Ss: sí
R: y seguís gente:: de habla inglesa, en- en instagram?
Ss: sí
S1: a mí por ejemplo en twitter, un día de repente me salió por gustos y eso me empezó a seguir una de Australia y:: muchos de estados unidos que habla- y hablan conmigo en inglés

S2: y además también nos siguen- a mí en instagram me siguen gente de intercambio de Alemania que pues también hablan en otros idiomas, en inglés en alemán

C1 I15 E4:

R: cuando hablas con er gente que habla árabe en internet er mezclas también?

S2: sí, también mucho

R: usáis el francés también?

S2: sí el francés como mis primos ellos en marruecos utilizan el francés que es- pues me:- me sueltan cosas en francés aunque me cesta a veces entender

C1 I15 E4:

R: y las abreviaturas? erm en- en- bueno por ejemplo poner una k en vez de que

S2: eso no lo hago yo

R: tú no? por qué

S2: porque no me gusta

R: no te gusta?

S2: si vas a escribir algo lo escribes bien

R: vale, y tú?

S1: ah pues yo sí lo utilizo mucho

R: y por qué lo usas?

S1: porque::: como hablo en diferentes idiomas, por whatsapp por donde sea, ah pue::s la misma letra te sirve para todos los idiomas, porque en rumano el que se escribe con c h y la e aquí se escribe q y- y e::n cualquier otro idioma con k, entonces, ponerlo con k me resulta un poquito más fácil, así lo entiende cualquiera

Question 8: Do you think technology changes the way you use your languages?

C2 I3 E1-2:

S1: sí, porque:::, hay- hay gente que cuando hablan, las letras en vez de poner, la- la oración o la palabra entera pues pone, el que pone una q, y a lo mejor eso puede, puede:: umm, hacer que no escribas bien, pue::s en ese idioma

R: ah ((laughs)) vale, sí sí sí

S1: no sé

R: sí sí, muy bien muy bien, y tú?

S2: yo también como ella, hay gente que:: en vez de escribir toda la frase escribe, escribe::: mal

R: sí

S2: entonces, luego escribe mal

R: vale, y tú?

S3: yo igual, porque si no e- escribes bien pues entonces luego te puedes equivocar

C2 I4 E1-2:

S2: que hay veces que en una red social tienes que hablar en inglés porque la red está en inglés [o algo]

R: [a::h] vale vale

S2: (xxx) que tienes la necesidad de saberlo

C2 I6 E1-2:

S1: sí porque:: mmm la mayoría de::: cosas tecnológicas e::r el idioma es inglés, entonces deberías entenderlo más o menos lo básico

R: mmm

S1: para:: entenderte un poco a la hora de utilizar cosas

R: mmm, entonces te anima un poco

Ss: sí

C2 I6 E1-2:

R: vale, entonces si tienes la opción de cambiar el idioma en un ju- en un videojuego lo haces? o::: o:::

S2: o sea, lo utilizo en español porque:: claro me:: lo entiendo más y eso pero:: a veces cuando::: me aburro y días que quiero aprender-

R: ah

S2: me lo pongo en inglés y::

R: vale y::

S2: (xxx)

R: qué te parece esta manera de aprender?

S2: es divertida porque a la vez que juegas aprendes

C2 I6 E1-2:

S1: yo creo que afecta pero al escribir porque en las redes y eso pues hacen abreviaturas, y pues-

R: ah, como decir q en vez de que? y:::

Ss: sí

R: cosas así no? e::r y::: sabéis algú- e::r algún ejemplo de eso en inglés? aparte de lol, claro

S1: de abreviatura?

R: sí

S1: what the fuck, no?

R: ((laughs))

Ss: ((laugh))

S1: e:::r

R: que es w t f, no? se pone eso

S1: sí

R: sí sí ((laughing)), bueno ((laughs))

S1: by the way, que es b t w

R: ah, sí sí, y esas abreviaturas las usáis?

Ss: a veces?

C2 I7 E1-2:

S1: si no hubiese- si no hubiese internet o cosas así yo hablaría casi inglés, menos para las clases de inglés

R: entonces el internet, e::r te hace utilizar más el inglés?

S1: sí

R: te anima utilizar el inglés o no?

S1: hombre, si es algo que te interesa y quieres entenderlo, pues, no sé-

R: mmm

S1: intentas saber lo que significa en inglés

S2: porque en la vida así normal no solemos hablar inglés, así::

C2 I8 E1-2:

S1: sí

R: sí?

S1: porque:: hay::, la tecnología hay- pues hay muchas que son en inglés, entonces en inglés nos ayuda a aprender más de lo sabemos, entonces con estas tecnologías pue::s cada vez aprendemos más cosas

R: y:: os parece una buena forma de aprender idiomas?

Ss: sí

R: y por qué?

S1: porque así lo manejas-

S2: [más]

S1: [con] más fluidez y lo practicas más [xxx]

C2 I8 E1-2:

S2: yo:: lo- el ordenador y el móvil nunca me lo pongo en valenciano porque a mí el valenciano me parece, una::- igual que el inglés me parece que lo puedes hablar en todo el mundo, el valenciano es de la comunidad valenciana y nadie te entiende

R: mm

S2: entonces me lo pondría en inglés y el castellano para aprender pero el valenciano, no me lo pondría

R: ok (1.0) otro comentario? no?

Ss: no

R: ok, no cambia, no ponéis cosas como que, e::r como Q o K en vez de que

Ss: sí

S3: sí, por la X

R: la X sí pero eso:: nunca lo haríais en una redacción

Ss: no, no

S1: en la redacción se pone todo como tiene que ser

S3: claro

C2 I12 E3-4:

S3: no sé:: err, porque con la tecnología puedes utilizar internet e internet es contacto con todo el mundo, en todo el mundo hay var- un montón de idiomas, y es una fuente de cultura bastante grande

R: mm, muy bien, sí también? ((at S1))

S1: sí, si no entiendes algo puedes ir al traductor [y lo entiendes]

S2: (((laughs)) sí], es verdad eh?

R: y::: er, os parece buena forma de aprender?

S1: sí

R: sí?

S2: sí

C2 I13 E3-4:

S1: yo creo que sí

R: sí, tú crees que sí? cómo?

S1: pues que::, no sé, pero:: (1.0) yo creo que sí porque hay- hay mucha gente que no habla inglés y ahora habla perfectamente y tal porque ya hablar co::n gente:: de- inglés o algo así que viene pues ya sabes palabras y tal

R: ok ok, y tú?

S2: no sé yo:: de verdad es que he aprendido bastante inglés de las redes sociales y cosas así, can- y música

R: ah

S2: he aprendido bastante

R: ok ok muy bien, y tú?

S3: sí porque:: ahora lo tenemos más fácil hablar con una persona que hable inglés a través de internet y las redes sociales y eso

C2 I14 E3-4:

S1: en el ordenador muchas veces está en inglés, y hay juegos o hay programas que están en inglés y a veces no se traducen

R: y:: qué efecto tiene?

S1: pues, que tienes que buscar a ver como se dice y traducirlo

R: sí, crees que de esa forma se puede aprender un idioma?

S1: claro

R: y::-

S1: quieres saber lo que pone

R: vale vale entonces tienes más interés no? sí? no [es como un libro por ejemplo]

S1: [sí sí también también]

R: ok, y::: alguna otra manera:-

S2: sí que nos ha hecho darnos cuenta de que:: el inglés nos es importante

R: ok, vale

S2: que le damos más importancia ahora

C2 I15 E3-4:

S1: sí, yo creo- yo creo que mucho porque:: si no fuera por- por internet, las redes sociales videojuegos y esas cosas, mm, no sé, como no viajes o algo lo único que usas otros idiomas es para- para dar clases y:: poco más

R: entonces, es más- es más real?

S1: sí, mm, es distinto

S2: yo opino lo mismo, que si no fuera por las redes sociales, yo por ejemplo no hubiera aprendido varias cosas, otras cosas

R: ah, entonces pues sí que has aprendido bastante a través de- mediante de los er, los webs y cosas

S2: sí

R: muy bien, y tú también has dicho que sí?

S3: sí porque:: te pones- o sea te comunicas con gente de otros países entonces tienes que hablar u:::n- otro idioma

R: se puede decir que hay más oportunidades de utilizar otros idiomas, no?

Ss: mm ((agree))

C2 I16 E3-4:

R: crees que aumenta las posibilidades de contacto?

S2: sí, mucho

R: ((to S3)) y tú? qué opinas?

S3: que sí, ha cambiado pero no sé, yo como el inglés no::

S1: [no lo domines]

S3: [no lo domino], no::

S1: le ayudo yo

S2: es más, yo:: y mis amigos empezamos por los juegos online por internet, hemos conocido un montón de gente inglesa y no sabemos ni dónde vive pero sólo hablamos inglés y nos caen genial

R: sí

S2: y siempre estamos hablando con ellos en el móvil con el Whatsapp

S3: yo tengo un indio en el Whatsapp

R: ah sí?

S3: tengo un indio

R: y hablas en inglés con él?

S3: sí::, pero es que me habla en un inglés tan cerrado, pero muy cerrado, y una vez me llamó y no lo entendía

Ss: ((laugh))

S3: pero habla muy rápido

S2: [xxx]

S3: madre mía

R: ((to S2)) una cosa que me gustaría preguntarte porque me has dicho que usas em, videojuegos no?

S3: el la Play y eso también que cuando juegas online te sale mucha gente- la mayoría de la gente es inglesa

R: es inglesa?

S2: la mayoría de la gente te suelta en inglés y tienes que saber defenderte

R: muy bien, pero a ver, creéis que- que:- que estos videojuegos forman una:: una clase de comunidad?

S2: sí, mucho del inglés que se habla ahora lo ha aprendido en juegos, más que en clase, de:: hoy por ejemplo de las historietas del juego:: muchas veces, cuando las traducen al otro idioma las voces cambian mucho, así que me recomiendan déjalo e::n- en inglés pero lo lees subtitulada y claro muchas veces leyendo tú te enteras de lo que dicen vas traduciendo y al final vas aprendiendo

R: vale vale porque- porque:: err, estás escuchando y leyendo a la vez, no?

S2: claro

R: muy bien, y::: um, os hace sentir e::r, que- que formáis parte de un grupo? (1.0) habland- jugando estos videojuegos?

S2: no sé

R: o alguna vez ha::- habéis sentido como fuera del grupo por el idioma?

S2: no

R: más inclusivo que exclusivo, no? (2.0) no? o- o::: nunca lo has pensado?

S2: no nunca me lo había pensado

R: bueno será buena idea pensarlo la próxima vez

S2: sí

R: y piensas hmmm, formo parte de este grupo o no

S2: hombre, pero siempre que hablas, si es en un grupo más o menos cuando empiezas a hablar todos vais a hablar de lo mismo, siempre hay que se entera menos que otro, o sea alguien que se entera menos pero a lo largo se entera de algo o se lo explica alguien para que lo entienda, no hay por qué- necesidad de sentir excluido, pero pides ayuda para entenderlo mejor y te lo explican

C2 I17 E3-4:

S1: todos lo::s- las redes sociales están en inglés, entonces tú cuando- además para decir el nombre tienes que decirlo en inglés, es que no hay opción

S2: y alguna::s- er por ejemplo en Twitter, algunas personas que escriben en inglés pues lo tienes que traduci::r, y lo de las palabras

S3: [o hay muchos juegos]

S2: [dices please a mí me sale] sólo ahora

S1: o:: la forma de usar- por ejemplo tú no dices- bueno sí lo dices ((laughs)) pero decir dejar de seguir, tú dices má::s dale unfollow,

Ss: claro, sí

S1: y expresiones

R: y:: usáis Twitter o?

Ss: sí sí

R: y:: y seguís gente de habla inglesa?

Ss: sí

S2: famosos

R: famosos no? y:: habéis hecho algún comentario en inglés?

Ss: sí
S1: alguno
R: sí? y te han contestado?
S1: sí
R: y qué?
S1: lo sigues hablando
R: sí? te parece bien? te::
S1: es interesante
R: interesante no? y os parece una buena forma de aprender inglés?
Ss: sí
S1: es más divertido
R: más divertido
S2: es que si estudias inglés todo el rato no es tan divertido como si estás hablando con una persona::
S1: aunque el inglés me parece divertido no me apetece la asignatura
Ss: sí
R: puede que sea un uso más auténtico del idioma?
Ss: sí

C2 I17 E3-4: (talking about writing on mobile devices)

R: creo que se trata un poco de una evolución no? de- de:: er, los interrogantes ahora están desapareciendo no? porque pones uno al final y ya está no?
Ss: sí
S4: a veces en vez de por pongo una x
R: una x
S4: cuando voy de prisa y tengo que pedir algo rápido, si no escribo normal
S3: o en vez de que pones una k, o pones-
Ss: claro
S2: antes yo escribía mucho peor, al principio no lo entendía ni yo lo que escribía, yo decía uy qué es esto-
S3: yo escribo como hablo normalmente, lo que sí- los signos de interrogación y la puntuación y todo eso no porque es más rápido
S2: lo que pasa es que ahora pones la primera palabra y ya [te sale]
Ss: [te sale] claro
S2: entonces da igual
R: es muy interesante porque yo creo que antes, er, se escribía más como- umm, menos comprensión, como en plan er, una x un número, no sé qué, por ejemplo en inglés un montón, como un código muy raro y hoy en día, como tú has dicho como ahora el móvil te lo pone
S2: te lo pone solo
S3: con el corrector es que es-
R: entonces puede- puede que ser que ahora:: em, escribimos mejor
Ss: sí
S3: con acentos
S2: aprender y todo, digo mira esto no sabía que tenía acento
S3: claro

C2 I18 E3-4:

S1: sí:: yo creo que:: la tecnología igual que ha cambiado, la forma a lo mejor de concebir la vida, respecto a los idiomas ha cambiado muchísimo a la forma de utilizarlo y a lo mejor a la forma de aprenderlo porque, sí que es verdad que antes a lo mejor sólo podías aprender un idioma abriendo un libro y ahora como hemos dicho antes entras en internet y tienes, todas las páginas a lo mejor que

entras están en inglés, y:: sí que es cierto que está a lo mejor el traductor de [xxx] y el traductor de Google y lo traduce todo pero también está la posibilidad de empezar a leer tú en inglés y a través de eso empezar a aprender por ti mismo no abriendo un libro sino estando en un ordenador en el móvil o en cualquier tipo de aparato

R: y estáis de acuerdo no?

S2 S3: muy de acuerdo

C2 I19 E3-4:

S1: en realidad no- nos ayuda también a comunicarnos con gente::, por ejemplo Facebook nos ayuda a comunicarnos con gente de otros idiomas y podemos desarrollar idiomas nuestros

S2: yo creo que sí que ha cambiado porque:: por el hecho de que por ejemplo cuando estás jugando online o algo, utilizas el inglés y entonces eso ya hace salir del castellano y valenciano que usas día a día, te hace cambiar

R: entonces aumenta las posibilidades de contacto no?

S2: claro, sí, lo utilizas más::s y aprendes

C2 I20 E3-4:

S1: yo creo que sí porque:: realmen- si la tecnología no existiera o no estuviera tan avanzada, aquí el inglés no estaría ta::n tan desarrollado en- ves ese desarrollado no existe en castellano, desarrollado, no estará tan desarrollado porque no tendríamos la necesidad de saber inglés, pero para, redes sociales páginas web y todo eso necesitas saber algo de inglés para- para saber dónde te metes, si no no te enteras de nada

C2 I20 E3-4: (about online multiplayer)

S1: al principio- y juego al League of Legends, y:: al principio cuando eres niveles bajos, como si te- no te sientes suficiente al nivel para hablar pero ahora ya que llegas al máximo y a cada:: partida le pones qué prefieres coger este campeón, éste? pues mejor vete a la línea tal y es- lo haces todo en inglés, pones from y te dicen Alemania y- pero todo todo es inglés y luego me pongo yo a hablar en castellano y el otro se pone a hablar en alemán, cuando ponemos a hablar en inglés como todos tenemos cierto nivel nos entendemos

C2 I21 E3-4:

S1: y luego la introducción, en nuestro idioma por ejemplo de palabras como software o:: hardware que vienen de la tecnología que se ha metido como un extranjerismo no? en nuestro idioma de otras lenguas

S2: sí sí es que- lo que ha dicho él, por la:: tecnología se- en todos los idiomas, el inglés a nuestro idioma, y:: a lo mejor nuestro idioma también se puede conocer más en- en otras partes

R: ah, también eso es- por supuesto pasaría con el castellano pero crees que eso puede pasar con el valenciano? que ahora más gente puede enterarse de:: de ese idioma

S2: si lo buscas mucho sí pero no:: no creo que- no es tan fácil

R: pero aumenta las posibilidades de contacto, no?

S2: sí

R: co- con los tres, no?

S2: mmm ((agrees))

C1 I3 E1:

S1: jo sí per que a lo millor te [fa] sentir que um- que estàs apartado

R: sí? a vore pues, explica-ho un moment- explica-me'l que tu vol- a que tu refereixes

S1: er, estàs a lo millor en la gent, ((clears throat)) la gent que parla en castellà i tu parles en valencià, hi ha gent que pues, no sé, diuen que parles en castellà o coses així

R: hay que-, o sea [xxx] te diuen, ostres no nos [cortes en] valencià si parlem castellà, i te pots sentir apartat?

C1 I2 E2:

S1: sí, normalmente si hablas con un compañero en, o sea en la vida real digamos hablas con él en valenciano, pues en el whatsapp también hablas con él en valenciano

C1 I2 E2:

S1: pue::s cuando, por ejemplo en el twitter mucha gente es de diferentes países, entonces mu- muchos hablan en un idioma y otros en otra, entonces si quieres entenderlo pues te hace curiosidad

R: a ver, explícalo un poquito mejor (1.0) o sea la- o sea el twitter es internacional

Ss: sí

R: entonces podemos ver twitters en diferentes lenguas

Ss: sí

R: entonces? es que no he entendido la parte final

S1: que- pues cuando::: hay u::n tuit que está en otra lengua, tú:: intenta::s

R: entender

S1: entenderlo

R: que realmente es bueno no?

Ss: sí

R: para formar el multilingüismo, no? como si dijéramos

Ss: sí

C1 I7 E4:

S2: sin la tecnología el inglés no lo utilizaría mucho

S1: claro

S2: porque así, yo que sé, también escucho música y e::r tampoco puedes ver películas en versión original así tan fácil

R: claro, por ejemplo las películas las veis en versión original a veces?

S2: muchas, sí, en- en inglés sobre todo

C1 I8 E4:

S2: que des de que hi ha tecnologia escriba més i té més oportunitats de controlar més idiomes

C1 I8 E4:

R: o sea, realment el que s'utilitza més en les xarxes socials és el castellà o l'anglès, o sea que té una influencia molt forta realment no? la tecnologia en les llengües ... i vosaltres creeu que heu millorat el nostre nivell d'anglès mitjançant la tecnologia?

Ss: sí sí

R: molt?

S2: sí, perquè el practiques més

C1 I14 E3:

R: os parece una buena manera de aprender?

Ss: sí

R: sí, vale

S1: porque, como la genta usa más la tecnología, si lo ponen en inglés así:: lo- como lo intentan entender pues así se aprende más inglés

S2: y:: es más- no sé, a mí utilizar tecnología con el inglés y eso me parece más- má- má:::s no- menos aburrido que estar en clase que nos enseñan tanto inglés

C1 I15 E4:

S1: yo creo que sí porque:: (1.0) a- al poner las aplicaciones en todos los idiomas, pues no sé, la gente pone:: el idioma que más le gusta-

S2: y la que más le emociona y la que más le- que se sienta más cómodo porque-

S1: yo con las aplicaciones me siento más cómoda hablando en catalán, pero:: el castellano y el inglés, no sé, pero::: como soy de aquí y me gusta el valenciano, pues uso el catalán en las aplicaciones

