Second Language Production and Its Influence on Thought and Personality

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Fecha

I, the undersigned Giulia Mambrini, as a student of the Faculty of Humanities and Psychology at the University of Almeria, hereby declare under the penalty of perjury, and also certify with my signature below, that my Master's Thesis, titled: Second Language Production and its Influence on Thought and Personality is my own work, except where indicated by the reference to the printed and electronic sources used according to the internationally accepted rules and regulations on intellectual property rights.

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1. Introduction

Language and personality are elements that constitute human life from the beginning of times. Every human being has the basic and spontaneous need to communicate and to reveal him or her to the others. Not only emotions, feelings and sentiments are transmitted through the use of language but also the deeper part of our soul. Our mother tongue defines us as members of a community. Through the way we speak, we transmit our cultural baggage and our social background. Furthermore, through speaking other languages we can enlarge our mental boundaries and come in contact with other societies and cultures. This paper invites the reader to consider the richness of language considering all these factors. Language is not only a tool but a living travel-mate through which we can give voice to our personality and thoughts.

This master dissertation is an investigation founded and developed on questions that rose after living, learning and learning a second language (L2) and sharing the experience with other L2 speakers. As the title of the paper indicates the principal areas of interest in this research are L2, thought and personality. The main aim is to demonstrate that these three fields are not separated but interlaced and deeply connected. For this reason the hypothesis of this investigation can be expressed in the following question: Does speaking a L2 provoke change in personality?

This topic fulfills a gap in the linguistic and cognitive panorama. There are not specific investigations about this theme, for this reason it can be considered original and relevant.

In order to obtain evidence of what has been stated in the hypothesis a questionnaire has been used. The participants have been chosen on the basis of their level of proficiency in a L2 and their experience abroad. These two elements are fundamental for the investigation because, as explained in the theoretical framework, the high level of

proficiency and the experience abroad are fundamental in order to show changes in the inner self. The questions presented in the questionnaire aim to collect both quantitative and qualitative data and the program used in order to analyze the data collected is SPSS.

In order to support the hypothesis the theories discussed and taken into consideration belong to the field of Cognitive Linguistics, Speech Production and Psychology, in particular the branch of Personality. In this paper the aim is also to demonstrate that cognitive linguistics aspects are related to psychology, culture and communication. Cognitive linguistics, from which the interest in this topic started, is a dynamic field and in full development. Through the cognitive linguistics field it has been possible to see the learning of a L2 as a complete experience which involves not only the mind but also our body and personality provoking a change and an evolution of the individual. All these aspects are fundamental in human life and leave a trace in the brain and in the inner self which is automatically reflected in the way we speak and communicate.

So that, the first part of this project is devoted to show and explain the main theories in which the entire paper is based. Section 2.1 intends to explain briefly what is Cognitive Linguistics and its areas of interest. The second section, 2.2, explains two key words in Cognitive Linguistics: Embodiment and Experience. These key concepts are fundamental in order to explain the relation between the way we experience the world and language. The third part, 2.3, intends to explain the history and the link between language and thought. The following section, 2.4, it is devoted to communication, society and culture. This section is fundamental considering that it is impossible to separate language and culture and language and communication. In chapter 2.5 the theory of personality is explained. This psychological background is fundamental in order to demonstrate the changes in personality when we speak a L2. The last part, 2.6, is about brain and language production. The aim of this part is to show the way in which the L2 is organized and stored in the brain and the way in which the speakers formulate and produce statements in a L2. The first introductory part is followed by section number 3 which is devoted to the core investigation. In this part the focus is on the description of the main objectives and the hypothesis, 3.1, and the description of the methods used, the materials and the participants involved in the investigation, 3.2. After that, section 3.3 is committed to show the results obtained with the support of charts and percentages graphs. Finally section 3.4 shows the discussion of the data and chapter 4 the conclusions.

2. Theoretical Framework

2.1 Principles of cognitive Linguistics

This section explains briefly the foundations of the Cognitive Linguistics. The paper intends to demonstrate trough the basis of the Cognitive Linguistics the presence of changes in mind and personality during the second language production. In this section the most important assumptions of the Cognitive Linguistics theory are described briefly. In addition, the names of the principal theorists are mentioned.

Cognitive Linguistics is a recent theory concerning the relationship between human language, mind and socio-physical experience. It is possible to establish a date of birth of this theory (Barcelona and Valenzuela 2011) which is 1987 when three fundamental books were published: *Foundations of cognitive grammar* written by Ronald W. Langacker*, Women, Fire and Dangerous Things* written by George Lakoff and finally *The body in the Mind*, Mark Johnson.

Cognitive Linguistics started as a reaction against generative approaches to language. One of the most important supporters of generativism was Chomsky. The generative theory assumes that there are innate structures for grammar and language which are recollected in a "universal grammar" as a set of innate universal principles which provide to humans the possibility to learn their native language. This theory also assumes that linguistic knowledge is isolated from the rest of cognitive faculties. The idea is that there are distinct modules separated from other cognitive processes. Generative Linguistics in general attempted to model language by proposing explicit algorithmic procedures operating on theoretical primitives in order to generate all the possible grammatical sentences of a given language (Evans, 2011). As we will see in section 2.3 this theory is the ground for the Cognitive Linguistics trend.

One of the most important assumptions of the cognitive linguists is that language reflects patterns of thought. Language offers a window into cognitive function, providing insights into the nature, structure and organization of thoughts and ideas (Evans and Green 2006). Cognitive Linguistics is interested, differently from other theories, in studying the way in which language reflects certain fundamentals properties and features of human mind.

Cognitive linguists think that the systemic structure presents in language reflects a systemic structure inside of our conceptual system. The hypothesis explored is that the ways in which we express certain kind of linguistic phrases are the evidence that the structure of our conceptual system is reflected in language. The way in which we structure and perceive the world is expressed by the way in which we speak and think. We tent to structure abstract concepts into conceptual domains deriving from the experience. We can define conceptual domains as a body of knowledge within our conceptual system that contains and organises related ideas and experiences.

The view of language as a product of general cognitive abilities is a result of the observance of a more basic principle in cognitive linguistics, named "the cognitive commitment" (Lakoff 1990). The commitment represents the view that principles of linguistic structure should reflect what is known about human cognition from the other cognitive sciences, particularly psychology, artificial intelligence, cognitive neurosciences, and philosophy. In general linguistic theories and methodology must be consistent with what is empirically known about cognition, the brain, and language (Barcelona and Valenzuela 2011). Cognitive linguistics rejects the idea that there is a distinct language module, which asserts that linguistic structure and organization are distinct from other aspects of cognition.

2.2 Embodiment and Experience

This section discusses the importance of two key concepts in Cognitive Linguistics: Embodiment and Experience. Considering the aim of this project, it is important to focus the attention on these two concepts in order to understand that the way we speak is directly inspired and connected by the experience of our body in the external world. Furthermore, these two concepts are strictly related with the environmental strategy that

we are going to debate in section 2.5 dedicated to Personality. The present section starts discussing the meaning and the implications of these two concepts on mind and language and it ends explaining the way in which the body experience is manifested at the cognitive level.

One of the most important ideas in Cognitive Linguistics is that language is perceived in a strong relation with the way in which we experience the world. Cognitive linguistics takes inspiration from psychology and philosophy to define the relation existent between body experience and perception of the world. One of the key concepts in cognitive Linguistics is *embodiment* (Johnson 1987; Lakoff 1987; Lakoff and Johnson 1999), the idea is that mental and linguistic categories cannot be abstract, disembodied or human-independent. The main idea is that we can express and understand what we perceive, in other words, we can talk about, and have access to, or think about things that we perceive and conceive because of our embodiment. The meaning of the words, expressions and sentences, is not something fixed and pre-established, but a lot of those expressions are motivated by the experience, and in particular, the body experience. The term, since was introduced by Johnson and Lakoff (1999) over two decades ago, has acquired different meaning which sometimes have very little in common. For example Johnson and Lakoff (1999) distinguish neural, phenomenological and cognitive unconscious levels of embodiment, which seem to be useful in order to create a sort of universal in the cognitive process. To give another example as is suggested in the volume *Embodiment via Body Parts* (2011) another Italian linguist, P.Violi (2004) discuss various formulation of the embodiment thesis ranging from a weak to a strong version. Nuñez (1999) distinguishes from a trivial, material and full embodiment. The really important point is that thanks to Johnson was given importance to the relation between body and concepts and conceptualization. Lakoff in his book *Women, Fire and Dangerous Things* (1987) affirms that embodiment has to do with: "our collective biological capacities and our physical and social experiences as beings functioning in our environment". There is another interesting point about the embodied experience that is really interesting to discuss also because is strictly related with other theories presented in this paper. An important American linguist argues (Maalej and Yu 2011) about embodiment that: "bodies are not culture-free objects, because all aspects of embodied experience are shaped by cultural processes". This claim is particularly relevant if we also consider the environmental strategy in psychology and it is important

if we consider that one of the main objectives of this paper is to demonstrate changes in personality while speaking another language different from the L1. The theory of embodiment, and the fact that we speak in a certain way because of our experience in the world, is much more complete affirming that our way of speaking is also related in a certain way with the culture and the way in which a certain social group perceive the reality. Every culture shape in a different way elementary body experiences, in each culture people interpret their bodily experience in a different way. It is also true that there are aspects of body experience that can be considered to be universal and shared, but it is also true that, as Gibbs (1999 a) argues, that some cultural models sometimes set up different perspectives from which body experience is interpreted in a different way compared with other cultural situations.

Another key concept is in fact *experience*. The meaning of words, the use of certain types of mental associations, the way in which we perceive the world, in general, are not disconnected from our bodies. On the contrary, we deduce a large number of meanings and structures through body experience. The fact that our experience is embodied has consequences for cognition. The reality we talk about and the things we think about are results of our embodied experience. We can only talk and think about what we perceive and conceive and the fact that our experience is embodied has consequences for cognition (Barcelona and Valenzuela 2011). The mind results to be never separated from the body, as Tim Rohrer and Mark Johnson (2008) suggest, a way of expressing the strong relation between thinking in bodily experience and its connection with the environment is to say that there is no break between perceiving, feeling and thinking.

In 1987, Mark Johnson proposed in his book *The Body in the Mind* that one way in which the embodied experience is manifested at the cognitive level is trough image schemas. Image schemas are abstract conceptual representations that derive from the everyday interaction and observation of the world around us. They are concept arising from the embodied experience. The use of the term image refers to the same meaning that the term "imagistic" has in psychology where "imagistic" is related to the experience that derives from our experience of the external world. The term "schema" suggests that image schemas are not detailed, the concepts we perceive are abstract rather than concrete. When we talk about image schemas we can articulate a list of properties associated with this aspect of the conceptual system. In origin image schemas are preconceptual, it means that they emerge at first in the human mind and because of

the relation to sensorial experience they are at the beginning really schematic. An image schema can give rise to more specific concepts. It is possible to link this affirmation with the CONTAINER schema. The use of prepositions like *in, into, out, out from*, refers not only on a simple spatio-geometric theory, but these prepositions are more specific lexical concepts that derive from an abstract image-schematic concept. This theory is relevant because in our everyday life the containers are meaningful. If in everyday experience we understand and apply the container's idea to organize our view, it is possible to apply it also to understand more complicated terms and concepts like LOVE. When we say that someone is in love with someone else we are applying the container schema. It is possible to say that image schemas derive from the observation and the interaction with the world. Image schemas are meaningful by nature, in fact the embodied experience is meaningful because have some consequences. To conclude this section we can resume that the mind reflects the body in which is contained (Mark Rowlands 2010), furthermore "psychological processes are incomplete without the body's contributions" (Shapiro 2004).

2.3 How language affects thought

The present section summarizes the history of the idea that language affects thought, in particular the different ideas that have been supported during years by linguists from different schools of thought.

Chris Swoyer (2011) traces a brief history of linguistic influence on thought and remembers us that the debate about linguistic relativity started in late eighteenth and nineteenth century. All those linguists were especially relativists, especially during the first half of the twentieth century. In the second half the panorama was dominated by the opponents of the idea of relativism.

The *linguistic relativity* hypothesis captivated so many thinkers thanks to the ideas of Sapir (1884-1936) and Whorf (1897-1942). They claimed that the structure of the language we speak is related with the way we thing. There were two main ideas, the first one about the Linguistic relativity. The main claim of linguistic relativity is that grammatical and lexical differences among languages are related with non-linguistic cognitive differences. William McGregor (2009) affirms that the principal of relativity

suggests that language and habitual modes of thought are correlated; there is not a casual relation between them. The second theory is the one called *linguistic determinism*. The idea of this theory is that the differences between cultures and the way each culture perceive the reality and the ways of think are consequence of the different ways of organizing grammatical and semantic system of languages. Because the linguistic relativity hypothesis came to importance trough the work of Sapir and Whorf it is called the "Sapir-Whorf hypothesis". Chris Swoyer (2011) underlines that the linguistic relativity hypothesis was popular among American anthropologists during the first half of the twentieth century. This hypothesis started to be support also by the behaviourists, an important approach in psychology. The main theorist of behaviourism was John Broadus Watson (1878-1958). A half century after the Sapir-Whorf hypothesis this theory pass way. In any case it is interesting to mention the case of Dan Slobin (1996), a researcher that during the nineties proposed a new research based on the Sapir-Whorf hypothesis, but in this case the stress of his investigation was on the dynamic process of thinking more than on thought as an abstract phenomenon. The main reasons of the decadence of Sapir-Whorf hypothesis can be found in the rising of cognitive sciences and in Noam Chomsky. Behaviourism was replaced by cognitive psychology and cognitive sciences. One stimulus for this replacement was the rising of the computers and the information sciences. The rise of cognitive sciences restored the study of the inner mental processes such as perception, attention, memory and decision making. The second cause of the passing away of the relativity was the idea argued by Chomsky. He claimed that an individual can only learn natural languages because the structure of the language is already present in our inner (Chomsky 2000). So for example he claimed that children have an innate language acquisition module in the brain that guides them in the construction of grammar. According to the Chomskyan model of 1980s the Universal Grammar consists of a set of principles applicable to all languages and a set of parameters that vary from language to language within specific limits. From this idea of a module, many cognitive psychologists started to think that the human mind is composed by modules for processing various types of different information and tasks. But the many claims about specific cognitive modules are very difficult to test.

2.4 Communication, society and culture

The following section intends to focus the attention on the type of relationship established between communication and culture. It is argued that the way we perceive the world and we express our thoughts is often related to the society we belong to. It also discusses the fact that the boundaries between different societies are blurred due to intercultural communication. Furthermore, the ideas of membership and identification are considered.

It seems to be really interesting and useful to talk about communication, society and culture in order to understand the way in which the speaker of a second language is able to adopt and imitate specific linguistic structures used by the native speakers of a certain language, in order to be accepted and integrated. It is important to understand that the language is not something static and independent from the speaker and the place in which it is spoken. It is important to consider the language and communication as elements which are in a strong relation with the culture in which they are inserted. As Hubert Knoblauch (2001) suggests the idea that there is a relationship between culture and communication might appear obvious, but is the product of the ideas of postmodernism, post-structuralism or cultural studies. With the discovery of everyday life, sociology started to stress culture as something linked to meaningful and symbolic action. Thanks to Levi-Strauss (1908-2009) culture started to be considering in terms of the linguistic structure of language. Before Levi-Strauss, culture was understood as a system of meaning to be learnt by its members and after that it was understood as a system of signs. After this affirmation scientist, such as Austin (1911-1960) and Wittegenstein (1889-1951), started to consider that signs cannot be considered in isolation from the actions by which they are produced (Knoblauch 2001). For this reason anthropologists started to consider culture as something founded in the "parole", the spoken language. This approach to culture has been called "communicative paradigm". This paradigm considers the idea that culture is being constructed in communicative actions. Communicative actions in this case include the performance of social action in the use of language as well as nonverbal signs, cultural objects and artefacts. Alfred Schütz (1964) started to analyse the world of everyday life. In his view the life-world in which we live is a social and cultural world. The culture is composed

by people's knowledge, ideas and meaning. Culture is not simply a cognitive phenomenon which allows us to interpret the world, but it also imparts actions and is a preeminent social phenomenon. By interaction cultural meanings are negotiated. An interesting point proposed by Hubert Knoblauch (2001) is that if the culture of the world of everyday life is constructed by means of communicative acts, it is essentially a communicative culture. Using this definition he wants to stress the fact that culture cannot be reduced to knowledge, meaning or sign-systems only. Communicative culture is produced, realised and transformed in communicative actions. A part from this view of communicative culture another interesting point is discusses by Ulf Hannerz (2001). He focuses the attention on culture as meaning and affirms that studying culture means to study ideas, feelings and experiences and the way in which these elements are made public, acceptable and considered true in society. Culture is intended to be "the meaning that people create, and which create people as members of societies. Culture is in some way collective" (James Lull 2001). Following this definition that associate culture with meaning it is possible to conclude that in order to express the meanings is important to be in possession of tools, in this case the most important tool is the language. Farzard Shafiran and Gary Palmer (2007) affirm that language not only is a cultural activity but it is also an instrument for organizing cultural domains. There is a nexus between culture and language that is possible to call *linguaculture,* using the words of Paul Friedrich (1989), by this word that blend culture and language is perfectly expressed the way in which language is shaped by physical and socio-cultural experiences shared by a certain community of people. So again we are appreciating how the theory of embodiment is true and the way in which is possible to apply it not only on individuals but also on entire communities. It is from this idea of language as culture and language governed by culture (Palmer and Shafiran 2007) that has been created an approach called *cultural linguistics.* It is possible to apply this approach every time we want to demonstrate the cultural basis of language, for example in the teaching a second language explaining the cultural construction beyond some linguistic forms and constructions.

In order to following with the idea of culture and communication we can now focus the attention on the way in which the intercultural communication is possible. Especially we can pay the attention on the importance that the culture of a certain place have and on the fact that intercultural communication with native speakers is fundamental for the

integration of a non-native speaker interested in learning a certain language. Through intercultural communication the learners communicate outside of their own cultural boundaries, it prepares them to get used to a constant negotiation of meaning and to observe how the communication can be effective across cultures (Heger 2011). We are going to observe that the complete acceptance of the cultural features of a place are fundamental to be accepted and integrated but can also provoke a sort of change in the inner of the speaker. In fact in the moment in which we accept other standards, different from the ones we are used to, we are making an effort to enlarge our basic knowledge and we are also changing something in our personality or general vision of the world.

In the matter of communicative actions it seems to be relevant to talk about the *Plan Curricular* of *Instituto Cervantes* (2006). In one of the section is taking into analysis the theme of knowledge and socio-cultural behaviour. The contents of this section refer to the type of knowledge, based on experience of the everyday life, collective identity, personal relationships and social organization which are present in a determinate society. In this section is affirmed that the knowledge of certain aspects such as cultural references, for example beliefs, values, and behaviours are fundamental to achieve a profitable and effective communication. The really important thing to notice is that when someone is going to learn a new language there are a lot of elements that is important to consider, a part from the more theoretical characteristics of a language the speaker need to be able to interact in a proper and efficient way with the native speakers. Those who are able to achieve this interaction in a fruitful way are those who are able to adapt themselves to the new context, observing and interiorizing the culture and the intercultural strategies adopted. It is important to mention what Vivian Cook suggests in *Language and Bilingual cognition* (2011). She affirms that some language teaching theorists have recognized that learning a language means not just learning the language but also the way of life that goes with it. Learning a second language means develop and create intercultural competences. In the part of the *plan curricular* dedicated to "abilities and intercultural aptitudes" is also affirmed that the intercultural competence supposes the extension of the social personality of the student. In fact through the development of intercultural competences the non- native speaker will be able to get along new situations and to interpret facts and cultural products typical of a certain community. Being interculturally competent in a second culture means to be able to achieve a successful intercultural communication. Language reflects cultural

values (Hegel 2011). As Calzado (2011) suggests the culture has to be intended as a space of alteration and change, it is a net of exchange and interaction. In order to understand what culture is, it is important to understand that it's meaning start from our daily experience. The culture is not the set of human actions exercised in a determined community, but all the cultural practices which transcend geographic boundaries. Culture is intended to be the set of cultural practices. Clifford Geertz (1973) affirms something really interesting and important, culture has to be intended in a strong relation with communication, culture is understood trough communication. Every day we put in practice our culture also without realize it, each society composed by women, men and children define trough communication their vision of the world, theirs believes, thoughts and feelings. All of us owned an identity, but the nature of the man is not to stay isolated and alone, for this reason depending on the type of group identity we assumed certain types of characteristics according to the social identity. Identity can be consider as a sort of personality, or a view that we have over the world and which we create starting from our characteristics, values, believes and ideas. It is possible to affirm that the contact with another culture imply a sort of change in the inner of a person, it is important to recognize that we are all social being and for this reason the relationships that we establish with other persons determine a sort of change or adaptation depending on the social relations. This fact implies that if we are exposed to different relations we are going to transform something. So it is possible to say that the identity is something that is possible to shape and also transform. It is really important to consider that identity is a construction; it means that is something that you build product and change. The identity is neither static nor pure or essentials, identity is a product of culture and is transmitted by men, who are social begins, as a consequence identity is varied and changeable.

All those discourses about identity, culture and society are important if we consider that a person can change his or her point of view depending on the type of relations that establish during his or her life. If this change is effective is really possible to affirm that during a deep contact with another culture the person can result really affected, in other words if we decide to move to another country and to live in this country during a certain period it is really possible to be deeply affected by the relations and to change something in our own, also to identify ourselves with another culture and start to mix and enlarge our inner. In this way is possible to perceive a change inside and to perceive

that our membership is not completely linked only to a specific place, but there is something more. Now we can identify ourselves with a way of looking at things, not represented by geographical places, but by persons and relations.

2.5 Personality

In this section the definition of personality and the most important theories about this concept are presented. The core of this section is the discussion of the environmental strategy, a fundamental theory in order to understand the aim of this paper.

Modern psychology is a really extended field which includes a lot of specialized areas such as the psychology of development, experimental psychology cognitive psychology and so on. The common point between all those branches is the psychology of personality. According to Liebert and Splieger (1998) it would not be appropriate to give one definition of personality, because it varies depending on the psychological orientation. For the purpose of this investigation we will define it as follows:

> Personality is the unique and dynamic organization of characteristics of a particular person, physical and psychological, which influence behaviour and responses to the social and physical environment. Of these characteristics some will be entirely unique to specific person (i.e. memories, habits, mannerism) and others will be shared with a few, many or all other people. (Liebert and Spiegler 1998: 7)

It is possible to identify four main strategies which are possible to discern in order to study scientifically personality. According to Liebert and Spiegler the main idea is that the four strategies that we are going to present have been the most fundamental "guiding lights" in the scientific work on personality for the past century and remain so today. The first one is the *psychoanalytic strategy*. This one is probably the most famous one to the general public and the idea is that personality is inspired by one or more underlying strengths within the person. The most famous theorist founder of this theory was Sigmund Freud (1856 – 1939). The theorists of this strategy focus the attention on the active strengths which cause human behaviour. The psychoanalytical psychologists are divided in five groups: the Freudians, the revisionists (Jung 1933; Erikson 1963, 1968) motivational psychologists (Adler 1964, 1973), "Ego" psychologists (Hartmann 1958, 1964) and the theorists of the objective relations Melanie Klein (1882-1960) and Sullivan (1953). The interesting fact is that a lot of people know the name of Freud and

terms such as unconscious, libido, complex, dreams and so on. Most people know more about this first personality strategy than about the other three strategies. Normally these types of theorists focus the attention on different case studies, and the majority of these psychologists are psychotherapists. The process of psychoanalysis use to be a long process during which the patient is informed of his unconscious aptitudes and some specific characteristics of his behaviour. The methods used are indirect because personality is supposed to operate on an unconscious level beyond the awareness of the individual. Nowadays modern psychoanalysts are paying more attention on the social relations, the development of personality and to scientific methods of investigation. During history the psychoanalysis has been criticized a lot. It was considered not to be scientific and not to evaluate properly the patient.

The second main strategy is the *dispositions strategy* (Gordon Allport 1897-1967). The principal assumption is that personality is an ensemble of long-lasting characteristics and the individuals are different each other depending on the quantity they own of each of those characteristics. This strategy has its root in early Greek philosophy.

The third one is the *environmental strategy* (John Watson 1878-1958). This strategy assumes that personality is shaped by an enormous combination of conditions and external circumstances which have influence on the individual and it is also interested in how and what is learned from the interaction with the external environment. For this reasons the psychologists interested in this type of theory are interested in the processes which shape the individual and in the content of what is learnt by the individual. This strategy is the one that we are going to take in consideration more deeply.

The last strategy is the *representation strategy* (George Kelly 1905-1967). The basic assumption of this theory is that personality is a reflection of the ways in which individuals mentally represent themselves and other persons, objects and events that experiment.

Each one of the theories mentioned has to deal with four fundamental matters: theory, investigation, evaluation and applications of the theory for the modification of personality. Those are the principal characteristics that each theory need in order to be considered scientific and empirical.

In this paper it seems to be particularly important to focus the attention on the third theory on personality that we have mentioned above. The theories and the investigations on the environmental strategy all share a common point: all of them focus the attention on the strengths of the external environment which have a certain influence in the behaviour of the individual. Personality is intended to be a constellation of behaviours that the individual make visible. The researchers of this strategy in order to individualize the relations existent between the individual and the environment, pay attention on the open occurrences, those which is possible to observe directly, and not on the undercover processes of the individual. The environmental psychologists are interested in the process of learning which shape the behaviour and also in the contents of what has been learnt and, as a consequence, transmitted in the behaviour. This strategy is different from all the others. If we take into account the other strategies we can observe that in psychoanalysis the stress is on the internal impulses, in disposition strategy the stress is on the intrinsic characteristics and in representation strategy the focus is on the personal success and mental operation. The environmental strategy differs completely, indeed it considers for the first time the individual as the product of the combination of complicated interactions between the individual and the always changing environment.

As Liebert and Splieger suggest, the environmental strategy have root in the behaviourism, a school of thought begun with John Broadus Watson (1924). His idea is that it is only important to study the open behaviours and the environment's stimulus. The methodology to follow is the direct observation of the behaviour, the objectivity, the use of precise definitions and controlled experimentation. Watson with the creation of the behaviourism had the idea to procure a model for all the fields of psychology, but even if his theoretical framework was used a lot by others studies and investigations, his original idea was never fulfilled.

The key role of the environmental strategy is that personality is assumed to grow and change because of the learning and the experience with the environment, and not as the result of biological and inherited characteristics, this is a fundamental assumption of the environmental strategy (Liebert and Splieger 1998). It is possible to stand out three learning processes: classic conditioning, operant conditioning and observational learning. The classic conditioning assumes that behaviour is acquired through associations between stimulus and response. The operant conditioning pays attention on

how behaviour is acquired and changes in response to the consequences of actions. The third learning process is the observational learning which has to do with the role of other or models in the process of learning. These three learning processes can be combined and this is also the demonstration of the complex nature of the environmental forces that influence an individual at any point. People are viewed as "products" of the interacting and ever-changing physical, social and cultural environment of the world in which they live. So once again we can affirm that environmental strategy emphasizes the role of external forces acting on individuals to shape their behaviour and the ways of interacting with the world, it is important to consider two further aspects in this type of strategy. Personality assumes that individuals learn the various roles they are expected to play as prescribed by the social group which they belong to, all those social roles are also inscribed in a larger group which is defined *social construction*. With the term *social role* we intend all the behaviours and attitudes appropriate to a particular group or status. For example a person can be at the same time a student, but also a daughter a roommate and a sister, or a teacher a mother and a spouse of her husband, these roles are all defined by socially prescribed relationships as dictated by the family and cultural environment. In general what we consider to be masculine and feminine derive almost entirely from social forces that we can name *social construction*.

The environmental strategies (Liebert and Splieger 1998) share three common points. The first one is that the environmental theories tend to give simple and parsimonious explanations. We can use the adjective simple because the theories used are based in few assumptions that can be used to explain a big variety of other phenomenon. To give a simple example following the path of Liebert and Spiegler we can think about the common experience of forgetting the name of someone we know well. On the environmental point of view you are not able to remember the name maybe because in that moment the stimuli that would help you to remember are absent, later in the majority of the cases there are signals that help you to bring the name to mind immediately. As we can see this is a straight simple explanation of the phenomenon. On a psychoanalytic point of view in contrast the same phenomenon is explained by several and complex explanations which make reference to multiple levels of unconsciousness, the result is that we have a lot of complex explanations and a lot of assumptions are done than the parallel environmental explanation. Second, the theory of personality does not use a lot of theoretical constructs. The environmental psychologists try to

avoid all those explications which try to speculate about the hidden processes of an individual. Third, the environmental theory reduces at the minimum the interferences. It means that the psychologists do not try to give difficult explanations to the events; the organism is conceived as a "black box" whose working is not possible to be studied because of its hidden and personal nature. A clear example is given by Liebert and Spiegler making reference to a hypothetical case of a five years old child and the observation of his affection to his mother and the avoidance to his father. The psychoanalysts would talk about the Oedipus complex and they would start not only the overt behaviour but their analysis would go beyond ending in the formulation of a general theoretical construct. In contrast an environmental psychologist would probably affirm that the child would go to his mother when he is in troubles, based on the observation that the child seeks out his mother when hurt. In this simple explanation is free of inferences, no cover processes are proposed.

Furthermore we can say that the environmental evaluation of personality is characterized by its *direct*, *present oriented* and *highly focused* nature. It is *direct* because the psychologists observe directly the behaviours and from the observation they try to achieve some conclusions. Just to give an example we can think about a child described by the parents as having difficulties at school. The first think that an environmental psychologist will do is to go school and observe the child interacting with his teachers and peers in the environment of interest, so as the example shows, it is a direct and straight way of operating. It is *present oriented* because the environmental psychologist is interested in the present events that can explain the behaviours considered to be problematic. There are two principal reasons in order to explain better this orientation. The first one is that, even if the environmental psychologists do not deny the possibility that some problematic behaviour can find an explanation in the past, they also affirm that is not possible to change thing in the past, in other words the events of the past belong to the past. The second reason why is possible to consider this theory related with the present and not with the past is that is possible that the information given about the past is not reliable. At last, it is possible to say that it is *highly focused*, because the interest of the environmental theory is to analyse particular aspects and behaviours of personality, and not all the personality as a whole.

From the environmental strategy another theory started to be developed: the social learning theory. This theory stresses the fact that social aspects influence personality,

including the importance of learning and changing oneself by observing how others behave. The first theorists who started to shape this approach during the forties were Neal Miller and John Dollar (1941). We are going to follow the path proposed by Liebert and Splieger who focus the attention on other theorists, Bandura and Walters who shaped their approach in 1963. Those two psychologists created the theory of *observational learning*. This theory is based on the idea that the process, through which the behaviour of an individual, the observer, changes, is the result of the exposure to another's behaviour, the model. It is possible to be exposed to two different types of models: *living model*, if the model is "real" and physically present or *symbolic*, if the models are represented by the television, readings, and films and so on. The observational learning is a process divided in three stages. The first one is the *exposition* or observation. The person must participate and observe the behaviour of the model. The second one is the *acquisition*. This phase is the moment in which takes place the learning and the recollection of the model. During the acquisition a person is supposed to pay adequate attention to the modelling cues and retain them. After these two phases there is the third one the *acceptance* in which the observers decide which part of the model will be imitate or not. During the acceptance the individual can follow two paths. The first one is to decide to imitate the model which means that his or her behaviour will be the same of the model observed, in other words the imitation imply to simply behave as the model did. On the other hand, the second one is when the individual decide to contra-imitate the model which means that his behaviour will be exactly the opposite of the model. Furthermore is possible to talk about *indirect imitation* if the behaviour is similar but not exactly the same of the model. We can also talk about indirect *counter- imitation* in this case the subject uses the basic points observed in the model in order to produce an opposite type of behaviour.

This theory seems to be really interesting for this project. What we are trying to explain and to support is the idea that there is a change in personality when another language, different from the L1, is spoken. This type of change is not only provoked by the fact that another culture get in contact with the pre-existent culture, but also by the fact that the subject is completely in contact with different models of learning and those models, as the environmental theory explains, are able to exert a certain influence on the personality of the subject. The learner who decides to go abroad to learn properly a new language not only is in a situation of intense interchange, but also is exposed to new

models, different from those that can appreciate in his own country. Those new models, if the learner is receptive and open minded, in a certain way will have an influence also his personal behaviour. The theory affirms that when a certain imitation of a model is produced it is also possible to appreciate a change in personality.

To be precise it is important also to illustrate briefly the weak points of the environmental strategy. One of the major problems of this strategy is that it does not take into account the biological and inherited factors, but has been demonstrated that all those factors play an important role in personality. Furthermore the environmental psychologists trust in excess in situational evidence, but investigation has demonstrated that those instruments sometimes are not really reliable.

2.6 Brain and second language production

The importance of the second language production is a fundamental issue in this project. The first part of this section is dedicated to the description of the physical structure of the brain. After that the way we learn a second language and the way in which our brain organizes and stores the new information is described. In the third part, some language learning strategies are described.

2.6.1. Physical structure of the brain

In order to understand the process of acquisition of a language we can briefly focus the attention on the basic structure of the human brain. William McGregor in his book *Linguistic: an Introduction* (2009) offers a description of the structure of the human brain. As we know the human brain has a spherical shape and is divided in two hemispheres, the left and the right hemisphere. The two hemispheres are connected by a bound of nerves called *corpus callosum*, each hemisphere control the opposite side of the body. The layer which covers the brain is the *cerebral cortex*; it is a layer of two or four millimetres of thickness and is made up of neurons. Many cognitive functions take place in the cortex which is divided in four main lobes in each hemisphere: the frontal lobe, the parietal lobe, the occipital lobe and the temporal lobe. We can distinguish two areas which are particularly important in language processing: the Broca's area and Wernicke's area. The names of the two areas belong to Paul Broca (1824-1880), a French physician and anthropologists and Carl Wernicke (1848-1905) a German physician. The first one, the Broca is localized in the anterior frontal part of the

temporal lobe of the language-dominant hemisphere and is associated with speech production. The second area, the Wernicke's area is slightly larger than Broca's area and located further towards the posterior back of the brain. This area is believed to be associated with speech comprehension. The two areas are connected by a bundle of nerves called *arculate fasciculus*. In the case of damage to some of these areas it is possible to observe a certain type of aphasia and in general linguistic problems. The human brain shows a degree of plasticity in relation to language and other cognitive functions. It is also capable of recovery at least to some extent from damage through deployment of other areas.

2.6.2. Acquisition of a new language and speech production

As Judith Kormos (2011) affirms acquiring a language is a psychological process that brings about changing in cognition. In fact if language is considered to be a tool used for interacting with other people, language learning is also a social process affecting behaviour and attitudes. It is relevant to focus the attention on the general characteristics of speech production in a second language. As Judit Kormos sustains the speech production researchers all agree that language production has four important elements:
1. Conceptualization: this is planning what one wants to say.

2. Formulation: this element includes the grammatical, lexical and phonological encoding of message.

3. Articulation: this is the articulation of speech sounds.

4. Self-monitoring: it involves checking the correctness and appropriateness of the produced output.

The researcher highlights the fact that in L1 production the conceptualization (point 1) is the one which requires more attention from the part of the speaker, whereas the others two are more spontaneous and automatic, and therefore the act of processing mechanism can work in parallel, for this reason producing a message in L1 is generally faster. There is now an interesting point that has to be considered, and that allow us to observe that although a number of differences existing between first and second language speech production, the basic psycholinguistic mechanism involved in speech

production seem to be very similar. The interesting point that researches share is the view that one of the basic mechanisms involved in producing speech is *activation spreading*. Kormos (2011) defines activation spreading as a model based on the finding of neurological studies that neural networks consist of neurons that exchange simple signals, called "activations," via the connections they have with each other. So the speaking process consist of a hierarchical levels (the points listed before) among which information is transmitted by means of activation spreading and also consist of knowledge stores, such as the lexicon and conceptual memory stores, within which activation can also spread from one item to related items. This process described is inspired in the work of Levelt (1989,1999) who offers this bilingual speech production model which has been empirically supported in the field of cognitive and psychology and psycholinguistic. What emerged is that, as affirmed before, although the differences present in the speech production of L1 and L2, the process is really similar, the mechanisms through which our brains work are similar. Now we can fix the attention on the knowledge store in L2 speech production. Judit Kormos (2011) assumes, following the results of the most important memories researchers (H.P. Bahirick, 1993, 1975; E. Tulving, 1972) that the language processing model should contain one large memory store called long-term memory. The long-term memory consists of several sub-components such as: episodic memory, semantic memory including the mental lexicon, the syllabary and a store for declarative knowledge of L2 rules.

At this point it is important to define some words that have been named above, the first one is lexicon. David Singleton (2000) gives a general definition of the term lexicon saying that "is an Anglicized version of a Greek word, which basically means dictionary, and it is the term used by linguists to refer to those aspects of a language which are relate to words, otherwise known as its lexical aspects". In the lexicon are included not only list of words but also the roots, the derived stems, since their meaning is not predictable, and need to be recorded. For example, as McGregor (2009) suggests, for English the lexicon will contain *farmer* and *farm* but forms like *farmers* and *farmer's* do not need to be listed, in those cases the knowledge of English morphology is sufficient in order to know how and when use them. Other elements that are present in a lexicon are the irregular forms of verbs and nouns, such as the verb *to be* and its irregular forms *are* and *is*. Furthermore McGregor (2009) states that in the lexicon are also listed all those expressions and idioms whose meaning cannot be guessed from the

meaning of the component words such as *kick the bucket*, *know by heart* and so on. It is important to remember that the lexicon is not fixed; on the contrary it tends to change rapidly. Some changes are due to social and technological changes but also can be relevant the fact of speaking more than one language. In this case in particular we have talked about the *mental lexicon,* there are many definition of this word, and we can say, following Levelt (1999) definition, that the mental lexicon is the language user's store of information about the words in his language. In general, as David Singleton (2000) affirms, we shall look at the mental lexicon as the lexicon which each speaker carries "inside his/her head" that is to say that is the lexical knowledge upon which all use of any language heavily depends. In the mental lexicon the process of word recognition is sensible to phonological and orthographic characteristics that word share, but it is also sensitive to word frequency and the effects of context. At this point we are going to focus the attention on L2 dimension, in other words we are going to observe how the mental lexicon is organized when more than one language is taken into consideration. Singleton (2000) says that one of the first steps that a learner has to deal with is the phonetic/phonological domain, in fact in many cases the sounds related to a new language used to differ markedly from those of his/her first language. For this reason the learner, as a child, will have to practice and to make mistakes in pronunciation in order to internalize the principal of phonetic distinctions. In many cases the fact of having one phonological system already in place can represents a source of hindrance as well as of help in this matter. Moreover it is important to note that phonological working memory is really important in determining the proficiency of the second language and that the processing of phonological form is particularly crucial in the early stages of acquiring a new world. In relation to the conceptual/semantic domain it is obvious that the learners of a second language are at a more advanced stage than the infants acquiring their mother tongue. Indeed many of the meanings already present in the lexicon of the first language speaker will be re-applicable with only minimal adjustment in other languages. It is evident that there are areas of meaning in which the two languages in question differ, for example when new concepts need to be acquired. In many cases the meaning of two or more different languages are related with cultural particularities and are differently structured and distributed. Furthermore it also possible to notice that words easy to imagine are more readily acquired than those which is more difficult to picture. Finally it is possible to observe that the way in which the meaning of a word is integrated change, initially it is associated with the meaning of words with

which it collocates, such as *blue-sky*. After that this kind of association gives way to more hierarchical organization with words covering the same area of meaning based on relations as synonymy: *little-small*, or oppositeness *fat-thin* or hyponymy *carrot-vegetable* (Singleton 2000). Despite the similarities between the acquisition of lexical elements in the first language and the second there are different views on the type of mental lexicon that is created. There is a view which claims that while in the first language mental lexicon the connections are predominantly semantic, in the second language mental lexicon are predominantly phonological. The evidence which supports this claim has been proved with word-association test data (E. Service 1992; Meara 1984). The opposite claim says that the first language mental lexicon and the second language mental lexicon work in the same way. According to this perspective if the processing of a lexical item depend predominantly on meaning-based links or on phonological relationship will depend not on the status of the language in which the item occurs but on the degree of familiarity of that particular world to that particular speaker.

Another important issue suggested by Singleton (2000) is whether the second language mental lexicon is separated from or integrated with the first language mental lexicon. There are two points of view; the first one is in favour of the separateness. The point of view which supports the separateness is demonstrated by observing that one language is recovered before another after language loss due to brain damage. The opposite point of view comes from the integrationists, such as the linguist Vivian Cook (1992) who affirms that the first language lexicon and the second are integrated or at least connected. There are also some evidences about the influence of learning in a certain environment and level of proficiency in a certain language in the degree to which the first language and second language lexicons are integrated. In other words, the more the first language is involved in the environment in which the second language is learned, the greater will be the grade of integration between the two mental lexicons, and that, as second language becomes less and less dependent on and more and more separate from the first language mental lexicon.

It has been empirically proved (Kroll and Tokowitz, 2005; Poulise and Bonagaerts, 1994; Roelofs, 2003) that all those sections described concerning with the knowledge stores are shared between L1 and L2. So it is possible to affirm that there is a common episodic and semantic memory for L1 and L2, a shared store for L1 and L2 lemmas and

lexemes. Lemma is the graphic unit which represent a set of forms having the same stem and belonging to same major word class, for example the verb *go*, is the lemma of *went* and *going*. The lexeme is the part of the lexical item containing the information about morphological and phonological properties. Going back to the language production and the way in which knowledge is stored we focus the attention on Judith Kormos studies (2011). She postulates the existence of a fourth L2 specific knowledge store: a declarative memory for syntactic and phonological rules in L2. The researcher postulate the existence of a fourth memory because for the bilingual speaker phrase and clause building, as well as lexical phonological rules, are not automatic and assumed to be stored in the form of declarative knowledge. Ullman (2001) for example gave several pieces of evidence from neuro-imaging research that declarative knowledge concerning grammar is stored in a different region of brain from the area which is responsible for the processing of automatized rules of grammar. Therefore, the interesting part of this brief description of general characteristics of speech production and the knowledge store in L2 speech production, is important to observe that apart from the existence of a fourth knowledge store in the bilingual brain, the bilingual production model is not significantly different from models constructed for monolingual speakers.

It is now possible to encode briefly the second language speech. The processing of L2 speech begins with the *conceptualization*. Judit Kormos (2011: 42) says:

> "This process involves activating the relevant concepts to be encoded and deciding on the language in which the message will be spoken. The output of the conceptualization process is the preverbal plan, in which is contained the conceptual specification for the message to be conveyed".

 In this part is important to remember that we have seen that the concept in L1 and L2 are stored together in the same memory, the semantic one. When one concept is called on in many cases the concept is shared by L1 and L2 only in few cases is completely separated (Hintzman 1986). The fact that the concepts are shared between L1 and L2 depends on the concept, the situation in which the L2 was acquired and level of proficiency of the speaker. So in this first phase of conceptual preparation the message is generated through macro-planning and micro-planning (Kormos 2011). The first one involves the elaboration of communicative intention which is the speech acts, like apologising, informing, directing and so on. The second one, the micro-planning,

involves the linguistic realization of the content. The micro-planning in addition specifies the references and the argument structure of the message and assigns thematic roles and the mood of the message. The macro and micro planning are part of a preverbal plan. This part is not yet linguistics but contains all the necessary information to convert meaning into language. During the conceptualization of the message also the language of the massage need to be established. The language choice depends on the sociolinguistics factors and the nature of the communicative situation, but also in the type of the relationship we have with the interlocutors. Judit Kormos, inspired to the theories advanced by Levelt's model (1999), says that in the semantic memory is not activated only the concept that the speaker wants to encode but also all the concepts semantically related. The example reported is the one of the concept of *child*, when we conceptualize this word we also activate other related concepts such as *mother* and *love*. The really interesting thing is that when the bilingual speaker uses one of his languages, also the concepts in the other language are activated.

The second important phase of the second language speech is *encoding*. In bilingual speech production encoding means "matching the conceptual specifications and the language signal with the appropriate lexical entry in the mental lexicon" (Kormos 2011). The conceptual specifications send signal activations both to L1 and L2 lemmas. The lemma which contains all the features that the speaker needs will be the one chosen. The mental lexicon contains L1 and L2 lemmas and lexemes. The bilingual lexicon is supposed to contain single L1 and L2 words and long phrases; those long sequences can be idioms, conventionalized expressions and have their own syntactic information. The lexicon is conceived to be a network in which entries have connections with each other. Between L1 and L2 lemmas and lexemes there are connections. The well-known words and phrases used in L2 are in a central position of the network and they have access to a lot of other items. The word less-well known to an L2 speaker can be found at the periphery of the network (Wilks and Meara 2002). The strength of connections can also vary, in fact for a speaker who has got a low L2 level, the links between L1 and L2 items are stronger than links among lexical entries. The second phase of the process of encoding, now that we have said that there are connections between L1 and L2 lemmas and lexemes, is the syntactic encoding. The syntactic encoding in L1 consist in two phases: the first one is to activate the syntactic information such as gender, countability and the complements that is necessary or not to use. The second phase consists in

individualize the mechanisms that are necessary in order to assemble the sentence and the syntactic futures. It has been observed that regarding to the general process of syntactic encoding there are no fundamental differences between L1 and L2 speakers. During the selection of the mechanism necessary for the assembly of the sentence the L2 speakers with a high level of proficiency are able to organize the syntactic information directly, in other words, they do not need to turn to the syntactic information of the corresponding L1 item. The next phase after the construction of the sentence involves the process of activation of phonological form of the word to be encoded. Judit Kormos (2011) once again proposes that the basic mechanism of phonological encoding is not different in L1 and L2 production. In fact the L1 and L2 phonemes are stored in a single network within the lexicon and the lexeme level and memory representations for phonemes that are identical in L1 and L2 are shared. In the case in which there are some different phonemes in L1 and L2 they are stored as separate representations.

Now there is the third phase of the process of speech production which is the *monitoring*. Also in this case this last process is similar in both L1 and L2 production. The aim of this phase is to monitor and control the use of the language in order to produce a proper message. In this part the first step involves the comparison of the preverbal plan with the original intentions of the speaker before being sent to the formulator. In this part is possible that the preverbal plan needs to be modified or changed in case of not giving the appropriate message. The second step concerns the monitoring of the phonetic plan before the formulation; this passage is called *covert monitoring* (Postma 2000). Finally the statement is also checked after the formulation, in this case if the speaker notices an error, is activated the production mechanism for a second time.

This model represented does not take in account the interaction with another speaker, but we have to imagine that usually the speech production occurs in a dialogue, between at least two interlocutors. It has been observed that during an interaction, in order to understand each other, the speaker's and the listener's situation models need to be coordinated. It means that they need to share the same representation of the context of the conversation. There is a model shaped by Garrod and Pickering (2004) which supports that there is an alignment between speaker and hearer, which is automatic, and allows activating the representation to one interlocutor to the other directly. This

mechanism explains why people tent to use similar words, structures and expressions to the ones produced by their interlocutors. A part from that the effect of the interlocutor's output to the listener's linguistic system also explains why L2 speakers try to incorporate new constructions into their speech through the repetition and the reconstruction of the received input.

It is important to consider the position of Peter Robinson (2003, 2011) about the speech production and the cognition hypothesis. The idea is that language learning should be sequenced on the basis of cognitive complexity, this gradual progression allow students to be able to progress from a simple linguistic form to more complex and linguistic situations. The cognitive hypothesis is based on the assumption that as regards L2 representations, between L1 and L2 concepts there are not a lot of differences, the major part of the features are shared. It has been affirmed by Jarvis (1998) that during the learning of a L2 a new system of linguistic forms is learned, but it is mapped on an already existent mental system that has been constructed according to a person's total experience with language and concepts. At the begging of the learning process the L2 forms learnt are usually associated with the semantic features of the corresponding L1 concepts, but during the process of task complexity the aim is to activate complex concepts and to extend the L2 conceptual system. The principal aim of the cognitive hypothesis is to demonstrate that the enrichment of the L2 conceptual system produces effects on lexical, morphological and syntactic development by driving learners to create new connections. The tasks are fundamental in this sense because need to be shape on the students' needs.

2.6.3. Characteristics and Influences of the L2 learner

It is now possible to consider briefly the principal characteristics of the learner of a L2 and also the cognitive and affective influences on language learning. Those characteristics and differences are important in order to see how learners are different between them and also to observe the way in which some are more opened to be influenced to another language and some others not. As Skehan (1996) affirms one of the most decisive characteristics determining the disposition of a speaker in learning a L2 is surely the factor of introversion or extroversion. Skehan (1996) uses the definition of Eysenck (1965) in order to describe the main differences between these two behaviours. Extroversion is composed by two fundamental elements: sociability and

impulsivity. Introversion, on Eysenck point of view, is characterized by quietness, seriousness and introspection. As we can observe we are observing features strictly related with personality, a lot of scientists tried to study the extroversion and to demonstrate the positivity of extroversion in learning a second language, but anyway the really important fact to observe, as Skehan suggests, is that both extroversion/introversion have their positive features and that these two characteristics are related to age and also on the learning environment and the type of tasks that the learner is expected to solve (Wankoski, 1973).

Another important characteristic associated with a good language learning success is the *risk-taking*. There are several theories which have focus the attention on the risk taking, and one of them, in particular the theory designed by McClelland (1967), proposes that successful learners are those who construe the tasks that face them as medium-risk and achievable. Unsuccessful learners will tend to be those who set excessively high or law goals for themselves. Even if the risk-taking, in situations containing social interaction, has been seen as generally and pervasively good, has also created questions and doubts. A lot of theories and investigations have been carried out related, for instance, to general psychological theories Ely (1986), the results show that there is a link between risk-taking and proficiency in language learning but, in any case, the results have to be handling with caution because a lot of other factors can influence the language learning apart from the risk-taking.

Another component able to impede the successful L2 learning and production is anxiety. As Hager (2011) explains in many cases communicating with other people belonging to different socio-cultural backgrounds can provoke a sort of anxiety and awkwardness. Therefore it is necessary that the individual prepared himself to new challenges and to cultural variation in verbal and non-verbal communication. In many cases anxiety is provoked by situations in which there are high challenges and low skills, in this case the speaker feel frustrated and anxious. When anxiety is a serious problem for the speaker all his or her capacities can result affected and especially the self-esteem, the risk-taking and also the L2 proficiency can be hindered (Hager 2011). Furthermore anxiety is described as a vicious circle: communicative anxiety interferes with performance, a bad performance and bad performance increase the levels of anxiety; bouts of anxiety in L2 learning can cause anxiety in L2 anxiety; L2 anxiety can affect negatively the L2 performance and so on in a never-ending circle. As Skehan

(1989) suggests exist two type of anxiety: general anxiety which affect behaviour in all domains and specific anxiety, which rise as a consequence to specific exposition to certain situations. As Skehan (1989) affirms it seems to be a relation between anxiety and learning but it has to be considered also in union with others variables such as the age, ability, stage of learning and proficiency level. Furthermore we have to consider that second language anxiety in many cases appears as a consequence to negative experiences repeated in time. In many cases the teacher, the classroom environment and sense of community cause anxiety. It is important to consider the aspect of anxiety because one of the questions of the questionnaire is about the relation with native and non-native speakers and through this question it is possible to observe if the participants are influenced or not by anxiety and, as a consequence, if their L2 production is undermined.

As Skenah (1996) asserts, recently interest has been shown in other cognitive abilities that might be relevant to the task of language learning. The principal ability is the field-independence. This theory of field independence has been constructed by the psychologist Witikin (1962). The principal form of this theory concerns visual perception and an individual's capacity to separate figure from ground in an illustration. In other words, the psychologist (Witkin 1971) created a test in which individuals had to separate figures from the ground, the essential from the inessential, in this way it resulted possible to observe the way individuals organize and perceive the world. People who do well on the test were thought to be analytic and field-independent. People who do poorly on the test, on the other hand, see the world as an unanalysed whole and they were called *field-dependent*. Furthermore Witikin distinguished some characteristics regarding to the two types of aptitude located. The field-independent are supposed to be more impersonal and detached, less sensitive and more cerebrals. On the other hand the field-dependent are thought to be person oriented, interested in other people and sensitive to them. The field-independent construct has been related also to language learning. In fact in language learning field-independent people are supposed to have grater analytic and cognitive restructuring capabilities, they have more resistance to "fossilization" in other words thanks to their analytical capacity they are able to restructure and develop interlanguage systems more readily. They can break up, re-analysed and reassemble more easily and organize in that way the knowledge and create new bases. The theory of the correlation between the field-independence and the

language learning has been investigated from a lot of researchers. There are different points of view on the effectiveness of this theory, some researchers seem not to see the correlation between these two spheres and some others have found a certain correlation. What is true is that is certainly an interesting field of research and to conclude is possible to say that, as Skehan (1996) suggests, there are strong ground of believing that field-independence only works when is combined with another essential component which is intelligence, in particular the verbal one.

3. Research

3.1 General Aims and Hypothesis

The main aim of this paper is to investigate the existence of a connection between a L2 and changes in personality. The idea rose up by some personal experiences shared by a number of second language speakers. This subject of investigation, as stated before, falls within the area of Cognitive Linguistics and psychology, and more precisely the area of Personality. The goal is to answer to the following questions:

1. Is it possible to establish a relation between a L2 and the way we perceive the reality?

2. Is it possible to say that speaking a L2 with high level of proficiency provokes a change in personality?

3. Does speaking a second language implies changes in the way we interact with others and in the way we perceive another culture and life style?

4. Are the speakers aware of this change in their inner-self?

If we take into consideration a person exposed to an intense cultural, lingual and personal contact in different socio-cultural situations we can observe that the individual is in a certain way affected by the external factors related to the new linguistic and socio-cultural context. The exposition to new external factors, such as a new language and new habits, provokes in the subject a personal change and obliges him or her to adapt to the new circumstances. A lot of persons during and after the exposition to new cultures and languages start to perceive some inner changes and in many cases they become conscious of these transformations.

3.1.1. Hypothesis

The hypothesis is: If speaking a L2 provokes changes in our way of thinking and organizing the structure of that language, can this process provoke also changes in our personality and the way of seeing reality? The interesting point is that the analysis does not concern only with the psychological sphere but also with linguistic and cognitive ones.

3.2 **Methodology**

In this paper the methodology used in order to achieve the aforementioned goals and to investigate the questions listed above, takes into account both theory and practice, in other words quantitative and qualitative data. The data are collected by the use of a questionnaire and the discussion of the data is supported by the theoretical framework described in chapter 2.

3.2.1. Materials and Design

In the questionnaire yes/no questions and open questions are presented (Appendix 1). For this reason it is possible to consider it a quantitative and qualitative analysis. The language used in the questionnaire is Spanish. In order to analyse the data collected the program chosen is SPSS. As Zoltán Dörnyei (2007) affirms after having collected quantitative data the next step is to analyse them using a set of mathematical procedures. SPSS is a software package used in applied linguistics and educational research. It is able to perform statistical operations. A quantitative data analysis handles data in a numerical rather than alphabetic form. This is why at the beginning all the variables have been transformed in a range of numbers from zero to four and then analysed following statistical procedures. In the case of the open question the analysis is different; we are dealing with words and opinions. In many cases in fact the participants do not answer to all the questions or some of them are not valid or complete; only the most relevant and interesting for achieving the aims of the paper have been considered. The answers have been also compared between them in order to find out some similarities, or on the contrary, the differences.

The questionnaire contains twenty-one questions. There are five questions about participants' demographics, including: sex, age, profession, nationality and mother tongue. In addition there are six open questions in which the participant is asked to explain his/her personal opinion and experiences. In the very first part, the personal level of proficiency in a second language following the Common European Framework of references for languages is asked. This detail is relevant for the good result of the investigation. Individuals with a high level of proficiency are meaningfully exposed to the culture of a foreign country, furthermore the higher the level of the L2 the better the interpersonal relationship with native of the language chosen. We have to consider that a person at the beginning of his learning process has not the same ability and ease producing sentences and talking about a wide set of topics. Furthermore, as it has been demonstrated and explained in section 2.6, at the beginning of the learning process the space occupied in our brain by the L1 and L2 is the same and the learner tends to makes reference to the knowledge already present in his/her mind, so tends to use only the L1 knowledge. For this reason the subjects chosen are more or less good speakers in a L2 and have lived abroad during a period of time. All the other fifteen questions are yes/no questions.

In the questionnaire different topics are debated. Substantially the words used in the title of this paper are analysed and discussed in the questionnaire. This is why it is possible to find questions on culture, second language production, personality and the relations that all these key words establish. The questionnaire also asks to the subjects to describe personal experiences and to become aware of the changes in their inner by describing personal experiences or feelings in determinate moment of their learning process. The answers proposed in the questionnaire rose up following the principal theories explained in the first chapters of this paper. In order to be more precise we can say that questions from 1 to 4 provide details of the L2. Questions 5 and 6 concern the idea of culture and language. Questions from 7 to 9 are about language learning and characteristics of a L2 speaker. From 10 to 12 we find questions that start to introduce the idea of changing in the way of being and personality. Questions from 13 to 16 are inspired to language production and influences of the L2 on thoughts and on L1. Questions 17 and 18 are about the environmental strategy and at the end from 19 to 21 personality and individual.

3.2.2. Participants and Procedures

A convenience sample of 25 L2 speakers was recruited. All participants met the following inclusion criteria:

1. Speaking with a high level of proficiency a L2

2. Have lived abroad during a certain period of time

The participants selected belong to different countries and have different ages and jobs. Most of them are Spanish with a high level in a L2, following the Common European Framework of references for languages. The average of the age of the participants is thirty-one years old (Appendix 2, figure 2) and the average of the level of proficiency in a second language is a high B2, although C1 and C2 subjects participated as well (Appendix 2, figure 3).

On one hand part of the subject chosen has lived abroad during a period of time, months or ages, and on the other hand part of them still live abroad. The sex of the participants is not considered particularly relevant but the majority of the participants who have fulfilled the questionnaire are women, expressed in percentage 72% of women and 28% men (see Appendix 2, Figure 1). In the questionnaire the age is only in part relevant because it is possible to observe a change in personality at any age and stage (see section 2.5).

Participants were tested individually. The questionnaire is completely anonymous. The participants had to think about their personal experiences and answer sincerely trying to expose their point of views. They had the possibility to do it on paper or with the computer. With some of them was possible to have an informal interview in order to understand better their point of view, in this way they had the possibility to explain better their opinion and to reflect about their own experiences being more aware and conscious of what they lived.

As a whole, the questionnaires recollected are twenty-nine, but only twenty-five have been considered relevant and useful in order to achieve the objectives proposed. Some of them were blank and some others didn't fulfil the basic requirement of a B2 language level. So the final sample is twenty-five subjects.

3.3 Results

This section focuses on the data collected. The results gathered in this investigation and the data are represented in percentages and graphics. The first part of the questionnaire is dedicated to demographics, for this reason the analysis of the data starts from question number four. Question number four asks if the participants have lived during a certain period of time abroad. The answers to this question show that the majority of them lived during a certain period of time in a foreign country. Only the 8% of them answered negatively to this question (figure 2).
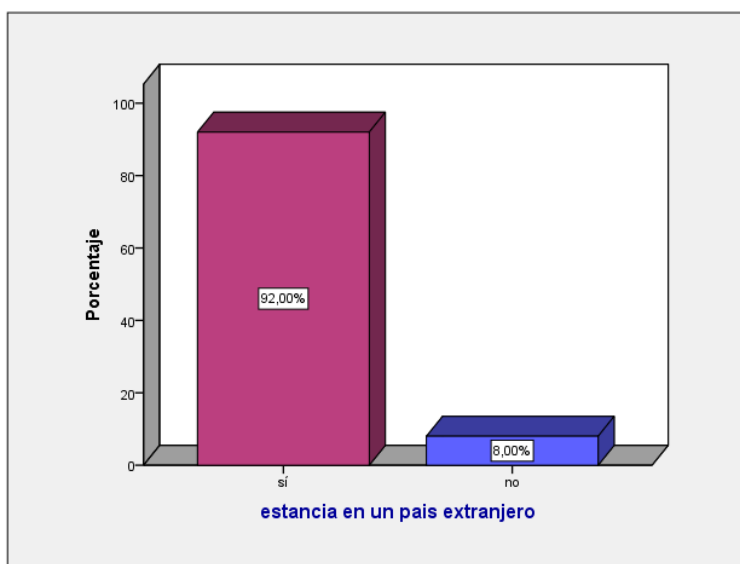

Figure 2

Following with the next question the results show that the 64% of them perceived in a different way the culture of the county where they spent a certain period of time (Figure 3).
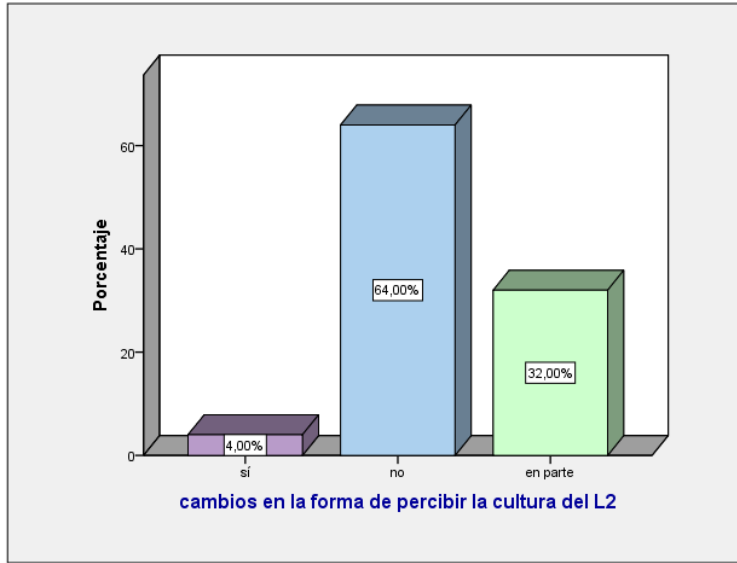
Figure 3

The 96% of them agreed considering that there is a relation between culture and language (Figure 4).
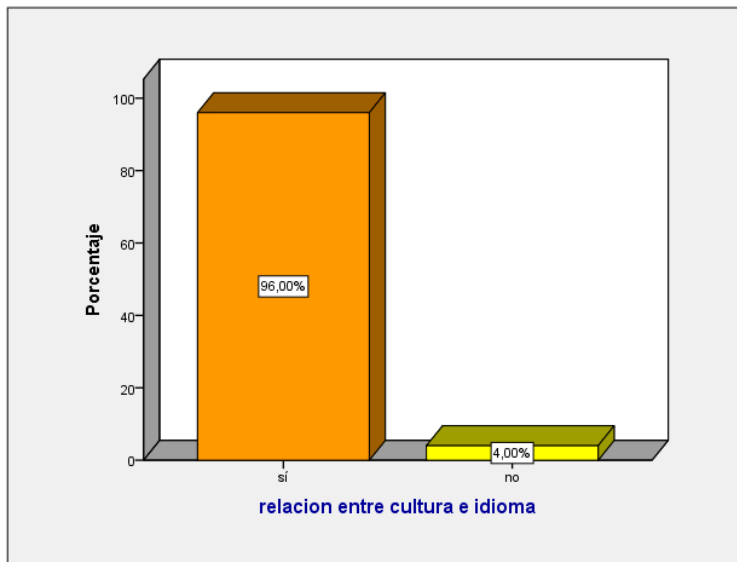

Figure 4

After that was asked them the way in which they engage with native people (question 7) and the way they engage with those who are not mother tongue but speak the same L2

(question 8). The 72% of them answered that the way they approach to native people is different (Figure 5). In order to understand better this question it seems to be interesting to focus the attention on the answers of question number 9. A lot of the participants have answered that they notice a change relating with the natives because they feel pressure due to the use of the L2. In other words, part of them feel more embarrassed, introverted and insecure because they tend to focus their attention in the way they speak and express rather than the way they behave. Part of them instead answered that they act in a different way with native-people because they feel much more self- confident and bold; speaking a L2 help them to feel closer to the native speakers.
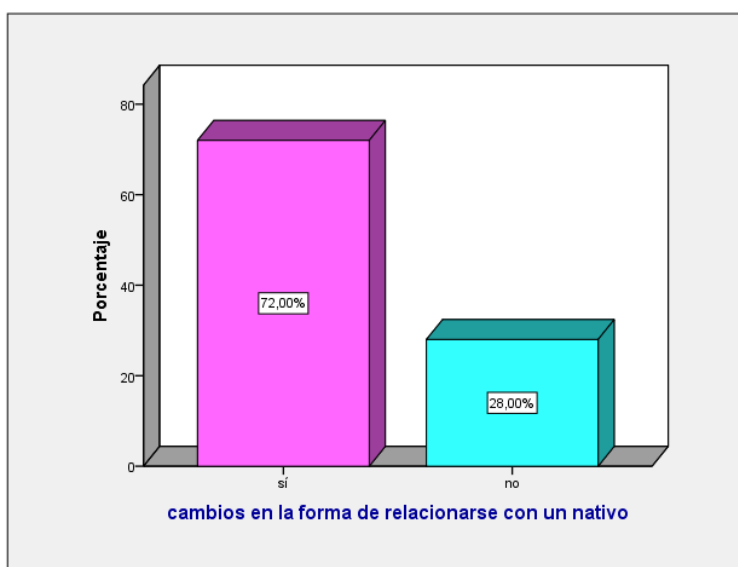

Figure 5

The 60% affirmed that their approach is different also with non-native people (Figure 6). The answer has been justified affirming that when they have to do with non-native speakers they feel at the same level and they feel more relaxed, spontaneous, at ease and closer to the others. Furthermore they feel more confident because they think that they are not judge for the way they speak. On the other hand the 40% answered that they do not change anything approaching with other non-mother tongue speakers.
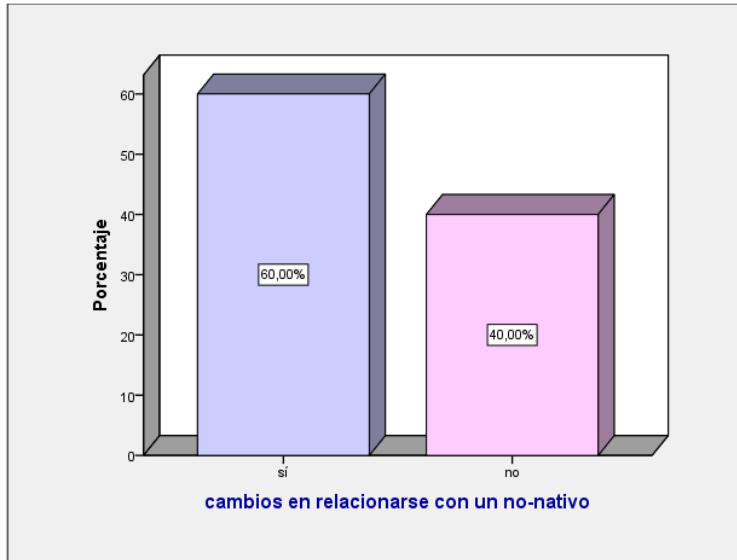
Figure 6

Going on we find one of the most important questions of the questionnaire (question number 10). The participants had to say if they feel freer or different speaking a L2 compared with speaking their mother tongue. The 4% of them said that they feel much free or different speaking a second language. The 44% answered yes, they feel freer or different, and the 52% answered no, they do not feel freer or different (Figure 7).
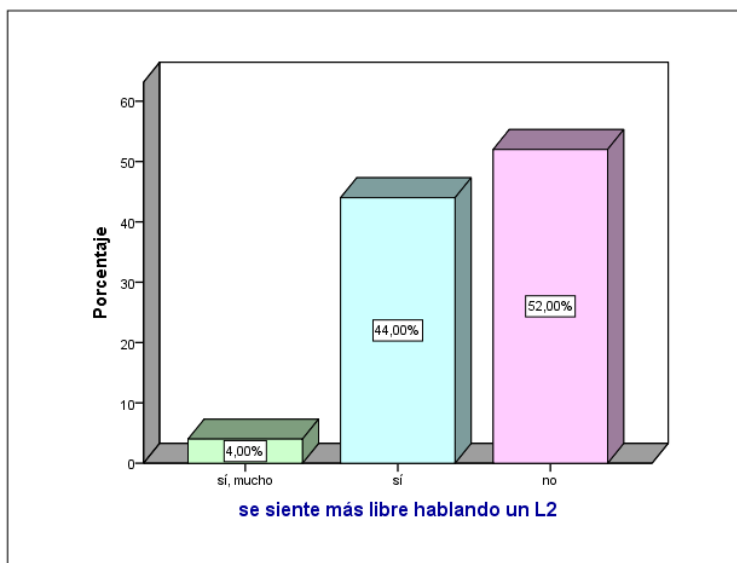

Figure 7

As a consequence was asked them to say if there are aspects of their personality that they appreciate more speaking a L2 and also if there are aspects of themselves that they have discovered speaking different languages (questions 11 and 12). The 64% of them notice a change in their way of being and the 36% do not (Figure 8). Part of the participants who affirmed to perceive them in a different way said that they discovered inner resources and strengths that they ignored (question 12). One of them affirmed that he feels more sophisticated while speaking English, another participant affirmed that her humor is much more intelligent while speaking German. Some of them discovered to be not so shy and that they are able to overtake the personal barriers. One of them affirmed to feel more "international" and this sensation provokes a sense of self proud. One of them confessed that his personality appears different speaking in another language because his linguistic resources are different. Others said that they are more controlled, polite and less impulsive. One of them noticed that while she speaks Spanish she feels more positive; in fact she does not use the typical English "regret" expressions like I should have done…, I could have done…, I would have done…

Figure 8

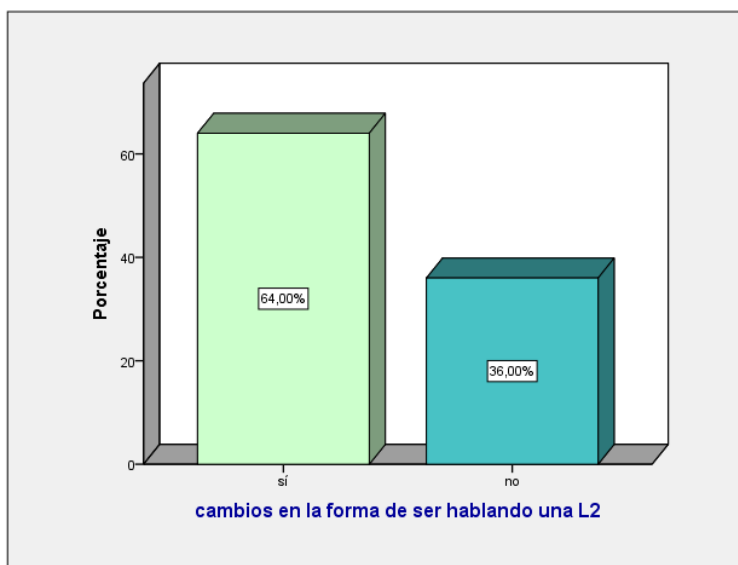In the questionnaire it is also investigated the way in which the L1 and the L2 are related (question 13 and 14), for this reason the 76% of the participants affirmed that learning a L2 changed something in his/her way of express himself or herself and the same percentage affirmed that the L2 conditioned the L1 (Figure 9). To the first question (after learning a L2 can you notice some changes in your way of thinking and

expressing?) participants seemed to agree saying that the L2 helped them to understand better the other culture and to feel more interested in it. Others verify a change in organizing concepts and ideas, in other words they became aware of the differences using their L1 and L2 grammatical and verbal constructions. Others affirm to be clearer and able to go straight to the point. One of the most interesting answers given affirms that because language influences thought and shapes the reality, a new language helps you to activate new ways of seeing reality and way of thinking. Regarding the way the L2 influenced the L1 there is a common idea within the participants (question 15 and 16).
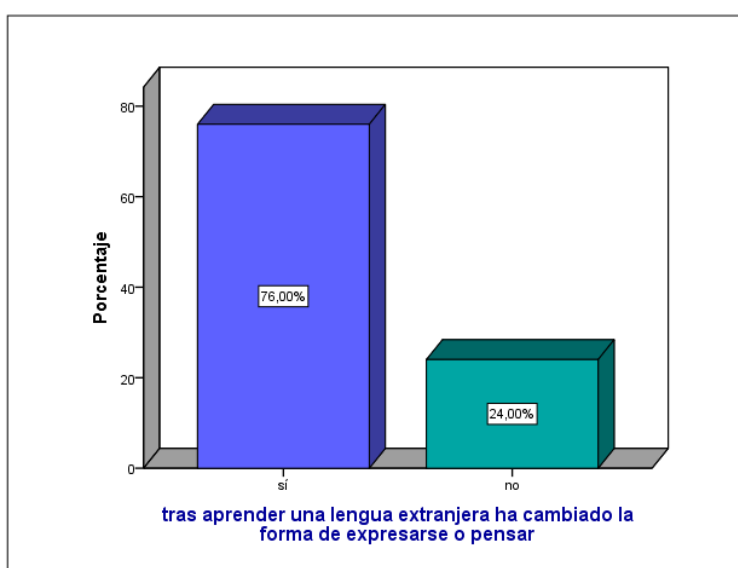
Figure 9

Again the 76% of them consider that the L2 has influenced the L1 (figure 10). They said that they have started to use and translate typical expressions of the L2 in their L1 merging ideas and concepts. Some others noticed that the constant contact with the L2 provoked a sort of contamination in their L1. Others have enriched their vocabulary and have introduced new worlds and concepts. In general most of them feel enriched after the contact with the L2.
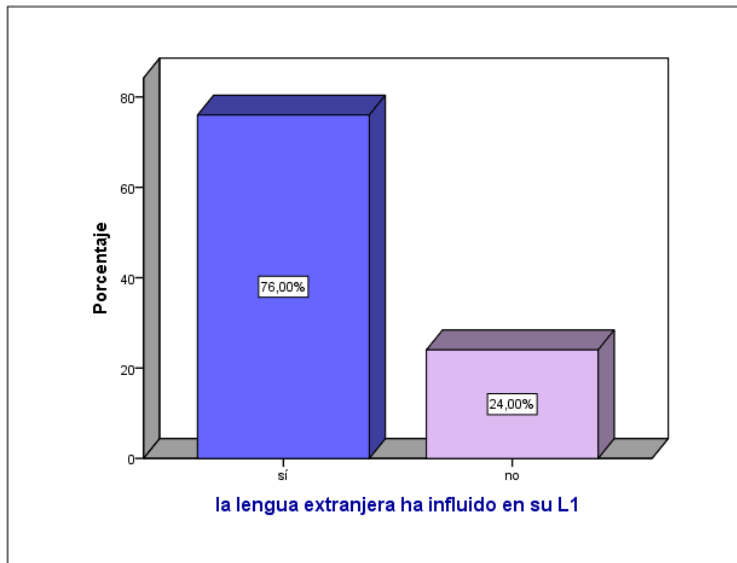
Figure 10

Another field of interest of this dissertation is the environmental strategy. For this reason in questions 17 and 18, was asked if the participants imitate or not the behavior and the pronunciation of native speakers. The 92% of them answered positively (figure 11). The participants seem to share a common point of view admitting that they try to imitate the accent and the behavior in order to be integrated easily with natives. Furthermore, most of them said that the models they follow are native they used to know and TV series.

Figure 11

Finally the last three questions of the questionnaire, 19, 20 and 21, are related with the self in contact with a new culture, personality and perception of everyday life. Regarding the change in perceiving the events of everyday life 95,83% answered positively, they have changed their way of perceive the events of everyday life (figure 12).
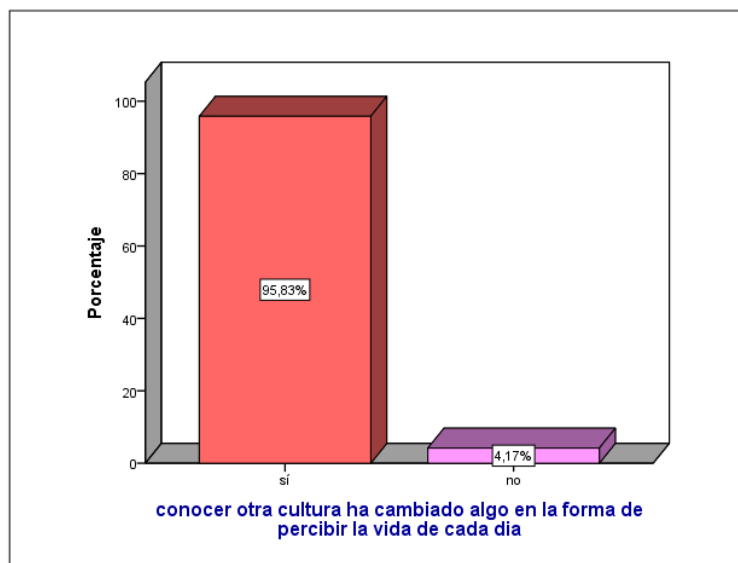
Figure 12

As consequence the 92% of them affirmed that they felt not to be the same after their experience abroad in contact with another culture (figure 13).

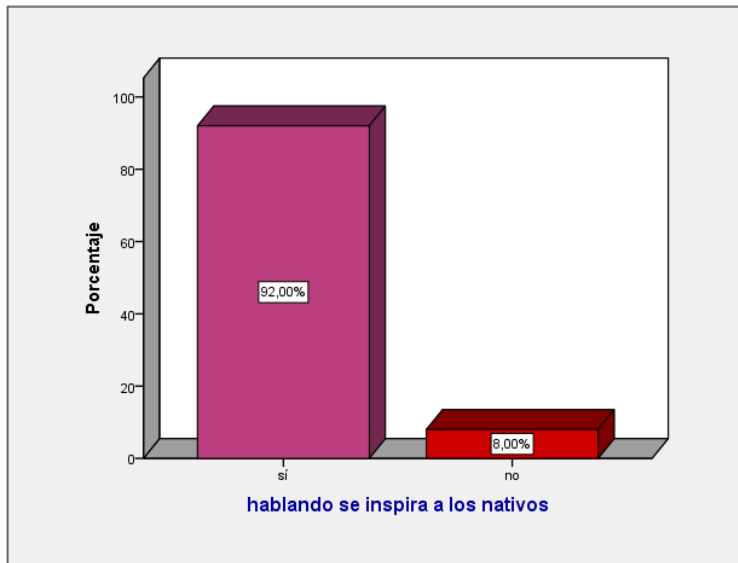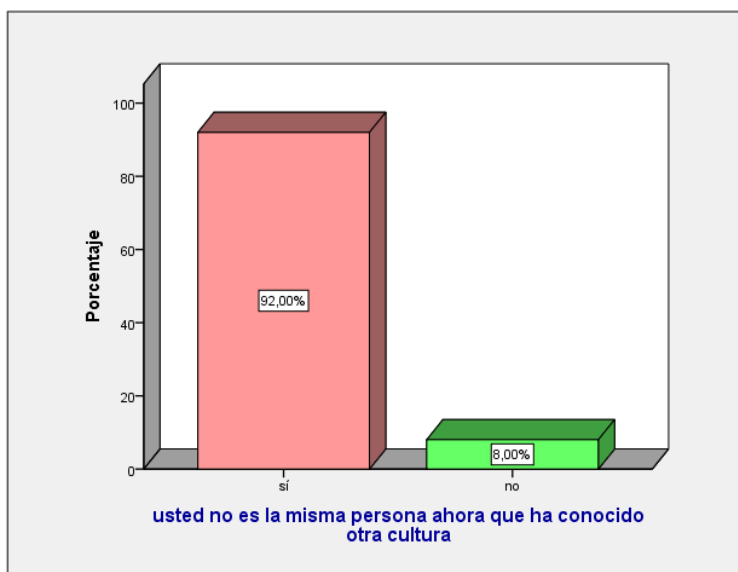Figure 13

The last answer represents the core of the entire questionnaire. It states that "I notice changes in personality, in my way of being and in the way I perceiving the reality while speaking a L2", they had three possible answers, true, false, partly true. The 36% answered true, the 4% false and the 60% partly true (figure 14). This last question is one of the most important and it is going to be analyzed better in the next chapter dedicated to the discussion of the results. The participants in general were aware of a change in the way they look at the other culture. Most of them did not admit directly a change in personality but they admitted that meeting other people belonging to different cultures had given them the possibility to change their point of view perceiving the external reality and had opened their field of knowledge. Just few of them admitted a change in personality saying that they are not the same persons after living abroad.
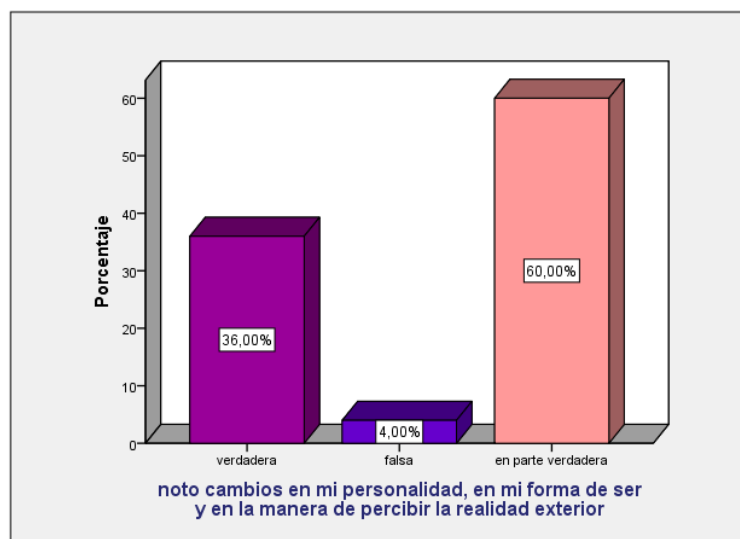
Figure 14

3.4 Discussion

3.4.1. Level of proficiency in a L2

The results of the current research evidence that the individuals exposed to a new culture, language and environment have changed something in their mentality and point of view. As we can observe through the data there is a relation between the level of proficiency in a L2 and the ability in relating with natives and having success in different cultural environments. During the oral interview, and in participants' answers, some of them recognized that the increasing of the level in a L2 helped them to feel more available engaging with others, in particular with the natives (question 7). On the contrary those who have a law level of proficiency in a L2 feel ashamed and as a consequence cannot communicate properly. The ability to communicate and to understand the L2 and to feel comfortable to express almost everything we want to say makes the L2 speaker closer to the native speaker. Knowing a language and achieving a good level of proficiency implies the ability to be creative and to communicate with maximum attention to communication and minimum attention to form (Stern 1991). It implies that the L2 speaker starts to perceive himself or herself as a bilingual on a pair with natives. Furthermore a high level of proficiency implies changing in organizing the lexicon during the learning process. In chapter 2.6 about language production Judit

Kormos (2011) affirmed that people with high level of proficiency in a second language are able to organize the syntactic order of the sentence directly without recurring to the L1 construction. Observing the results obtained it may appear that a good level of proficiency can be achieved at any age. This statement is supported by an important study conducted by a group of researchers (Perani 1998) which demonstrates that the level of proficiency in L2 in bilingual individuals is more important than the age of acquisition of the language. As one of the participants suggest the way in which everybody look at himself or herself is the key to solve the problem of anxiety and to be opened to communicate. Anxiety is described in psychology as a persistent state of worry (Heger 2011). Anxiety appears in learners and speakers with a low self-esteem of their L2 communicative skills. Anxiety affects not only the linguistic capacity of the speaker but also the possibility to communicate and to be integrated, chapter 2.6.

3.4.2. Relation between level of proficiency, intercultural communication and changes in personality

In one of the questionnaires one participant wrote that speaking fluently allow you to open the doors of intercultural communication. In the introduction of the *Plan Curricular Instituto Cervantes* (2006) in the section dedicated to knowledge and socio-cultural behaviour is declared that the learner has to be able to put into relation the linguistics ability and the cultural knowledge of a certain culture. As the *Plan Curricular* (2006) affirms, the socio-cultural behaviors are intended to be aspects related with the social conventions, for example the theme of punctuality, hospitality, non-verbal communication and sense of humor. All these aspects together with the ability to understand the different types of communicative situation, for example being able to choose the correct linguistic register and vocabulary depending on the situation, are fundamental in order to be integrated and accepted in the new community. In order to be integrated it is really important for the L2 speakers to achieve good level of intercultural competences, they must learn specific skills and knowledge (Hanger 2011).

In relation to culture it is really important to observe that almost all the participants, apart from one of them, answered that exist a relation between language and culture. In chapter 2.4 dedicated to communication, culture and society, are described important concepts that we have to bear in mind talking about communication and culture. As Hubert Knoblauch (2011) affirms through language it is possible to construct

communicative action, and communicative actions construct culture. Considering that the majority of the participants have not studied linguistics and philology it is really interesting to appreciate how this concept seems to be shared by almost everybody. The only participant who answers negatively to this question is an informatics. We want to underline that even if the answer to this question has been "no", in all the other questions the participant has given answer that suggest the contrary, it means that she is simply not aware of this idea, but she sustains it unconsciously. It is particularly relevant to remember that almost all the participants lived during a period of time abroad. This element is relevant considering that, aware or not, their point of view changed and also their vision of culture. Furthermore the fact that the majority of the participants answered positively to the question about culture and language remind us the concepts Embodiment and Experience (Johnson 1987; Lakoff 1987; Lakoff and Johnson 1999) described in chapter 2.2 and related with the Cognitive Linguistics. If we consider that language is conceived in a strong relation with the way we experience the world the relation between language and culture seems to be clearer. In fact the participants affirm that the relation exist because of their personal embodied experience in the world, in particular in a new socio-cultural context.

3.4.3. Cognitive Linguistics and changes in personality

Regarding Cognitive Linguistics and the two key consepts described in 2.2 it is interesting to observe that the answerers given to question 11, 12, 13, 14, 15 and 16 of the questionnaire reflect the idea that changing in experience the world, provokes changing in the way we organize language and the verbal thought. It seems that the embodiment in another socio-cultural context has consequences in the organization of verbal thought and in the way we perceive the reality. Furthermore observing questions 15 and 16 about the influence of the L2 in L1 a lot of the participants admit a change in their way of expressing after learning the L2. In this case what we can observe is how is affirmed by Judit Kormos (2011) that learning a new language it is a process which involves changing in cognition. The fact that it is possible to observe a contact between the L1 and L2 can explain the fact that the L2 mental lexicon, chapter 2.6, is integrated with the L1 mental lexicon. The 76% of the participants affirmed that is aware of a certain influence of the L2 in the L1. The reason they gave are different, part of them affirmed to notice influences in the L1 on a vocabulary point of view. They said that they have enriched their own vocabulary and that in many cases they try to translate

words from the L2 into their L1 because are considered to express better the meaning they want to transmit. In this case we can make reference to the theorists who talked about the contact between the two lexicons, such as Vivian Cook (1992, 2011). One of the participants in particular answered defining the type of influence on the L1 as negative. The participant affirmed that the influence of the L2 in the L1 has corrupted his native language introducing expressions that are effective in the L2 but do not exist or are considered unusual in the L1. Furthermore, the same participant made a relevant consideration about the changing in thought and way of expressing after learning the L2, he said that language builds thought, for this reason learning a L2 activates new ways of seeing reality. It is important to report this answer considering that the participant who gives this answer is a computer technician and demonstrates that some linguistics notions are innate or at least intuitive.

Coming back to the influences of the L2 in the L1 we can also notice that there are participants that were aware of changes in the syntax structure due to the constant use of a L2. In particular one of them affirmed that switching from the L2 to the mother tongue turns out to be difficult at the beginning of the speech act. It could be important to observe that the participant, lives at present in a foreign country and is a philologist for this reason has been able to describe properly this syntactic change. A part from these two relevant answers the others show an influence of the L2 in vocabulary and in lexicon. The few participants, 24%, who answer that are not influenced in their way of speaking are in part not aware, in fact many of them demonstrate exactly the contrary in other questions, and in part are people that during a long time have not travelled abroad, and at present use the L2 in their job and as a consequence they do not have great possibilities to use the language in all its fields.

To question number 11, "Do you notice changes in your way of being speaking a L2" the majority, 64%, answered positively. The answers given to this question and to the following, 12, "are there aspects of your personality that you appreciate more speaking a L2?" are quite interesting. One of the participants, a philology and professor, affirms that speaking Spanish, her L2, makes her much more positive. She affirmed that while in her L1, English, she tends to use a lot of "regret expressions", (e.g. I should have done…, I would have done… I could have done…) in Spanish she feels much more direct and cheerful. She also admitted that this feeling could be the result of an intense influence exercises by the native speakers on her. Another participant affirmed that he

has discovered aspects of himself that he appreciates more, for example he said that the way he organizes the sentences in the L2 is totally different. He explained that because of the impossibility of using idioms or set phrases he is obliged to construct the sentences in different ways, for this reason he notices that persons can have a different idea of him just because he organizes the structure of the sentence in a different way. Observing the answers we could affirm that in many cases the more expert speakers have modified and enlarged not only their vocabulary but also the grammatical and syntactic structures. As a consequence of these modifications also their inner and personality result changed and different. For this reason we might say that exist a relation between high proficiency and changing in personality due to changing in organizing the mental structure of the sentence.

3.4.4. Environmental Strategy and its influence on L2 speakers

The results regarding the field of environmental strategy, questions 17 and 18, show that almost all the participants try to imitate the way natives behave and speak. As the theory of observational learning, (Bandura and Walters 1963) chapter 2.5 explains, the behavior of the individual (the observer) tends to change after the exposition to another's behavior (the model). The participants' positive replies to this question could show that the theory is effective ad that it might be possible to observe a change in the inner self. Furthermore, this theory explained by Liebert and Spiegler (1998) it is directly connected with Cognitive Linguistics and the definition of Experience and Embodiment, chapter 2.2, that we have described before. The two theories go together because in both cases the focus is on the direct contact of the individual in the environment, and the effects that it has on his mind and body changing the way of speaking and the way of behaving. The answers show that the majority of the participants, 92%, imitate the pronunciation and the behavior. Analyzing the answer given it is possible to observe that most of them focused the attention on the imitation of the pronunciation; the models taken into consideration are persons, *living model*, and television, *symbolic models*. The reasons given are related with the idea of being integrated. From the answers seem to be possible to say that, following the theory of the observational learning, the participants during the acquisition of the L2 have been exposed to models and some of them decided to imitate the models (native speakers) in whole (pronunciation and behavior). On the other hand some others decided to imitate

the models only in part, and the psychological definition for this behavior is *indirect imitation*.

3.4.5. Changes in personality after exposure to another culture

The last three questions reveal the orientation of the participants in a straighter and clearer way. The results are sufficiently clear, the 95 % of the participants sustain that something has changed in the way they approach and perceive the everyday life and the 92% of them affirm not to be the same person after living and getting to know new cultures and languages. These results are relevant in order to achieve the objectives of the Master dissertation. Admitting a change in the way of seeing things and in the way of perceiving everyday life and culture means that consciously or unconsciously the participants have changed something in their personality. In this way gain importance the experience abroad and the level of proficiency. Without these two values would be impossible to establish a change and a modification in the inner self. It is really interesting to observe how the yes/no questions in many cases contradict the explanations given by the participants in the open questions. It means that those who are conscious of their changes are few, the great part of them in fact do not recognize consciously the changes and the real effect that speaking and learning a L2 provoke. The last crucial statement of the questionnaire "When I speak a L2 I notice changes in my personality, way of being and perceiving the exterior reality" has been considered true or in part true by the participants. Only one of them answered negatively. From those who are aware of changes there is one answer which is really interesting, the person who gave it is a professor of the University and lives abroad. He affirmed that the way each one perceive himself as able or not to communicate determinate the manifestation or not of conscious changes in personality. Furthermore others affirmed that the experience of living abroad changed them inevitably and in a long-lasting way, in other words, the change experienced is permanent in life. As mentioned before the majority of the answers received admit not a change in personality as is, but admit changes in the way of perceiving the culture and the external reality. The answers given by these unaware participants make us think about the words of Friedman and Liu (2009) about biculturalism. They affirm that biculturalism is the ability of understanding and using the norms, way of thinking and attitudes common between two cultural systems. Hager (2011) complete the definition of biculturalism with the idea of cultural intelligence, saying that cultural intelligence is the "person's capability for

successful adaptation to new cultural settings, that is, unfamiliar settings attributable to cultural context". One of them admitted that "the art of speaking a L2 consist of imitating as better as possible the natives of this L2. I think that there is not a complete change in personality; you simply adopt the role of the standard native speaker. The better you speak the most it is possible to appreciate a change, in my case I'm myself but with a variation in shyness". This statement given by one of the participants shows clearly that most of them are not aware of changes but admit them through their words. In this statement, for example, is contained the observational learning theory, as we have seen before imitation of models means change in personality and acceptation of the behavior proposed (chapter 2.5). Furthermore, he admitted that thanks to a high level of proficiency the change is more evident. As we have seen having a high level of proficiency in a L2 cause the expansion of the mental lexicon, allow to create new connections in the brain independent from the L1 (Kormos 2011), chapter 2.6. The same point of view is shared in a lot of questionnaires of participants who are in part agree with the statement of the last question but then show the presence of a change in their reasoning. Another participant affirmed that speaking a L2 open the field of knowledge during the learning as well as during the contact with the culture, but he thinks that personality is affected by the age. Once again we can apply Cognitive Linguistics theories and the theories about personality and, following the theoretical framework, all of them are in favor of changes in the inner. All the participants associate the learning of a L2 with the learning of new cultures and agree saying that this knowledge generates a new way of seeing reality. It may be possible that those who are not aware of changing in personality have different representation of themselves. The individual use to have an image of the self as a unique individual or as part of a collective group, in this way the inclination of an individual to see himself as independent or interdependent (Hager 2011) as consequences in more general processes. Even if we are not dealing with bilingual cases, the participants have a high level of proficiency which means that part of them, depending on the way he or she perceive him or herself, have a double cultural frame, and each frame is founded on a corresponding cultural knowledge and experience (Dixon 2007). For this reason we can conclude following the idea expressed by Michael Hager (2011) "language functions as to be considered as a conveyance for culture, allowing cultural differences to trickle into language and to influence cognitive styles and the self. Multicultural individuals possess multiple concepts of the self".

4. Conclusions

In conclusion, the results suggest that the changes in the way of perceiving reality could have consequences in the individuals such as changing their point of view and modifying their behavior. Results also suggest that there might be a positive relationship between the individuals' level of proficiency and their integration with natives, which could result in a greater personality change. Concerning this conclusion we could highlight that the participants seem to be aware of the correspondence existing between the high level of proficiency and the change that it is possible to appreciate. From the results we could also deduce that speaking a L2 may imply changes in the way of seeing another culture and society, but not always imply changes in the way we interact with others.

The results recollected seem to underline that within the participants and L2 speakers in general it is present and quite clear the link existing between culture and language. In general, there seem to be a strong relation between individuals' level of proficiency and the appearance of changes in the way they perceive a certain culture, mentally construct sentences and view the world, all of which may provoke a change in personality.

Finally, admitting changes in personality could be considered a strong affirmation to make. For this reason it might have been difficult for the speakers to admit it in the questionnaires. In this regard, it could be unusual to admit a change in personality provoked by the way of speaking a L2. On the contrary, it might be more natural and easier to admit a change in "the way we see things" after being in contact with another culture.

This interesting field of research need to be expanded and enlarged. For this reason could be a fascinating future research project to implement the number of the participants and to enlarge the field of research including all the levels of proficiency in a second language in order to investigate changes in personality and in cognition at

different levels of the learning process. Furthermore, it could be interesting to take into consideration this topic as a project of investigation for a future PhD, considering that these assumptions could be modifies and improve in the light of new evidence and practice or from a deeper research.

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Appendix 1

CUESTIONARIO PARA RECOLECCIÓN DE DATOS SOBRE UNA SEGUNDA LENGUA

Edad: Sexo: Femenino   Masculino

Ocupación: Lengua materna (si es bilingüe ponga ambos idiomas):

Nacionalidad:

1. ¿Usted habla una segunda lengua diferente de su idioma nativo?

    Sí   No

2. ¿Podría atribuir un nivel de conocimiento del segundo idioma que habla según el marco
    común europeo de referencia para las lenguas? (ej. B1, B2, C1…)
    _____

3. ¿Donde aprendió el segundo idioma?
    1. Contexto escolar (Escuela, Instituto, Universidad…)
    2. De forma natural de uno de mis padres (bilingüismo).
    3. Viviendo en un país extranjero.

4. ¿Ha estado de estancia o ha vivido durante un periodo en el país donde se habla el
    idioma que ha aprendido?

    Sí   No

5. Durante el aprendizaje de la otra lengua ¿ha notado algún cambio en la forma de
    percibir la cultura del país en el que se habla dicho idioma?
    1. No
    2. Sí
    3. En parte

6. ¿Cree que existe una relación entre cultura e idioma?

Sí   No

7. Cuando habla un idioma extranjero ¿nota cambios en su forma de relacionarse con la otra persona (nativo)?

Sí   No

8.   ¿Y con un no-nativo?

Sí   No

9. Si su respuesta ha sido sí ¿podría describir qué tipo de cambio nota? (por ejemplo se nota más **suelto/cohibido**, **abierto/cerrado**, **simpático/antipático**, **accesible/inaccesible**, **tímido/atrevido**, **distante/cercano, seguro/inseguro, extrovertido/introvertido, tímido/atrevido**…)

_____

_____

_____

_____

_____

_____

10.   Hablando el idioma extranjero ¿se siente más libre o de alguna forma diferente a cuando habla su idioma nativo?

1. Sí, mucho   2. Sí

3. No

11. ¿Usted nota cambios en su forma de ser al hablar la lengua extranjera?

Sí   No

12. ¿Se podría decir que hay aspectos de su personalidad que le gusten más al hablar la lengua extranjera? ¿Hay aspectos de si mismo que haya descubierto a la hora de hablar el segundo idioma?

_____

_____

_____

_____

_____

_____

13. Tras aprender una lengua extranjera ¿considera que ha habido algún cambio en su forma de expresarse o pensar?

       Sí   No

14. Si sí, ¿Cuáles?

_____

_____

_____

15. ¿Considera que la lengua extranjera ha influido de alguna manera en su idioma nativo?

       Sí   No

16. Si sí, ¿Cómo?

_____

_____

_____

17. A la hora de hablar un segundo idioma, ¿se inspira en la forma de actuar y pronunciar de los nativos de este idioma?

       Sí   No

18. si ha contestado positivamente ¿cuáles son las razones que le motivan? (especifique también si los modelos en los que se inspira son la televisión, actores, radio etc.… o sobre todo personas que conoce).

_____

_____

_____

19. Pensando en su propia experiencia, el hecho de haber conocido otra cultura ¿ha cambiado algo en su forma de percibir los acontecimientos cotidianos de la vida?

         Sí   No

20. ¿Se podría decir que Usted no es la misma persona ahora que ha vivido y conocido otro mundo/cultura?

         Sí   No

21. La afirmación "A la hora de hablar una segunda lengua noto cambios en mi personalidad, en mi forma de ser y en el modo de percibir la realidad exterior" le parece

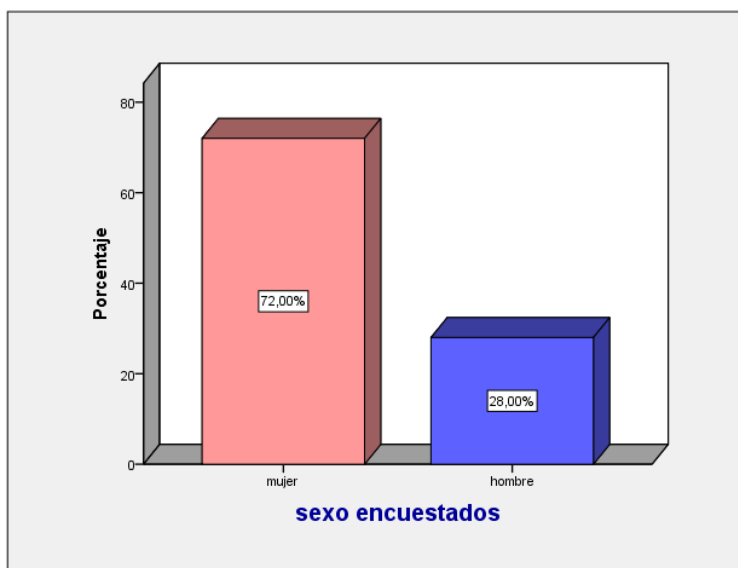1. Verdadera

2. Falsa

3. En parte verdadera

Justifique brevemente su respuesta

_____

_____

_____

Appendix 2

Figure 1

Average of the ages of the participants

Media	N	Desviación estándar
30,7600	25	8,11521

Figure 2

Average of the level of proficiency in a L2.

To Each value was attributed a number from 1 to 4.

 B1=1, B2=2, C1=3, C2=4.

Resumen de procesamiento de casos

	Casos					
	Incluido		Excluido		Total	
	N	Porcentaje	N	Porcentaje	N	Porcentaje
nivel secundo idioma encuestados	24	96,0%	1	4,0%	25	100,0%

nivel secundo idioma encuestados

Media	N	Desviación estándar
2,8750	24	,85019

Figure 3