

## **CHAPTER 3 - Semiotics, Linguistics, and Visual Communication**

### **3.0 Introduction**

Having established the notable lack of analysis of visual communication and its potential interrelationship with the verbal mode in economics discourse by economists and applied linguists, this chapter will now examine and review relevant work by semioticians and linguists working with other forms of communication to analyse the visual mode. This will initially involve a brief overview of the conception of the sign and meaning in general semiotic theory, and then a survey of the main schools of semiotic theory which have attempted to examine other forms of communication utilising linguistic insights originally derived from Saussure's treatise. This chapter will act as a bridging chapter to Chapter Four, which will examine and review the work of those who have attempted to investigate various kinds of visual modes from within the SFL theoretical framework which, as already stated in Chapter One, will form the theoretical foundation for the analysis of the *Mountains* text. This review will demonstrate that within this particular theoretical framework there is also limited research into the nature of the intersemiotic semantic relationship between the visual and verbal modes in text, and none at all in relation to economics discourse. The culmination of the reviews in Chapters Two, Three and Four will therefore be an established need for an application of the Hallidayan social semiotic theoretical framework to multimodal texts.

### **3.1 The Sign and Meaning in General Semiotic Theory**

Semiotics has been variously defined and subdivided into pure, descriptive and applied areas, and there have been any number of definitions (see Nöth 1990), depending on the particular tradition and the particular nuances given to the meaning of the notion of semiotics. Across the sweep of these various views of semiotics as a theory, a science or even as a fashionable movement, the prevalent feature is that it is concerned with the study of the *sign*. Some of the more typical definitions reflecting this variation include semiotics as "the antique doctrine of signs" (Sebeok 1994:5), "the general science of signs and meanings" (Danesi and Santeramo 1992:vii), "the science or doctrine that studies signs" (Danesi 1993:280), "the study of signs and symbols as elements of communicative

behaviour” (Random House Electronic Dictionary 1992), “the study of sign systems” (Halliday and Hasan 1985:4), and most commonly Saussure’s definition, from which most others are derived, as “a science that studies the life of signs within society” (1916/1966:16).

In general, semiotics examines signs as the vehicles which allow human beings to represent their world, to present information, to influence, or as Eco suggests, even to deceive and obfuscate (1976:7). A broad spectrum of signs and systems of signs in communities have been studied, whether the subject of that study is verbal, visual or some composite blend of both. These studies have included the semiotic analysis of speech, drama, novels, mime, comedy, paintings, architecture, sculpture, myth, folktales, comics, news stories and advertisements, and more recently, the previously-mentioned study of multimedia modalities. Semiotics has also been applied to the study of signalling behaviour in and across animal species in zoosemiotics, a branch of semiotics which attempts to account for the “corresponding designative processes among the speechless creatures” (Sebeok 1972, 1994:19).

In the history of semiotics from the mid to late nineteenth and throughout the twentieth century, a number of people are prominent in terms of their role in the development of the modern form of the discipline, and its major branches. According to Nöth (1990), these figures and their major contributions include Peirce (philosophy, classification of signs), Morris (the scope of semiotic theory), Saussure (semiology and linguistics), Hjelmslev (theory of *glossematics*) and Jakobson (poetics and linguistics). Of these, it is generally recognised that both Charles Sanders Peirce [1839-1914], who is the major figure in the philosophical branch, and Ferdinand de Saussure [1857-1913], who is commonly referred to as the founder of semiology (semiotics) and the “father” of modern linguistics, are the pre-eminent figures in the development of semiotic theory in this century, and that their differences, *inter alia*, are often characterised largely via their interpretation of the sign. The fundamental concept of the sign in its broadest sense as “a natural or conventional semiotic entity consisting of a *sign vehicle* connected with *meaning*” (op.cit:79) is clarified further by Larsen:

a sign is any object which represents another object. Meaning is the representation of an object in or by another object. The sign or the representing object can have any material manifestation as long as it can fulfil the representational function: a word, a novel, a gesture, a reaction in the brain, a city etc. On the status of the represented object nothing is made explicit by this definition. It may be material or mental, fictitious or factual, fantasised or real, natural or artificial. From this it follows that something which is a sign in one context may be an object in another and vice versa. Signs do not constitute a class of objects. A sign is a 'functional' unit (1994:3824).

The principal functional status of a sign means that its existence is related to its integration in a concrete process of meaning-making, a coded process involving the production and comprehension of signs which is commonly defined as *semiosis* (Danesi 1994:280; Danesi and Santeramo 1992; Nöth 1990:42; Eco 1976). This process means that "one infers something from a phenomenon one thus considers a sign, concerning something else, the object", and that "through this inference, the relation between sign and object is specified according to a code" (Larsen 1994:3824).

The views of Saussure and Peirce as to the nature of a sign and the process of semiosis have been discussed and developed in this century to the point that most of the semiotic literature seems to identify itself with having originated from what has been characterised as either *semiology* or *semiotics*. Sebeok (1989:63) alludes to these two terms being associated with the "two traditions" of semiotics, which Nöth explains as the "linguistics tradition from Saussure to Hjelmslev and Barthes [which was] usually defined as *semiology*" and the "the general theory of signs in the tradition of Peirce and Morris [which] was called *semiotics*" (1990:13). In more recent times (from 1969) the International Association of Semiotic Studies has decided to drop this terminological distinction and to adopt the term *semiotics* to cover all the research published from both the traditions of semiology and general semiotics (op.cit:14).

Notwithstanding this terminological rapprochement, the semiotic literature can still be interpreted in terms of its association with these two major traditions, and it is within the Saussurean linguistic tradition which this study will be situated. It

has been recognised by many in this branch that semiotic research and analysis deriving from linguistic theory could inform the interpretation of other communication modes besides language. The rest of this chapter section will form a brief overview of the work of those following the Saussurean linguistic tradition, and a brief review of the work of those researchers utilising various concepts derived from linguistic theory to examine non-linguistic modes. These can be conveniently referred to as ‘schools’, and indeed have been described as so by Nöth (1990). They include the Prague School of the 1930’s and 1940’s, the Paris School of the 1960’s and 1970’s, and more recently that which could be loosely described as the Hallidayan School, which as already mentioned in Section 1:1, will provide the theoretical framework for this study.

### 3.2 The Saussurean Semiotic Tradition

It is generally recognised that the study of language has served as the model for much work in the field of semiotics, and that the nature of this work derives initially from Saussure’s “semiological program”, Hjelmslev’s extension of Saussure’s ideas in his *glossematics*, and the further application of these ideas by various schools of semiotics in their examination of other non-linguistic modes of communication.

In Saussure’s semiological program, the central semiotic notion is the *sign*, which is defined as a two-fold entity consisting of the *signifier* and *signified* (1916/66:67). The *signifier* is defined as the material vehicle, or the “physical part of the sign, the actual substance of which it is composed (sound waves, alphabet characters etc.)” (Danesi 1993:24). The *signified* however is defined as the meaning or mental concept to which the *signifier* refers. This Saussurean dichotomy is to be contrasted with the Peircean triadic notion of the sign, which is comprised of the *representamen* or sign, the *object* or that to which the representamen refers, and the *interpretant* or the individual’s comprehension of, and reaction to, the representamen/object association. The representamen is synonymous with Saussure’s signifier, identifying the material or present part of the sign, while the object and interpretant are Saussure’s signified in two parts. The Peircean sign model is thus a “triple connection of *sign*, *thing signified*,

*cognition produced in the mind*” (C. S. Peirce, quoted in Nöth 1990:42). Both Saussure and Peirce developed their conceptions of the *sign* at the same time but independently, and both have been adopted and utilised in subsequent semiotic studies by various semioticians. Indeed, and as already mentioned, much of the semiotic literature can be interpreted as being derived from either a Saussurean or Peircean perspective. On this point Leeds-Hurwitz (1993:23) argues that the two conceptions of the sign should not be viewed as contradictory, but that the Peircean triadic model should be viewed as an elaboration of the Saussurean dyadic conception, which is therefore “the more basic and essential”. This is also the view adopted for this study.

Saussure (1916:65-70) elaborated his model of the sign only to the extent required to explore the nature of the *linguistic* sign, but as already mentioned, many following the Saussurean semiological tradition transferred his ideas to non-linguistic signs. Two schools are of note in that regard — the Prague School of the 1930’s and 1940’s, and the Paris School of the 1960’s and 1970’s.

The Prague School was characterised by an elaboration of the work of the Russian formalists, who attempted to develop a scientific approach to literature and art through their notions of *automatisation* and *deautomatisation* (or foregrounding), and the application of selected aspects of Edmund Husserl’s [1859-1938] phenomenology by such luminaries as Jan Mukarovsky [1891-1975], Karl Bühler [1879-1963], and Roman Jakobson [1896-1982] (Larsen 1994:3829). The notion of ‘foregrounding’ was applied to language (i.e. phonological or syntactic forms were deviated from the expected, standard forms for artistic purposes), as well as to a range of art forms. Mukarovsky (the arts in general), Jakobson (aesthetics, music, cinema), and Bogatyrev (folklore, theatre, clothing and fashion) were the most significant figures in that area (Nöth 1990; Larsen 1994).

The Paris School is distinguished by its direct relationship to and development of Saussure’s semiological conception of the sign, and the influence of Hjelmslevian linguistic theory on its central figures. This school is often characterised as being derived from linguistic structuralism (often referred to as the French Structuralist School), and its members are noted for their work in text analysis (see the Greimas

school of structural semantics), as well as for their semiotic analyses of a range of non-linguistic modes of communication. These analyses draw upon Hjelmslev's theory of connotation and *glossematics*, in which he insisted on locating language within a broader semiotic framework — where language is defined as comprising both “linguistic” and “non-linguistic languages” (Larsen 1994:1586). Some of the more prominent semioticians developing these ideas include Metz (semiotics of film), Nattiez (semiotics of music), Fresnault-Deruelle (graphic representation in comics), Lindekins (images in photography), and finally Barthes whose work on the photographic image, fashion, architecture, painting, film, and advertising has made him the most prominent and cited member of this school (Nöth 1990). Barthes' contribution bears some consideration, since his analysis of image-text relations is directly relevant to the focus of this study.

Roland Barthes [1915-1980], as a follower of Saussure's semiological program and a leading structuralist, is recognised for his contribution to text semiotic studies of myth, theology, literature and narrative. He became famous also for his contribution to the semiotics of various types of visual communication, and for his systematic model of *signification*, a Saussurean term which Barthes defined as “a process: it is the act which binds the signifier and signified, an act whose product is the sign” (1964/67:48). Barthes set up two orders of *signification*, which he referred to as *denotation* and *connotation*. His particular usage of these terms derives directly from Saussure's dyadic (signifier-signified) model of the sign, and from a “greatly simplified version of the glossematic sign model” developed by Hjelmslev (Nöth 1990:310). They refer to the first and second levels or systems of meaning in a sign. Defined, denotation is the literal (or informational) meaning of a sign, in terms of what is “objectively” observable or which is easily recognised and identified. For example, an image of an eagle denotes a bird, or type of bird. Connotation, on the other hand involves meanings which are dependent on the denotative level. It is the symbolic level. A sign is interpreted by a viewer or reader (and an audience in the case of music) connotatively when the interpretation goes beyond the literal (denotative) interpretation via the activation of context-dependent conventions or codes. An image of an eagle (a symbol), depending on the context, can connote a football team (Manly Sea Eagles rugby

club), danger or a need to warn or protect (as in advising tourists/campers in a national park), or spiritual superiority (as in many ancient religions and cultures).

Barthes explains the operation of these concepts by stating that “the first system becomes the plane of expression or signifier of the second system ..... the signifiers of connotation ..... are made up of signs of the denoted system” (1967:91). Viewers of signs can make sense of or integrate these two levels only by making reference to their background knowledge of the culturally-based codes and various associative meanings; the system of *connotation* is dependent on this background knowledge for its existence. Thus, in Saussurean terms the eagle example above is a *signified* which can become the *signifier* (the carrier or vehicle) of a further *signified* at another level.

The importance of context, and therefore ideology here cannot be understated, for when readers or viewers engage with verbal or visual signs, their interpretation is the result of the background cultural codes they introduce to unify the *signifier* and *signified*. Barthes clarifies these concepts in his treatment of the semiotics of publicity images, where he discusses the levels of meanings in advertising images. The *denotative* level of meaning in advertising images is referred to as a non-coded iconic message, while the *connotative* level is termed a coded iconic, or symbolic message, which is grounded on underlying pragmatic, cultural, patriotic, historic or aesthetic background knowledge. For Barthes, the advertising photograph (and image) exists in an ideological world, a view which Dyer (1982:129-130) elaborates:

Ads as a means of representation and meaning construct ideology within themselves through the intervention of external codes which are located within society. The ad will use images, notions, concepts, myths, etc. already available in the culture. An ad does not simply reflect ideology; it reworks it, thus producing new meanings. It uses objects which are signifieds of ideological systems and thought that already exist and then makes them signifiers of another structure (the ad). Its connotational process depends on our knowledge of the forms of ideology that advertisements employ.

There is a third level of meaning, besides the denotative and connotative, that Barthes (1977) discusses in his study of press photographs and advertisements. This relates to the way that ideology operates through the linguistic message that may or may not accompany the image, and he raises questions about the nature of the functions of the linguistic message with regard to the denotative and connotative aspects of the iconic message. Barthes states that there are two: *anchorage* and *relay*, a dichotomy developed by Barthes in an attempt to address the question of the contextual relationship between images and verbal text (op.cit:38).

In explaining *anchorage*, Barthes envisages a need for the meaning of images to be always related to, or in some way dependent on verbal text. Images without verbal support are seen as being too open to a variety of meanings, having an inherent indefiniteness which necessitates a reliance on verbal language, *inter alia*, to provide a more substantive interpretation. The rationale is that

all images are polysemous; they imply, underlining their signifiers, a 'floating chain' of signifieds, the reader able to choose some and ignore others. .... Hence in every society various techniques are developed intended to *fix* the floating chain of signifieds in such a way as to counter the terror of uncertain signs; the linguistic message is one of these techniques (op.cit:38-39).

The function of the linguistic message then, whether it be in the form of a caption, heading, headline or accompanying reportage or prose, is to fix or 'anchor' the various possible meanings, directing the reader's interpretations and settling possible visual ambiguities and contradictions. The verbal text does this at the denotative level by answering "the question: *what is it?*" The text helps to identify purely and simply the elements of the scene and the scene itself; it is a matter of a denoted description of the image." (op.cit:39). The verbal text also does this at the connotative, symbolic level where ideology is operating in a significant way. Here

the [verbal] text *directs* the reader through the signifieds of the image, causing him to avoid some and receive others ..... it remote-controls him towards a meaning chosen in advance. In all these cases of anchorage, language clearly has a function of elucidation, but this elucidation is selective, a metalanguage applied not to the totality of the iconic message but only to certain of its signs. The text is indeed the creator's (and hence society's)



right of inspection over the image; anchorage is a control, bearing a responsibility ..... for the use of the message. (op.cit:40)

In terms of an interpretation of the total message of the verbal/visual text, *anchorage* therefore involves a situation of visual-verbal dependency, whereby the verbal text links the image and the situation in space and time, a relation which cannot be established through purely visual means of expression. Further, the verbal text selects for the viewer/reader one of several possible interpretations of the image, thereby fixing “the floating chain of signifieds” (op.cit:39).

Barthes’ view of *relay* however is that “text and image stand in a complementary relationship; the words, in the same way as the images, are fragments of a more general syntagm and the unity of the message is realised at a higher level” (op.cit:41). Thus *relay*, in terms of an interpretation of the total message of the verbal/visual text, involves a complementary relationship between both the verbal and visual (image) constituents — it denotes a reciprocal association, such that each mode contributes to the overall message projected. Barthes claims that this is rare in fixed images, but most common in modes such as in the speech balloons used in comics, and those involving moving images as in TV or film where the dialogue works in concert with the images.

Vestergaard and Schröder, in a discussion of Barthes’ work, assert that the two text-picture relations should not be viewed as mutually exclusive, for there are obviously multimodal texts containing both images and verbal text where either the primary relationship is one of anchorage, with some element of relay, or one of relay with some element of anchorage (1985:33-36). Nöth (1990:454) develops this point in a brief, general overview of research into picture-text relationships in which the anchorage-relay dichotomy does not obtain, or in which anchorage and/or relay could be considered as sub-types of other higher-order relations. These relationships are listed below with some examples, and it can be suggested that these may apply equally well to other forms of visuals such as mathematical visuals like graphs, tables and charts, as well as the photographic image or picture:

1. ILLUSTRATION: Here the visual is subordinated in terms of its semiotic function to the verbal text which it illustrates. This is exemplified most commonly in the illustrations used in fiction - some editions of literary works are produced with illustrations, while others of the same work are not, as in for example a high school edition of Hemingway's "The Old Man and the Sea", compared to an edition sold to the public.
2. PICTORIAL EXEMPLIFICATION: This is a sub-type of relay, and unlike illustrations, the visuals in pictorial exemplification "retain a higher degree of informational autonomy in relation to the verbal message they exemplify visually" (454). A common example would include the photographs provided in encyclopaedias to exemplify the type of phenomena being described or discussed.
3. LABELING: This involves the affixing of a label to a picture, and may be an instance of anchorage (as in the title/name of a portrait or work of art), or as a type of relay (as in the name given for a person in a portrait or photograph).
4. MUTUAL DETERMINATION: This is a mixture of relay and anchorage; the interpretation of the picture is dependent upon the verbal text, but the picture is equally as necessary for the interpretation of the verbal aspect. This is very often seen in advertisements, where the two modes are combined via a verbally posed question ("Can YOUR graphics board do all this for \$369?"), and a set of four pictures connoting what the board can do in terms of speed, true colour, video, and real-time 3D (from PC Magazine, May 16 1995:265).
5. CONTRADICTION: This is rare, but involves the presentation of opposite or contrasting messages by both the language and the picture. This has perhaps become more common in recent times with radical graphic design techniques becoming more in vogue, as evidenced by magazines which are constructed in ways which purposely breach compositional conventions for the effects it can create. For example the pop magazine RAYGUN refers to itself as:  
 "THE BIBLE OF MUSIC + STYLE AND THE END OF PRINT" (sic).

It can be seen from the above that Barthes' was concerned with answering the question: "Does the image duplicate certain of the informations given in the text by a phenomenon of redundancy or does the text add a fresh information to the image?" (1977:38). However, this is a simplification which Nöth suggests does not capture the fact that "the juxtaposition of picture and word usually results in a new holistic interpretation of the scripto-pictorial or the audio-visual message" (1990:453). Here it is not simply a question of a text-image relation of addition and duplication, but of the ways in which both the modes work together to produce a unified, coherent, multimodal text, a text that in Halliday and Hasan's terms is "a semantic unit: not of form, but of meaning" (1976:1-2). It is thus a

question of the nature of intersemiotic *complementarity*. As already stated, it is the focus of this study to attempt to describe and account for the ways that this complementarity is realised in the *Mountains* text.

### 3.3 Summary

This chapter has briefly discussed and reviewed relevant work by semioticians and linguists working with other modes of communication to analyse the visual mode. A brief overview of the conception of the sign and meaning in general semiotic theory, and a survey of the main schools of semiotic theory which have attempted to examine other modes of communication utilising linguistic insights originally derived from Saussure's treatise shows that throughout the twentieth century there has been consistent interest in explaining the characteristics of various visual modes. Most of this work however has concentrated on single-mode analysis however, although some have attempted to examine intersemiotic aspects. Perhaps the most influential of these theorists has been Roland Barthes. Like many other semioticians Barthes attempted to build upon Saussure's semiological program, and he contributed much to text semiotic studies of myth, theology, literature and narrative. Of specific relevance to the focus of this study are firstly his systematic model of *signification* and the two orders of *signification*, which he referred to as *denotation* and *connotation*, and secondly his recognition that *relay* involves a complementary relationship between both the verbal and visual (image) constituents. What is clear from his work however is that although he recognises that this relationship can occur between image and text, his work does not attempt to demonstrate the semantic resources which may be utilised to realise it.

The next chapter will examine and review the work of those who have utilised the SFL theoretical framework to investigate various kinds of visual modes. This review will demonstrate that within this particular theoretical framework there is also limited research into the nature of the intersemiotic semantic relationship between the visual and verbal modes in text, and none at all in relation to economics discourse. The culmination of the reviews in this, the previous and next chapter will therefore be an established need for an application of the Hallidayan SFL theoretical framework to multimodal forms of economic discourse.