2.1 Introduction

Culture has long been a debated issue in several different disciplines, such as literature, art, archaeology, philosophy, anthropology, semiotics, and more recently linguistics, translation studies, and marketing. This is in itself proof of and reason for the complexity of this phenomenon which is subject to continuous development and as such lends itself to endless argumentation.

Despite a different perspective on culture taken by each scientific discipline, and the peculiarities of individual theories, some common ideas seem to be shared by the scientific community at large. Most of those elements are summarised in the following definition of culture by Kroeber and Kluckhohn (1952, p. 181):

"Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional (i.e. historically developed and selected) ideas and especially their attached values. Culture systems may, on the one hand, be considered as products of action, on the other hand, as conditioning elements of future action."

Indeed, a first important point shared by all cultural perspectives is seeing culture as a social event, based on learning and transmission of information. This has been recognised by several scholars, including, for example, scientist Cavalli-Sforza (1996), and anthropologists Geertz (1979) and Hall (1989). Information can be transmitted diachronically or synchronically. While several anthropologists such as Geertz, Kroeber and Kluckhohn, focus almost exclusively on the diachronic development of culture, other researchers recognize the existence of synchronic forces that produce cultural variation and development; among the latter are Cavalli-Sforza (1996), but also Lotman and Fleischer whose theories will be discussed later on in this chapter. Furthermore, information - and consequently culture - can be acquired consciously and/or unconsciously (Cavalli-Sforza, 1996; Hall, 1982). A frequently quoted theory in this respect is that by Hall (1982), who distinguishes between three levels of culture, which he calls 'technical, 'formal, and 'informal', depending on the level of awareness at which information is transmitted. The technical level of culture is characterised by the objective, denotative, monoreferential view of the world which is at the basis of scientific communication. This level of culture is explicit and

formally taught. The formal level of culture includes traditions, customs, rules and procedures, i.e. well-established, conventional aspects of culture which we tend not to notice in everyday life, until they are flouted. Conventional, formal aspects of culture can and are indeed taught and learnt. The informal level of culture, instead, can neither be taught nor learned; it is passed on and acquired unconsciously, or 'out-ofawareness'. This is the level of values, value orientations, beliefs, and judgments. It is at this informal level where people normally react in everyday life and communication. These three levels are metaphorically compared to an iceberg. The technical level of culture corresponds to the tip of the iceberg, which is the only constantly visible part, but also the smallest section of the iceberg. Immediately below that, there is an area, corresponding to the formal level of culture, which may or may not be visible depending on situational or contextual factors; therefore, this area is sometimes above and sometime below the water line, or the limit of consciousness. Finally, there is the biggest part of the iceberg, which is constantly hidden in water and not visible to the eye; this part corresponds to the informal level of culture. This is the level that supports and sustains the whole iceberg; no other part could exist without it. And indeed, values, value orientations and beliefs determine traditions, customs, rules and procedures, which on their turn become explicit in the concrete objects and facts of everyday life (such as music, art, food and drink, dress, architecture, institutions, visible behaviour, and, last but by no means least, language).

Two other important aspects of culture that are largely shared by the scientific community are the semiotic nature of cultural communication – which can boast a long history which reached its peak with the Moscow-Tartu school, as we shall see later on in this chapter – and the idea that culture is the key to interpreting all human action and thought (see for example Hall, 1989; Geertz, 1998; and Lotman, 1980a, 1994).²

Finally an aspect of culture that is of paramount relevance to the current work is its connection with language. The existence of a strong and direct link was hypothesised by Sapir (1929; 1949) and Whorf (1956), who believed that the world influences language, language influences culture and thought, and these influence the way we see the world. This sort of circular mechanism has been interpreted by followers of Sapir and Whorf in two slightly different ways that go under the name of 'strong version' and 'weak version' of the Sapir-Whorf hypothesis. According to the strong version, language predetermines human thought; our mental processes and consequently our ideas about the world are constrained by and limited to the possibilities offered by the language we speak. In the weak version, on the other hand, thoughts are influenced by language, but not determined by it. Despite the fact that some of the examples that Sapir and Whorf brought as evidence of their hypothesis

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¹ The term 'value orientations' was first used by Kluckhohn (Kluckhohn & Strodtbeck, 1961).

² There might be strong differences, however, in the way this 'key' is conceived. Hall (1989), for example, defines culture as the medium we live in, the models or templates we use to interpret the world and to act within it. This contrasts strongly with Geertz's (1998) argument that culture should be interpreted as a series of control mechanisms, including projects, prescriptions, rules, and instructions, aimed at driving human behaviour.

have been disconfirmed by recent research, and that the Sapir-Whorf hypothesis has been challenged, their theory is still quoted by researchers in cultural studies.³

However, even though the Sapir-Whorf hypothesis (either in its strong or weak version) is not universally shared, yet, the idea of a direct link between language and culture is widely accepted. Cavalli-Sforza (1996, p. 247), for example, considers language as one aspect of culture, and linguistic evolution as an important element in cultural evolution. Halliday defines culture as a social reality in which meaning is determined by people, with their statuses, roles, and an shared values and knowledge (i.e. the context of situation); language is one of the semiotic systems composing culture and "actively symbolizes the social system, representing metaphorically in its patterns of variation the variation that characterizes human cultures" (Halliday, 1978, p. 3).⁴ Fairclough (2003) believes that language, intended as discourse, moulds culture and society. In his "Manifesto for critical discourse analysis" (*ibid.*, pp. 202-211), he writes:

"We can see social life as interconnected networks of social practices of diverse sorts (economic, political, cultural, family etc.). [...] Every practice is an articulation of diverse social elements within a relatively stable configuration, always including discourse. Let us say that every practice includes the following elements: activities; subjects, and their social relations; instruments; objects; time and place; forms of consciousness; values; discourse. These elements are dialectically related [...]" (Fairclough, 2003, p. 205).

Finally, Hall (1982) sees language as a result of culture and an area where culture can be seen and analysed. The examples above are just a few of the names hypothesizing close relationship of language and culture and show how this belief is spread across research fields as different from each other as genetics, functional linguistics and discourse analysis, and anthropology.

A theory which merges all the above mentioned aspects in a single – though rather complex – organic framework has been developed by Fleischer (1998). His theory lends itself to a quantitative analysis of the semantic features of language and for this reason will form the main reference framework for the current study. His theory was markedly inspired by Lotman's studies as well as by general systems'

⁵ Considering the study of social discourse as the aim of cultural analysis is not only part of Fairclough's (and Critical Discourse Analysis's) perspective, but also of several other researchers in cultural studies, including for example Geertz (1998), Fliescher (see Section 2.3.1), and Halliday (1978).

³ See, for example, Wierzbicka (1991). In line with Sapir (1929) and the so-called Sapir-Whorf hypothesis, she assumes that, within each given culture, language both shapes and reflects reality, and the key to the understanding of this link lies in semantics. Therefore, 'cultural key words' – as she calls them – mirror the values and experience of the people in the given culture and are a major tool of culture perpetration; their meanings, however, are culture-specific and consequently impossible to understand for outsiders.

⁴ Emphasis in the original.

To be precise, Fairclough's attention is not on culture as such, but rather on society and ideology. Ideology, which can be defined as "a set of values and ideas advocated by the social dominant groups that guide actions and regulate the relationship of power and are expressed in conventional discourse" (Wu Rongquan, 2001, p. 617), is considered by Geertz (1998) as a cultural system. Indeed, values and ideas are at the core of both ideology and culture. What differs is the perspective that researchers adopt in commenting them.

⁷ In the original, these elements are listed within a text box.

theories, both of which will be introduced before Fleischer's theory, in the hope that this might help disentangle Fleischer's complexity.

Finally, the current chapter will provide a selected overview of scientific papers with semantic approaches to the study of culture, in a search for quantitative methods to apply to my data.

2.2 Lotman and the semiotic perspective

In the 1960s, in Russia, a group of scholars guided by Yury Lotman – the so-called Moscow-Tartu Semiotic School – started looking at culture from a semiotic perspective, inspired by the structuralist linguistics of de Saussure and Bauden as developed by the Prague school, Jakobson and Trubetzkoj in particular (Lotman, 1994). Their theories, applied to the study of a vast range of cultural and artistic phenomena, have greatly inspired modern semiotics and European scholars in several disciplines. In this section, a few introductory words will be spent on Lotman's view of semiotics and symbols, before we see how Lotman conceptualises culture, language and the world and how these relate to each other.

As Lotman (1997) himself declares, semiotics is the study of symbols. An intrinsic characteristic of symbols is their having unitary meaning and precise delimitations, which makes them easily distinguishable from the surrounding context. In this respect they are similar to texts. Like texts – which are situated in time and provide a synchronic view of a tension between present and future (Lotman, 1993) – symbols have a diachronic dimension and provide the basis for cultural memory. Thus, they transport cultural information from one layer of culture to another one. In the production-reception process, what is chosen by an author because of its symbolic value is interpreted by the receiver through cultural reminiscence. It derives that semiotics could also be seen as a science that studies the nature and transmission of information and, consequently, culture, from a theoretical and historical perspective (Lotman, 1994).

Semiotic space appears as an intersection between several texts at different levels. Text is not reality, but it is the material we need to reconstruct reality. When reality is coded in texts, some elements are favoured and selected for memorisation, while others are discarded and will be treated as non-existent (Lotman & Uspenskij, 1975). Beyond semiotic space there is 'reality', which includes several partially interrelated languages. These two 'layers', taken together, represent what Lotman calls 'the semiotics of culture' (Lotman, 1993).

As we will see in the following paragraphs, Lotman sees culture as a wide semiotic system, having structural rules and acting on a non-cultural background (Lotman & Uspenskij, 1975). Within this system, several semiotic systems coexist, each of them being a different realisation of culture. Therefore, the study of culture should be framed within a general theoretical perspective that studies the mechanics of semiotic systems in general; studying culture ('the semiotics of culture') means studying functional relations between individual semiotic systems. Lotman's ideas will eventually lead him to the conceptualisation of what he calls 'the semiosphere' (Lotman, 1985a, 1985b, 1985c, 1985d), a whole semiotic space that motivates and substantiates individual semiotic acts and their reciprocal interactions. Figure 2_1 is a

personal attempt to provide a graphical representation of the core elements of Lotman's theory, in its synchronic dimension.

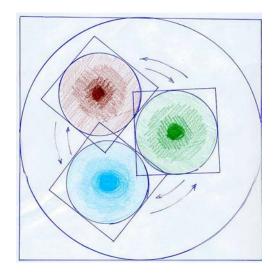


Figure 2_1. Lotman's semiosphere

Squares represent language, while circles stand for culture. The outer square and circle encompassing smaller ones represent natural language and culture, respectively. Smaller circles are the different semiotic systems, each coinciding with a corresponding language.

Culture (the main circle in Figure 2_1) is a complex system, synchronically composed of several semiotic (sub)systems (the smaller circles), such as the arts, literature, science and technology, but also any other type of human activity. Each of these subsystems is considered and analysed as a language of its own (the smaller squares in Figure 2_1). Therefore, culture as a system is expressed through language, or better through several different languages (Lotman, 1993). Each type of language produces (or creates) a different image of the world (Lotman, 1994).

Natural language (the main square in Figure 2_1) is the primary modelling system, while semiotic systems based on natural language, such as myths, folklore, religion, and art, are secondary modelling systems (Lotman, 1993). Though this distinction is necessary in order to highlight the specific features of each of these systems, in real life natural language and culture are closely intertwined (Lotman & Uspenskij, 1975): all languages exist and develop within specific cultures, and all cultures depend on the structure of natural languages (see Figure 2_1). Taking inspiration from the structure of language, the primary scope of culture is to provide a structural organisation of the world.

Another important function of culture is to preserve, transmit and create information (Lotman, 1980d, 1993). Preservation and transmission are possible because culture has a diachronic perspective: culture is the overall memory of humanity, where by memory Lotman means the ability that some systems have to pile up and store information (Lotman, 1980b, 1980c). This entails that culture is primarily a social type of event (Lotman & Uspenskij, 1975; Lotman, 1980d). According to circumstances, the researcher can take into consideration culture in general, the culture of a specific geographical area (e.g. the British culture) or of a specific period

(e.g. the Renaissance), or the culture of a particular social group. As such, culture is not a repository of ready-made ideas and texts, but a living mechanism of collective conscience and the intellectual shape of life as it is developing on the Earth. It is a mechanism that creates texts, and texts are the realisation of the potential of culture (Lotman, 1980a). Indeed, humankind is immersed in semiotic space and the human intellect can only act within culture (Lotman, 1980a, 1994, p. 105). Therefore, culture constantly evolves (Lotman, 1980b) and its evolution takes place through alternating phases of gradual growth and explosion (Lotman, 1993).

Creation of new information is possible because of the co-existence of several languages (Lotman, 1980d), as it is linked to communication and transmission of information (see circular arrows in Figure 2_1). There could be no culture without language and communication. Lotman (1993) makes a clear distinction between 'language' and 'code'. The former is natural and includes its historical representation; the latter is artificial, and is created through agreements. If addresser and addressee used the same code, there would be perfect understanding between them and very limited transfer of information. In real life, however, addresser and addressee use separate languages, because each individual represents a separate system (smaller circles in Figure 2_1) and is extrasystemic with respect to any other individual (*ibid*.).

Human memory includes both collective and individual elements (Lotman, 1980c, 1994): while collective memory represents a common core that facilitates mutual understanding, individual memory hampers understanding, but represents the motor of communication (Lotman, 1994). Therefore, the languages used by two individuals have a limited area of overlap. Dialogue between people could be graphically represented as two partially overlapping areas, and communication derives from constant tension between increasing and reducing the area of overlap (see Figure 2_1).

It is thus clear that, for Lotman, culture is made of languages. Each language is a semiotic system of its own. The world is an extrasystemic element which enters language in the form of content (Lotman, 1993). Language creates a world of its own. A major problem, then, is the adequacy or correspondence between the world created through language and the physical existing (extrasystemic) one. More than one language is needed to reflect upon extrasystemic reality, as different languages provide different images of the world. Therefore, the existence of several different languages marks the natural beginning of culture, as well as any other systems, but through time the aspiration towards one universal language leads to the creations of what Lotman (*ibid.*) calls 'second reality'. Second reality is created by culture.

Culture is, therefore, a dynamic system. A major source of dynamism is continuous attraction of extrasystemic elements towards the system, and *viceversa*. At any given point in time, systemic elements are considered existing and correct, while extrasystemic elements are tantamount to being incorrect and nonexistent. However, what seems extrasystemic with respect to one system may be systemic in another. Describing what is systemic will also indicate what is extrasystemic (Lotman, 1980b). Furthermore, every system is characterised by core and periphery (*ibid*.). The system

impossible to draw a dividing line between the methods used to represent content and the content itself.

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⁸ This goes against any traditional literary/linguistic oppositions between form and content. For Lotman (1993), opposition is between language, which includes content and form, and the world. A similar standing is taken also by Geertz (1996, p. 25), who declares that, in cultural analysis, it would be

is stronger towards the core and becomes weaker as we depart from the core (see the use of colour in Figure 2_1). Movements from periphery to core and *viceversa* cannot be avoided and are characteristic of diachronic development. Complex systems, like culture, are also characterised by tension between understanding and non-understanding, and in any given moment we are more towards one or the other position (*ibid.*). Finally, the several systems existing within culture develop at different paces. However, quicker ones may speed up the development of slower systems. The evolution or development of these systems takes place through alternating explosive and gradual phases. Explosive phases lead to innovation, while phases of gradual growth guarantee continuity to the system (*ibid.*; Lotman, 1993).

It is interesting to notice here – thought this is not surprising in structuralist thinking – how Lotman's thought is constantly characterised by the juxtaposition and co-presence of opposites. Culture emerges only when compared to non-culture, and systemic elements become evident because extra-systemic elements exist. Evolution takes place because of constant tension between what is systemic and what is extrasystemic, between understanding and non-understanding, between maintenance of a given level and amount of information and the creation of new information, between symmetry and asymmetry (Lotman, 1985a). Communication derives from tension between increasing and reducing the area of overlap between different languages (Lotman, 1994). Development takes place through alternating phases of gradual growth and explosion. Gradual growth is aimed at maintaining what is given (homeostasis), while explosion disrupts what is given and establishes a new reality (development) (Lotman, 1985c, 1993).

To sum up, Lotman's semiotic theory postulates the existence of an inextricable link between culture, humankind and the world, where culture is seen as a living mechanism of collective conscience, made of several semiotic systems and expressed through language. Language, on its turn, merges culture and reality, thus creating a world of its own in which reality is filtered through cultural perception. Communication derives from constant tension between increasing and reducing the area of overlap of addresser's and addressee's languages.

Lotman's ideas were exploited and reviewed by several researchers and in particular they clearly inspired some systemic approaches to the study of culture. One of these is Fleischer's systems theory, which is summarised in the following section.

2.3 Systems theory

Systems theory, also called systems analysis (Lowe & Barth, 1980, p. 568), is a transdisciplinary field that studies systems and their properties. In systems thinking all types of phenomena are seen in terms of 'systems', where by *system* they mean a

"collection of interrelated elements ('structured set') where a change in one aspect would affect some or all aspects of the system. [...] System analysis is the holistic approach to the ultimate understanding, design, and optimization of systems" (Gordesch, 1998, p. 39).

Systems include several parts or subsystems; they are not the sum of their constituent parts, but what arises from the *interaction* of these. Indeed, one of the most important features of any systems theory is emphasis on relationships between objects,

patterns of distribution, and the overall context in which these objects are produced (the *environment*). Hence, a system is more than the sum of its parts, and system analysis entails identifying the constituent parts of the system, and "analyzing their interrelations and *functions* as part of the whole" (Seppänen, 1998, p. 183).

Two major types of systems can be hypothesised: open, and closed systems. Open systems are characterised by continuous interaction with the environment, i.e. the context within which the system exists (extrasystemic elements) and tend towards continuous growth and evolution. Consequently, open systems show constant tension between homeostasis (maintenance of the status quo) and development. On the other hand, the term closed system refers to a state of isolation from the environment. No system can ever be completely closed, and closure affects all systems in varying degrees.

Finally, a fundamental part of systems thinking is the use of formal mathematical techniques to model systems behaviour (Lowe & Barth, 1980, p. 570).

It is easy to see how Lotman's theories on culture could be integrated into systems thinking. This was done by Fleischer (1998) who reframed and slightly expanded Lotman's semiosphere. Fleischer's however is not the only existing systemic theory of culture. Here we shall consider two systemic approaches to culture: ¹¹ Fleischer's systems theory, which is a rather comprehensive systemic interpretation of culture in which language, discourse and semantics are foregrounded; and Nobis's theory of behavioural patterns which – though indirectly – provides an interesting view on the level of development of a culture with respect to selected symbols.

2.3.1 Michael Fleisher: radical constructivism and semiotics

Fleischer's theory, variously presented and discussed in his writings in German, is summarised in his essay "Concept of the 'Second Reality' from the perspective of an empirical systems theory on the basis of radical constructivism" (Fleischer, 1998). As we shall see, Fleischer, taking inspiration from Lotman's semiotic ideas, ¹² reinterprets the cultural paradigm with a radical constructivist perspective.

The following paragraphs provide a synthesis of his theoretical ideas. Systems theories such as his one can only be clearly understood considering all of their constituent parts; for this reason, all main elements of Fleischer's theory will be taken into consideration, regardless of their level of relevance to the current research.

Fleischer's general framework of reference is *radical constructivism*, ¹³ a theoretical approach to the concepts of world, understanding, and knowledge

⁹ Emphasis in the original.

¹⁰ Other classifications are also possible. See Miller (1978, in Seppänen, 1998, p. 199).

¹¹ To a linguist, the adjective 'systemic' would most probably bring Halliday's systemic functional theory to mind (described, for example, in Halliday 1978, 1985; Halliday & Hasan, 1989). Indeed, Seppänen (1998), in his historical review of systems thinking, mentions Halliday among systems thinkers in linguistics. Though Halliday mentions culture as the outer circle within which the context of situation and language operate, his interest seems to be primarily on the interaction between the latter two elements, and Halliday's systemic functional linguistics developed into systemic functional grammar, rather than into a theory of culture.

¹² This is evident in the several similarities between their two systems, as well as in the direct attention Fleischer dedicated to Lotman in his own publications (see for example Fleischer, 1989, 2001).

¹³ Constructivism grew out of the interpretation of some basic notions by French psychologist Jean Piaget regarding cognitive development. According to Piaget, learning is based on the assimilation of

according to which what we see, perceive or understand is a construction of our own brain, an interpretation based on the possibilities, limits, and logics (schemata) of our mind, which in turn depend on experience (von Glasersfeld, 1984).¹⁴

Within this radical constructivist framework, Fleisher distinguishes between the First Reality, Culture, and the Second Reality. The First Reality is "the physical, objectively given reality and its laws" (Fleischer, 1998, p. 423), such as the world, society, etc.. *Culture* is "a sign-generating subsystem of the social system" (*ibid.*, p. 433) and as such is part of the First Reality. It is described as an open, self-organising *semiotic* system containing "all those phenomena and aspects based upon semiotic processes" (*ibid.*, p. 433). Its configuration is relational and functional. Like all open systems, it is dynamic, increases in order with the passing of time, is partially open and partially closed in order to maintain the steady state, and depends on the environment, i.e. the social system. The system as a whole organizes itself on the basis of chance and necessity, yet its constituent parts are autonomous in their evolution.

The Second Reality is defined by Fleischer (*ibid.*, p. 430) as "a given and functioning shaping of a system, i.e. a concrete realisation of general laws of the system". In other words, it is a specific cultural realisation organised as a functional, semiotic, relational system. Noticeably, however, the Second Reality is not a concrete entity but rather an image of the First Reality it relates to. Fleischer distinguishes between two types of images: world-images, which represent the view of those belonging to the culture in question (an 'emic' view), and appearance-images, which are the way world-images are received and understood by an external observer (an 'etic' view). The Second Reality is "based on utterances, fixed and manifest opinions and world-images." (*ibid.*, p. 429). So, for example, if we considered the First Reality of Great Britain, we could say that it includes culture (the British culture) as a system of semiotic elements. The corresponding Second Reality would then be the way culture is realised through utterances, opinions and world images; in other words, the way the world in general, and the British culture in particular, are seen and described by British inhabitants.

The Second Reality develops at two levels: a general (linguistic) semantic level, and a specific (cultural) semantic level. The "linguistic [semantic formings] provide

new experience and new pieces of information into self-made schemata based on previous experience. If new pieces of information do not fit our schemata, accommodation takes place, i.e. the schemata are changed so as to adequately include the new pieces of information (Piaget, 1937). Piaget's widely quoted statement by constructivists is that intelligence organizes the world by organising itself (Piaget, 1937, p. 311). Consequently, "constructivism proposes that learner conceptions of knowledge are derived from a meaning-making search in which learners engage in a process of constructing individual interpretations of their experiences. The constructions that result from the examination, questioning and analysis of tasks and experiences yields knowledge whose correspondence to external reality may have little verisimilitude. However, to the degree that most of our learning is filtered through a process of social negotiation or distributed cognition [...], generally shared meanings, tend to be constructed." (Applefield, Huber, & Moallem, 2001, p. 2). These concepts inspired the American psychologist Ernst von Glasersfeld (1984), who applied and developed them further, creating what he called 'radical constructivism', focussing on the idea that experience as well as all objects of experience are the result of our ways and means of experiencing.

¹⁴ This view is clearly in opposition to the strong version of the Sapir-Whorf hypothesis (see Section 2.1), according to which our view of the world depends on the possibilities and limits of language, which shapes the logics (schemata) of our mind. It seems compatible, however, with the weak version (see Section 2.1), in so far as language is part of our experience and as such may influence, though not determine, our view of the world.

the basis for the cultural ones, and are under their influence" (*ibid.*, p. 431). In other words, the 'laws' of language are the bricks and mortar for the creation of culture-specific semantic realisations aimed at differentiating one social (sub-)system from another and creating interconnections among its members.

Culture manifests itself at the level of the discourse, which is considered by Fleischer a systemic semiotic repertoire that mediates between a culture and its symbols, the place where symbols are applied and become evident. Within culture, several different subsystems exist at different levels; each of them works as feedback system for the other ones. In Western cultures, these subsystems are typically cultural groups, subcultures, single cultures, and intercultures. Each of them differentiates itself from the other elements at the same level of stratification and from the higher element and manifests itself in the Second Reality through a different type of discourse. The following paragraphs discuss the different levels of stratification of culture and of discourse. Figures 2_2 and 2_3 provide graphical representations of culture, from a synchronic and diachronic perspective, respectively.

Cultural groups (the smallest circles in Figures 2_2 and 2_3) are the smallest systems, the elements at the bottom of the stratification hierarchy. A cultural group could be, for example, a circle of friends, a study group, a gang, 15 but also a family, or the employees of a business company. Several cultural groups make up or belong to a subculture. Subcultural groups could be, for example, scientists vs. politicians vs. economists vs. lawyers, or different age-groups, or males vs. females. The subculture is the level where discourse takes place. All 'subcultures of a geopolitical area as well as neighbouring subcultures which are considered to be subculturally or discoursively close' (ibid., p. 437) make up a single culture (for example, the British or the Italian culture). At this cultural level, interdiscourse takes place. Finally, the interculture is composed of neighbouring or similar single cultures. Examples of interculture could be Mediterranean countries, German-speaking countries, or the European Union. At this level, intercultural discourse takes place. Discourse, interdiscourse and intercultural discourse are the linguistic counterpart of each cultural level.

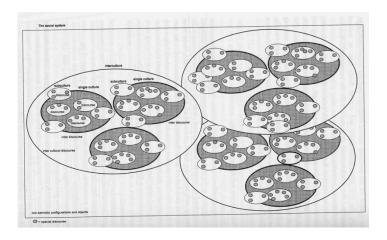


Figure 2_2. Synchronic section of cultural and discourse stratification (from Fleischer, 1998, p. 444)

¹⁵ These are the only three examples provided by Fleisher in his 1998 paper.

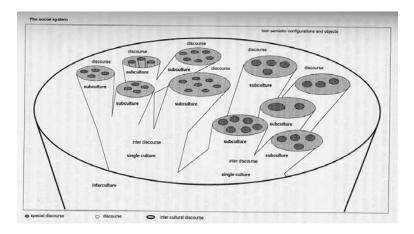


Figure 2_3. Diachronic section of cultural and discourse stratification (from Fleischer, 1998, p. 445)

In Fleischer's radical constructivist view, discourse is functional to creating, maintaining and developing cultural identity, distinguishing each (sub)culture from the other ones at the same level of classification, and creating the basis for higher level discourse. Discourse, being a semiotic element, is made of symbols. Two types of symbols are particularly relevant: collective symbols and discoursive symbols. Collective symbols are the most important elements that make up interdiscourse. A symbol can be considered a collective symbol when it has reached a high level of conventionalisation, and agreement exists about its meaning among the members of that single culture. As Wilson & Mudraya (2006, p. 3) nicely explain, "the degree to which a symbol is anchored [...] within interdiscourse will determine the conventionalisation of its semantic profile and the extent to which it is open to manipulation". Collective symbols show a very distinctive meaning and a very distinctive rating (positive or negative) that is valid for a whole single culture. Part of the meaning of a collective symbol is culturally dependent, and differs among cultures, because it represents the state of the system. In order to identify collective symbols one should take into consideration frequency and spreading, but also existence of functions and effect of the symbols under investigation (Fleischer, 1998, p. 449). Discoursive symbols are the counterpart of collective symbols at subcultural level. They are connected to a particular subculture, do not occur in other subcultures and, if they do, they show a different semantic content.

Both collective and discoursive symbols are made up of three elements, which Fleischer calls *core*, *current field*, and *connotational field*. The core is a stable element. Collective symbols with long standing have a strong, dominant core. The current field is a rather generalised, but not yet stabilised element. Both core and current field are expressions of cultural meanings. Finally, the connotational field is an expression of individual meaning and as such has no stabilisation at all; it is connected to the particular natural language and to lexical meaning.¹⁶

¹⁶ Fleischer's terminology might be confusing here. Indeed, he uses the term 'connotational' to refer to *individual*, *non standardised* meaning components, connected to the particular natural language and lexical meaning, but *not connected to cultural meaning*. This word, however, reminds of 'connotation' and 'connotative meaning', terms used in linguistics, but also in semiotics, to refer to additional meanings evoked by word associations of other words or concepts (Wales, 2001). These additional,

These elements allow interpreting the level of rooting of a word in the given culture: if the connotational field (individual meanings) predominates in the understanding of a word, then that word is not a collective or discoursive symbol. When current field predominates, the given word is about to become a collective or discoursive symbol. Finally, when core meanings predominate, we are dealing with a very strong collective type of symbol. Concrete examples of how to identify core, current and connotational fields are provided in Section 2.4.1.3.

Collective symbols have several functions and are used to a variety of aims, including the following: ¹⁷ to ensure or change the discursive status of an utterance; to ensure a system's coherence; to manipulate or polarize opinions or viewpoints; to cancel or prevent arguments; to achieve positive feedback and cultural success; to pose responsibility of what is said on the interdiscourse or on the recipient; to avoid manipulation. A text that is rich in collective symbols is not greatly open to interpretation and, if symbols are used homogeneously, will receive generalised positive feedback.

Another basic element in Fleischer's theory are the interconnected concepts of normativism and normality. Normativism refers to the fact that any particular culture considers some elements or phenomena 'normal', that is to say acceptable, correct and/or real. Normativism includes two states: the desired state (what is normal), which is frequently non specified; and the refused state (what is not normal).

The types of phenomena that fall in the category of normality are

"unreflected, but generally accepted areas of semantic formings and elements of cultural phenomena (since they are accepted they do not need to be reflected, i.e. efficacy advantage). They form a consens, they are beyond question and are part of the collective consciousness. They (implicitly or explicitly) form the scale for valuation, standardization, putting up a hierarchical order, and for fixing dependencies and elements" (ibid., p. 443).

Normality is therefore the reference point when we want to compare different subcultures or single cultures. Normativistic analysis, which is fundamentally a quantitative type of analysis based on frequency and spreading of specific individual phenomena, helps us understand what is considered normal in a given (sub)culture and allows us to make comparisons between (sub)cultures. Fleischer calls 'normatives' the collective symbols in the group of normality. These have greater force of affiliation and of delimitation than any other type of collective symbol.

It seems appropriate to say that Fleischer expands and systematizes Lotman's core ideas, with particular reference to the 'Second Reality', i.e. a concrete realisation of general laws of culture, as it appears through language; a semiotic, relational system "based on utterances, fixed and manifest opinions and world-images" (*ibid.*, p. 430). The culture layer of the Second Reality is composed of several interacting and at times (partially or totally) overlapping social systems and sub-systems – interculture, single cultures, subcultures, and cultural groups - each expressing itself in a different

frequently unexpressed evaluative meanings, are shared by the speakers of a language. Indeed, connotative meaning, compared by some corpus linguists (Hunston, 2002) to semantic prosody, could be frequently considered as culture-bound (see for example Taylor, 1998).

¹⁷ As Fleischer points out (1998, p. 447) "collective symbols are not the only linguistic or semiotic objects having these functions".

discourse system. At the language level, some of the most relevant elements to identify the subtending cultural layer are collective symbols – symbols with a wide core element, shared by all or most of the members of a cultural system and related in particular to the interculture –, and normatives – collective symbols in the range of normality according to the scales of normalisation of that cultural system. Finally, Fleischer emphasizes quantitative aspects in the identification of collective symbols and normatives, and in the analysis of all phenomena of the Second Reality, regardless of whether we look at them from the point of view of the sender (world images) or the receiver (appearance images).

Cultural analysis can be performed at any of the levels of culture mentioned by Fleischer (interculture, single cultures, subcultures or cultural groups), depending on specific research interests and goals. In the current work I will focus on the English and Italian single cultures, i.e. the cultural elements that are shared by all English natives on the one hand, and Italian natives on the other.

2.3.2 Adam Nobis: behavioural patterns and the self-organisation of culture

Another interesting contribution is offered by Adam Nobis, who analyses selforganising open systems and introduces the concept of 'enhancement of complexity organisation of evolving objects' due to interaction.

His theoretical framework for defining culture is inspired by anthropologists Kroeber (1952) and Morin (1973) and is summarised as follows: "culture is a complex of behavioural patterns transmitted non-genetically" (Nobis, 1998, p. 464), where the phrase 'behavioural patterns' refers to a stable structure of interaction that emerges among partially spontaneous behaviours. The key concept here is stability. As we have seen, open systems are in constant tension between stability and evolution. Any change in the system determines further changes. Therefore, transmission of behaviour – which is at the basis of evolution – may only take place when that behaviour has a long established network of relations with other behaviours, i.e. a stable behavioural pattern. Behaviours may be of several different types, including mental behaviours, such as for example thinking about a concept. Interestingly, the notion of 'stable behavioural pattern' can easily be equated with Fleischer's notion of conventionalisation, i.e. a mental behaviour, such as thinking of a concept, has features that, at a given point in time, are widely shared by all members in a community/culture.

The evolution of mental behaviours was tested by Nobis in a three-stage diachronic experiment on Polish students aimed at assessing the changing ways of thinking about Europe in Poland (Nobis, 1992a, 1992b, 1998). In a first phase, a group of Polish students were asked what they thought about Europe, and their interviews were recorded. Each of their statements, grouped according to theme (or belief), was analysed in terms of the reason given to support it; and the reasons provided were then collected into what we might call sub-themes. In particular, one of the common themes in the student's answers referred to European superiority on other continents. The arguments used to support this claim were either cultural, or historical, or economic, or a mixture of more than one of these. A few months later, a different group of Polish students was asked to agree or disagree with a series of statements/opinions comparing Europe to other continents. These statements had been

created using the arguments of the students in the previous experiment; some of the statements included homogeneous concepts, while others were combinations of arguments from two, three or four different sub-themes. The most accepted statements were two-element opinions, immediately followed by three-element opinions, one-element opinions, and four-element opinions, in this order. These results led Nobis (1998, p. 470) to formulate the hypothesis that:

"during social interaction more-element configurations will supersede the few-element configurations, which also means that more-element configurations will be accepted by the increasing number of individuals taking part in the interaction".

This hypothesis was tested and confirmed two years later on the second group of students, who were interviewed in a repetition of the second experiment. This time, in fact, three- and four-element opinions were as popular as two-element opinions. In other words, the richer the behavioural pattern, the more established (widely accepted, or conventionalised) the pattern is.

While Nobis' hypothesis was developed to describe the dynamic evolution of culture, it could probably be applied synchronically for cross-cultural comparison. In fact, it could be hypothesised that relevant differences in the number and complexity of the concepts connected to the same key concept in different cultures are indications of different stages of knowledge/acceptance of the key concept.

2.4 Analysing culture through language

All the disciplines that are, directly or indirectly, involved in the study of culture, have taken language and linguistic production as their starting point for analysis. Several linguistic aspects can be (and have been) taken into consideration for the analysis and comparison of cultures, including content, ¹⁸ genre, ¹⁹ syntax, ²⁰ and semantics, the latter being the focus of interest in the current research.

Most work, especially that carried out within the framework of critical linguistics, discourse analysis, translation studies, and semiotics, has traditionally been based on in-depth analysis of a limited number of texts. Recently, however, voices have raised advocating the use of corpus analysis techniques – frequently supported by statistical calculation –²¹ and extensive analysis of large quantities of data performed by means of computerized tools have gradually been taken into consideration for these types of study, in these disciplines. Other disciplines, including anthropology, psychology, and consumer research have longer experience with statistical methods, frequently applied to collections of elicited data.

The aim of this section is to accomplish an overview of semantic approaches to the study of culture, in a search for powerful quantitative methods to apply to corpus

¹⁸ By 'content' here we analysis of several different textual, intertextual, contextual, and/or semiotic elements, such as relation between text and pictures, anaphora, elision, use of metaphors. See for example Bassnett (1991, pp. 28-29), and Katan (2006).

¹⁹ In different cultures, the same text type may have different 'rhetorical requirements' as regards, for example, moves and steps, register (e.g. more or less formal), explicitness. See for example Aston (1988), Wierzbicka (1991, Chapters 4 and 5), and Tosi (2001).

²⁰ See for example Gerbig (1993), Stubbs (1994), and Galasinski and Marley (1998).

²¹ See, for example, Stubbs (1997) and Coffin & O'Halloran (2004).

data.²² Particular attention will be dedicated to those studies that employ corpora and quantitative research methods, however a brief outline of Wierzbicka's qualitative research work in cultural studies will also be provided, given its relevance in the linguistics panorama.

The studies here presented have been selected according to one or more of the following criteria: relevance of the study within its own discipline; frequent quotations of the given study; novelty of its approach; relevance to the current work. In this review, methodological issues will be foregrounded, along with results, in order to show the types of analysis that have been conducted on corpus data and the connections that can be seen between this type of semantic data and culture. This overview is by no means to be considered exhaustive of all the studies carried out in the different disciplines, or of all possible methodological approaches, especially as far as non-linguistic disciplines are concerned.

For the sake of systematisation, the studies will be grouped according to discipline and research tradition. This type of organisation – though not necessarily the best possible one – has been chosen because it clearly shows how different disciplines are still characterised, to a large extent, by the use of different preferred research methods. Only a few seem to be the studies that experimented with analytical methods or materials from outside the specific research tradition, but their results show the possible benefit of greater interdisciplinary integration.

2.4.1 Culture studies in linguistics

2.4.1.1 (Cross)-cultural semantics: Williams and Wierzbicka

One of the first linguists to look for words that might be meaningful for the understanding of reality was Raymond Williams. In his 1959 book *Culture and Society*, he noticed that some words change meaning or acquire particular importance in given periods. These words, he believes, mirror changes in the way people think about reality. In particular, he highlighted the following five words: *industry*, *democracy*, *class*, *art*, and *culture*. Subsequently, banking on the idea that comparison between the meaning of selected, relevant words – which he calls 'keywords' – and people's experience of everyday life may shed light on language and the way people use it, he focused on *culture* and published his most famous work *Keywords*. A *Vocabulary of Culture and Society* (Williams 1976), where he illustrates the words that he believes to be connected to the idea of culture (and society) and that help explain the complexity of its meaning.

Thus, Williams thought that culture could be analyzed through several other words that are in some way related to it. Although he did not provide specific indications about how to select or analyze these words, his work has inspired several linguists. In particular, Wierzbicka seems to have elaborated Williams' definition of 'keywords' when she describes 'cultural key words' as "words which are particularly important and revealing in a given culture" (Wierzbicka 1997: 15-16). While

²² Following McEnery and Wilson (2001, pp. 76-77), I define as quantitative all those approaches where features are classified and counted and statistical models are constructed in order to explain what is being observed; quantitative approaches differ from qualitative approaches, where "no attempt is made to assign frequencies to the linguistic features which are identified in the data" (*ibid.*, p. 76).

William's attention was not contrastive, Wierzbicka's is cross-linguistic and cross-cultural.

Wierzbicka, like Williams, denies the existence of an objective discovery procedure for the identification of words of this type, but has developed a method for the analysis of their meaning, based on semantic primitives (or universal semantic concepts). Her interest lies in cross-cultural communication, and her theoretical arguments are based on Geertz's and Sapir's assumptions about culture and language. Indeed, she takes up Geertz's (1979; 1998) idea of culture as a system in which patterns of meanings, embodied in symbols, are transmitted between people and across time. These patterns allow people to communicate, perpetuate, and develop knowledge. Furthermore, in line with Sapir (1929) and the so-called Sapir-Whorf hypothesis, she assumes that, within each given culture, language both shapes and reflects reality, and the key to the understanding of this link lies in semantics. Therefore, 'cultural key words' – as she calls them – mirror the values and experience of the people in the given culture and are a major tool of culture perpetration; their meanings, however, are culture-specific and consequently impossible to understand for outsiders. Thus, in order to achieve cross-cultural communication, the meaning of these words should first be made explicit and illustrated by means of "a 'natural semantic metalanguage', based on a hypothetical system of universal semantic primitives" (Wierzbicka 1991: 7). Hence, Wierzbicka (1972; 1980; 1987; 1988; 1989a; 1989b) and her colleagues (see in particular Goddard & Wierzbicka 1994) have developed a list of universal semantic primitives to use in the translation of cultural keywords. In 1991, her list included more than two dozen hypothetical semantic primitives divided by category (Wierzbicka 1991: 8): Pronouns (I; you; someone; something); Determiners (this; the same; two; all); Classifiers (kind of; type of); Adjectives (good; bad); Verbs (want; don't want; say; think; know; do; happen); Modals (can; if/imagine); Place/Time (place; time; after/before; above/under); and Linkers (like; because). In 1997, the list already included 'nearly sixty candidates' (Wierzbicka 1997: 26), organized in

"a network of categories, which can be compared (some-what metaphorically) with the parts of speech of traditional grammar. The main point is that the categories [...] are, so to speak, both semantic and structural" (ibid.).

In addition to these primitives, she sometimes employs

"a limited number of other concepts, which are regarded as neither indefinable nor universal or near-universal, but which are still relatively very simple and which recur widely in the languages of the world as separate lexical items. This larger set, whose items can be defined in terms o the basic set of primitives, includes concepts such as 'feel', 'small', 'much', 'a little', 'more', 'less', 'different', and so on' (Wierzbicka 1991: 8).

According to Wierzbicka's method of analysis, for example, the English word 'freedom' and its Latin, and Russian counterparts (Wierzbicka 1997: 125-154)²³ can be described as follows:

²³ Her chapter also includes the Polish word for 'freedom'.

[English] freedom

- (a) someone (X) can think something like this:
- (b) if I want to do something I can do it
- (c) no one else can say to me: "you can't do it because I don't want this"
- (d) if I don't want to do something I don't have to do it
- (e) no one else can say to me: "you have to do it because I want this"
- (f) this is good for X
- (g) it is bad if someone cannot think this.

[Latin] libertas (e.g., X habet libertatem 'X has freedom')

- (a) someone (X) can think something like this:
- (b) when I do something I do it because I want to do it
- (c) not because someone else says to me: "you have to do it because I want you to do it"
- (d) this is good for X

[Russian] svoboda

- (a) someone (X) can think something like this:
- (b) if I want to do something, I can do it
- (c) when I do something, I don't have to think:"I can't do it as I want to do it because some (other) people do/say something"
- (d) X feels something good because of this

On the basis of these semantic reformulations, along with analogous descriptions of related concepts such as English 'liberty', and Russian 'volja' (will), and very brief comments about the collocations of these words, Wierzbicka concludes declaring that freedom is a culture specific concept, as it differs in different cultures.

Despite the fact that she insists on her method being "a verifiable, non-speculative way" (ibid.: 30) to study cultural patterns, a few concerns might arise. First of all, Wierzbicka's 'cultural keywords' are chosen subjectively;²⁴ furthermore, no explanation is provided for the choice of the corresponding words in the various languages: the reader is only left to assume that they are 'official' translations provided by dictionaries. Finally, her considerations depart from a relatively short list of examples of use, which include phrases or sentences by famous writers, set phrases or proverbs. These, along with comments and definitions by previous researchers or writers, are used to explicate the meaning of the concept in terms of semantic (and syntactic) primitives, which still leaves us with doubts about the completeness and objectivity of her non-speculative analysis. Indeed, it really seems that – as Bigi nicely comments – "[...] keywords in Wierzbicka appear to be as a domain in which to apply and verify her theory of semantic universals" (Bigi 2006: 165-166).

What is interesting in Wierzbicka's approach, on the other hand, is her attention to individual words and direct comparison between cross-language translations of the same concept. Also interesting is her attempt to look at collocates, though her analysis of collocates is based on an exiguous number of examples, comments are very brief,

²⁴ See Chapter 3 for greater details on this issue.

and collocations are used mostly to highlight contrast between near synonyms. In the following sections we shall see how other, more quantitative-oriented, research traditions have used these same elements for (cross)-cultural analysis, but with a different focus. The studies reviewed in the following subsections are all characterised by the use of corpora, but they have been grouped according to what seems to be their major theoretical framework.

2.4.1.2 Within the framework of corpus linguistics

Cultural studies accomplished primarily within the framework of corpus linguistics seem to have all focused on general comparisons between cultures. One of the first studies using corpora to assess cultural specificities is that by Leech and Fallon (1992). The aim of their research was to highlight cultural differences between the American and British cultures by comparing American and British English in the 1960s. On the basis of word frequency tables from the Brown and LOB corpora, created applying the chi-square test and published by Hofland and Johansson (1982), Leech and Fallon grouped words into semantic categories and identified 15 categories where noticeable frequency differences could be seen, namely: sport; transport and travel; administration and politics; social hierarchy; military; law and crime; business; mass media; science and technology; education; arts; religion; personal reference; abstract concepts; and ifs, buts and modality. The authors used frequency differences to draw generalised conclusions about the two cultures: the American culture emerged as masculine, militaristic, dynamic, driven by high ideals, technology, activity and enterprise; the British culture as

"given to temporizing and talking, to benefiting from wealth rather than creating it, and to family and emotional life, less actuated by matters of substance than by considerations of outward status" (Leech & Fallon, 1992, pp. 44-45)

Leech and Fallon's cultural analysis and conclusions are entirely based on corpus data and word frequency, and are not contrasted to or commented within any type of qualitative study of the cultures considered.²⁷

Leech and Fallon's results were replicated by Oakes (2003) in a study concerned with the American and British languages of the 1990s. Using the FROWN and FLOB

²⁵ The Brown corpus, created in 1961, at Brown University (Rhode Island) includes approximately 1 million words of American English from a wide variety of prose texts (Francis & Kucera, 1979). The LOB (Lancaster-Oslo-Bergen) corpus was developed to match the Brown one, and includes about 1 million words from British English texts published in 1961. These two corpora were followed, in the 1990s, by the FROWN and FLOB, created at Freiburg University to match the Brown and LOB and to be used for diachronic studies. The FROWN and FLOB include about 1 million words of American and British English respectively, with sample texts that were published in 1991 (McEnery & Wilson, 2001).

²⁶ These authors disregarded what they called 'linguistic contrasts', i.e. spelling differences (e.g. *color* and *colour*), and lexical choice (e.g. *gasoline* and *petrol*), and did not consider proper nouns.

²⁷ This strongly clashes with Wierzbicka's views when she claims that, though important and revealing, "frequency is not everything [...]. Frequency dictionaries are only broadly indicative of cultural salience, and they can only be used as one among many sources of information about a society's cultural preoccupations" (Wierzbicka, 1997, p. 15). Wierzbicka's words were not openly directed to Leech and Fallon's study; yet, given the content and date of her considerations, it seems probable that she had this paper in mind. In fact, though in the Introduction to her work she mentions frequency as an indicator of salience, she completely ignores it in her analyses.

corpora.²⁸ Oakes' results entirely confirmed the findings of the previous study, which can only be taken as evidence that frequency is a good indicator of cultural salience. Indeed, Leech and Fallon's (1992) paper paved the way to a series of other studies which, likewise, focused on general comparisons between cultures and resorted to frequency, grouping of keywords²⁹ and/or collocates into semantic domains, and keyness as a primary means for highlighting cultural features. Two of these studies are briefly outlined below.

Muntz's (2001) analysis of cultural differences between British English and Australian English is – as the author openly declares – an application of Leech and Fallon's methodology, though a few differences should be highlighted. Muntz, in fact, considered also proper nouns of place names, as "it was felt they could provide information on a country's place within the world, which, in turn, contributes to its identity" (Muntz 2001: 394), and spelling differences, "as they provide evidence of cultural choices and language variation in progress" (ibid.: 394). Furthermore, she developed 11 specific domains, ³⁰ different from Leech and Fallon's ones, and dedicated increased time to verifying concordances of results, eliminating unsuitable ones from the frequency list, and recalculating keyness of each word. Muntz's aim was two-fold: identifying cultural differences in the British and Australian varieties of English, and using these to assess Australian cultural identity. Her study highlighted the above mentioned domains in which Australian identity comes to the fore and provided evidence of Australia's independent identity. Muntz's conclusion (ibid.: 399) was that

'the results closely reflect some of the most commonly observed facts and stereotypes about Australia and its culture: the size of its coastline, barren interior, native animals and hot weather. Whilst this assures us of the validity of the corpora, it also tells us that Australians have inherited a way of thinking about such things from Britain. [...] in Whorfian terms, then, perhaps the fact that Australians speak a type of English dictates the way Australians think about their physical environment, if not the frequency with which they use those words to describe it.'

Muntz's study clearly shows that relevant semantic domains are culturedependent and not generally suitable for all cultures or cultural comparisons.

Schmid (2003), instead, applied Leech and Fallon's analytical method to the spoken part of the BNC, ³¹ in search for confirmation to Deborah Tannen's (1990)

²⁸ See note 23

²⁹ In corpus and computational linguistics, the term *keyword* refers to words which appear in a given corpus with statistically significant higher (or lower) frequency than in a reference corpus (see Chapter 3, Section 3.6.2).

Muntz's domains are: place names referring to other countries; origin/ethnicity adjectives; multiculturalism; prestige forms and borrowings from English; American spelling conventions; colour terms; geography; housing and communities; fauna and flora; weather and clothing; personal reference; abstract concepts (challenge and diversity).

abstract concepts (challenge and diversity).

31 The British National Corpus (BNC) is a monolingual, synchronic, general corpus of British English. It includes samples of written and spoken language (about 90% and 10% respectively) from a wide range of sources, for a total of a 100 million words. The samples were carefully chosen in order to be representative of late 20th century English. The corpus is pos-tagged and encoded for headings, paragraphs, lists, and other features. Sample collection took place between 1991 and 1994.

ideas about gender differences.³² Words from 18 domains inspired by Deborah Tannen's book³³ were investigated in terms of frequency and collocations. This study confirmed that differences indeed exist in the way British men and women speak, but not all the data were in line with what is suggested in the literature. Our interest in this paper, however, lies in the fact that it extended frequency counts and semantic grouping to collocates, and that the comparison was carried out in order to test a specific theory.

Finally, an interesting corpus study of cultural features is that of Manca (2008), who compared Italian and British farmhouse holiday websites, in an attempt to describe the promotional strategies employed and assess whether they are determined by cultural features. Manca started from an analysis of the collocates of all the adjectives in the wordlist of her corpus of British farmhouse holiday websites. The collocates were grouped according to three main different themes, which she labelled description of rooms, description of surroundings, and description of food. Attention then moved to her comparable corpus of Italian farmhouse holiday websites. Starting from words naming concrete instances of rooms, surroundings, and food (prima facie translations of words such as room, kitchen, lounge, etc.), she identified and analysed - dividing them according to semantic domains - the adjectives and phrases that are used in the Italian corpus for the three given themes. Constantly moving from collocate to collocate, and back and forth between the two languages, Manca highlighted that, despite apparent semantic similarities between the adjectives in the two comparable corpora, collocational profiles indicate that different promotional strategies are at work. The discovered differences were then commented and explained within Hall's theory of high- vs. low-context cultures.³⁴ Manca's corpusdriven study is qualitative in nature more than quantitative, except for basic frequency counts. She took advantage of typical corpus linguistic events: frequency counts, and above all collocational profiles, the latter being a feature that – as we shall see in the following section - has been commonly used by CDA researchers. However, her cross-linguistic approach, along with the explanation of results within a very specific theory of culture makes her contribution extremely relevant to general corpus linguistics, and to the current work.

³² Gender differences are here equated to cultural differences, insofar as a clear distinction is now commonly accepted in sociolinguistics between males and females. In our reference framework, this distinction can be posited at the level of Fleisher's sub-cultures.

³³ The following domains were selected: personal reference; family; personal relationships; home; food and drink; clothing; car and traffic; computing; sport; public affairs; abstract notions; alleged "women's" and "man's" words; swearwords; hesitators, fillers, backchannel behaviour; linguistic politeness markers; linguistic markers of uncertainty and tentativeness; linguistic markers of conversational cooperation and support.

³⁴ Hall identified three cultural orientations: time, space, and contexting. By context he means 'the amount of information the other person can be expected to possess on a given subject' (Hall, 1983, p. 61). In high context cultures (HCC), writers expect readers to make use of their contextual knowledge to understand the text. Conversely, in low context cultures (LCC), readers expect contextual elements to be made explicit in the text itself (Hall, 1989).

2.4.1.3 Within the framework of cultural systems theory

A well-defined theoretical cultural framework of reference is what characterizes this series of papers. The aim of these papers, in fact, is as much cross-cultural comparison, as verification of specific theoretical elements.

Fleischer's (2002) study aimed to identify the semantic profiles of drinks in three different nations – Poland, France and Germany – and assess the level of conventionalisation of their images in the corresponding cultures. By conventionalisation he means the degree to which the semantic profile of a particular type of drink is common to, or shared by, all the members of a given culture.

To this purpose he presented groups of volunteers from the three cultures with a list of names of drinks and beverages (in alphabetical order), and asked them a rather broad question of the following type: what comes to your mind when you see each of the names of drinks in the list? Therefore, differently from the other linguistics studies, but – as we shall see later – in line with other disciplines, Fleischer's 'corpus' is based on elicited data: freely produced linguistic descriptions of drinks. The respondent's answers were semantically analysed. Three themes were distinguished, namely characteristics and connotations (Konnotationen/Images), trademarks and proper names (Umschreibungen/Marken), and evaluations (Wertungen). Words and phrases in each theme were then grouped into unlabelled semantic categories. Hapax legomena were ignored, as they were considered connected to individual feelings and preferences, rather than to collective (cultural) orientations. Then, Type-Token Ratio (TTR) of answers was calculated, ³⁵ considering the described features as Types and individual instances of each feature as Tokens; and three levels of conventionalisation - high, medium, and low - were established using confidence intervals based on means and standard deviations. TTR was consequently used as an indicator of intracultural conventionalisation of the image of drinks. 36 As expected, results showed that different drinks had different levels of conventionalisation in the three cultures considered. So, for example, cocoa and milk show a high level of conventionalisation in all the three cultures. This means that, within each country, a large number of the semantic associations of a given drink are common to all the people belonging to that culture, or, in other words, that the images of cocoa and milk are largely shared by all members of that culture. On the other hand, beer, coke, and coffee show a low level of conventionalisation in Poland, a high level in Germany, and a medium level in France. Inter-cultural differences in conventionalisation were also highlighted, by means of correlation tests. Finally, the semantic profiles of each drink are described and discussed with reference to historical, sociological and more generally cultural events. Fleischer's work is particularly interesting for the direct link it creates between words (names of drinks), verbal associations (descriptions of drinks) and cultural symbols, as well as for the attempt to assess conventionalisation by means of quantitative analysis (Type-Token Ratio).

In line with Fleischer's study is a paper by Wilson and Mudraya (2006). Inspired by Fleischer's (2001, 2003) idea that, though judgements include both individual and cultural components, if the judgements made by different people tend to coincide, the

³⁵ See Chapter 3.

³⁶ For a discussion of issues in the use of TTR as a measure of conventionalisation, see Wilson and Mudraya (2006, pp. 680-681)

concept or thing being judged can be considered to have become conventionalised as a collective symbol, these two linguists used quantitative methods to "examine one possible link between the onomasiological and cultural levels" (Wilson & Mudraya, 2006, p. 679), i.e. to analyse the relationship that exists between naming of shoes and the establishing of different types of shoes as cultural symbols in Russia. Their analysis was based on elicited verbal answers collected through two separate tasks in Russian. In the first task the participants (all Russian native speakers) were shown 12 pictures, each presenting a different type of shoe, and were asked to name each type. In the second task, the participants were asked to provide 10 completions of one and the same sentence: "I think that the woman who wears these shoes". The second task was a reviewed version of a widely used activity to study self-identity and aimed to identify specific traits attributed to those who wear a particular style of shoe. Names given to shoe styles and traits were counted and analysed by applying an evenness index, which – similarly to TTR – considers the relation existing between types and tokens, but it also takes into account the evenness of distribution of tokens among types.³⁷ No significant correlation was found between naming evenness and the evenness of associations and, consequently, the authors' working hypothesis that 'where respondents agreed more readily about an appropriate name [...] would also [...] elicit more conventionalised associations about their potential wearers' (ibid., p. 687) was disconfirmed for the Russian context. This experiment by Wilson & Mudraya is interesting not only for the quantitative methods applied, but also because it uses data to verify theoretical assumptions, while the other studies simply interpreted data within the chosen theoretical framework. Furthermore, though carried out by linguists, this study, and Fleisher's before it, is closer in terms of method to studies in other disciplines. In fact, its starting point are not corpora as 'traditionally' intended in corpus linguistics but rather an electronic collection (and as such a corpus) of elicited data. Verbal associations are treated and analysed as collocates.

Finally, it is worth noticing that in both the studies here considered focus was on individual words, rather than on the culture itself.

2.4.2 Culture studies in other disciplines

Anthropologists Szalay and Maday (1973) were among the first to study subjective culture, or implicit culture, i.e. "psychological variables, images, attitudes, and value orientations" (*ibid.*, p. 33), starting from verbal associations and semantic grouping of verbal responses in one's native language. The definition of culture these authors adopt is that of "group-specific cognitive organisation or world image" (*ibid.*, p. 33) made up of units of psychological meaning. Psychological meaning is encoded in the words that are elicited by other particular words (hence the need to elicit answers through free verbal associations). Subjective meaning reactions elicited by a particular word are called Elementary Meaning Units or EMUs (Greenberg, 1960, quoted in *ibid.*, p. 34). Psychological meaning includes three major dimensions which are all equally important in the study of culture, namely composition, dominance, and organisation. Indeed, psychological meaning depends on the

³⁷ Further details on evenness indexes are provided in Chapter 6.

³⁸ This definition seems to me nicely in line with Lotman's, and Fleisher's theories.

composition of several distinct elements: visual imagery, context of use, brand, affective reactions, and function. Furthermore, some EMUs are dominant in a given cultural group, as they are more frequent than any others and their higher frequency influences cognitive processes. Dominance, therefore, is measured in terms of frequency. Finally, the psychological lexicon is organised according to networks based on affinity between elements. In this respect, EMUs cluster into semantic domains, or "large units of cognitive organization" (Szalay & Maday, 1973, p. 34). The method they suggested for and applied in the study and comparison of subjective cultures includes four steps: identification of cultural priorities; assessment of culturespecific composition of dominant EMUs; re-creation of the psychological network (affinities between semantic domains); and inferencing as regards culture-specific hidden attitudes, values, and beliefs. This method, also known as AGA (Associative Group Analysis), was illustrated with respect to the semantic domains of education, manners and family, comparing American and Korean students living in the United States. In order to identify cultural priorities of the two groups, the researchers asked the participants to make a list of 25 important domains of life and to provide for each of them as many associative responses as possible. Fusion of the lists of the Korean students and of the American students led to the definition of two culture-specific lists, which were subsequently merged to create a joined list of common priority topics which could be used as stimuli for the subsequent phases of the study. Education, manners and family were among the common domains, and were used as stimulus words for a free verbal association task. Content analysis was performed on both highly frequent and less frequent domains in each culture. In the content analysis phase, responses were grouped into fewer categories. The identification and categorisation of EMUs was done manually by judges from both cultures. For each stimulus word, affinity indexes - which are necessary to understand the cognitive organisation of each domain and compare domains of different groups - were calculated between the EMUs of each group of participants. Once the affinity structure and cognitive organisation had been established for each domain word, affinity relations between domains (e.g. manners vs. family and education) were assessed. As already noticed in previous studies, the authors observed that "words used in the representation of a particular domain generally show the same consistent cultural patterns" (ibid., p. 37), i.e. consistently low or consistently high affinity with the other domains for each group of participants. In the given experiment, polite, greeting, manners, and to bow (EMUs in the manner domain) consistently showed low affinity with the family and education domains for American students, but high affinity for Korean students. These results led the authors to suggest that a relatively low number of properly selected EMUs could be enough for obtaining generalisable cultural trends in broad semantic domains. Finally, the authors concluded that free verbal associations obtained in the native language and solicited with the method described "provide empirical data on the denotative as well as the connotative components of meaning" and "allow to reconstruct culture-specific cognitive organization by its main dimensions" (*ibid.*, p. 41). This contribution seems important to the current research for several reasons. First of all, words are considered representations of psychological meaning units and hence of cultural trends. A direct relation is postulated between domain word (stimulus), words associated to domain

word (EMUs), and subjective culture. Furthermore, in establishing dominant EMUs, frequency criteria are applied.

Psychologists Potash, de Fileo Crespo, Patel, and Ceravolo (1990) used the Miale-Holsopple Sentence Completion Test (Holsopple & Miale, 1950, cited in ibid.) to assess cultural attitudes in American and Brazilian college students. A sentence completion test was chosen by the authors because they considered it "the ideal projective instrument to measure cultural differences because this type of test provides high structure with a diverse variety of topics, permitting comparison among different cultural groups" (Potash, de Fileo Crespo, Patel, and Ceravolo, 1990, p. 657). The participants in the experiment were 39 American and 70 Brazilian college students. The authors' aim was to compare the two cultures on the following topics: orientations about future; achievement motives and work ethics; interracial tolerance; and sexuality. For this reason, only the subject's answers to selected sentence stems which the authors considered indicative of the desired variables were analysed. The subjects' answers were scored as positive, indeterminate or neutral, or negative, and results were compared using the chi-square test. The authors report that American students gave more positive responses to the work ethic stems and more negative ones to interracial marriages. Furthermore, the Brazilian females gave more positive responses to the sexuality stem than did American women. This experiment is interesting for the current research because of its use of a sentence completion task – considered as the ideal projective technique for cross cultural comparisons – and for its analysing responses as positive, neutral or negative.

2.4.3 Discussion

Some considerations emerge from this review of empirical studies of culture.³⁹

First of all, the limited number of cultural studies in corpus linguistics – which is low if compared to those in the qualitative area ⁴⁰ – seems to indicate that culture has so far been a rather neglected area of study in this particular branch of linguistics, despite the fact that corpora and quantitative analytical methods are easily applicable to this purpose.

Second, although different research traditions have always been and still tend to be trenched within the boundaries of the paths paved by their respective predecessors, in more recent times attempts have been made to overcome such boundaries and employ methods from other traditions or disciplines. In particular disciplines such as anthropology and psychology seem to have much to offer to linguistics and crosscultural analysis through language and corpora, both at theoretical and methodological levels.

Third, two broad approaches to the study of culture seem to be distinguishable: overall description of a culture or comparison between cultures through keywords – a sort of *top-down or picture-to-detail* approach in which attention is on the general picture and individual words are used to provide a description of it; and comparison of cultural perspectives based on focus on single concepts – a kind of *bottom-up or*

³⁹ Adjective 'empirical' is used here to emphasize the fact that the core element in these studies is observation of data (deriving from corpus analysis or specifically designed experiments), rather than theory.

⁴⁰ Wierzbicka alone can boast dozens of publications in the field.

detail-to-picture approach in which attention is constantly on individual words and their meanings, and the general picture is used as a reference framework for their explanation. In either case, keyword and collocate frequencies, as well as grouping of items to create superordinate domains (either entirely semantic or thematic) seem to be established techniques of cross-cultural comparison.

Fourth, as in all types of scientific research, the selection of a clear cultural theoretical framework is of paramount importance for a precise and convincing analysis of results.

The current research uses system's theories on culture, and Fleischer's theory in particular, as its theoretical framework, and corpus linguistics as its methodological framework. Consequently, the next chapter provides an introduction to corpora and corpus linguistics, and an overview of some major issues which are relevant in the current work.